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OUT IN THE TRADE: THE OCCUPATIONAL COMMUNITY OF  
BIRMINGHAM'S JEWELLERY QUARTER.

MAUREEN PADFIELD

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## ABSTRACT.

The Jewellery Quarter of Birmingham has its base in small interdependent workshop craft production in a long-established location for which the concept of occupational community appeared an appropriate research tool. The ahistorical approach of studies of occupational communities is critically addressed and it is argued that the theory of occupational community can be deployed historically to investigate the particular conditions of the Jewellery Quarter and explain the construction of these over time.

The origins of the industry in Birmingham are investigated in detail and the patterns of localisation together with the structure and organisation of the industry in the nineteenth century are analysed. The establishment of the local formal institutions which developed to support the industry is traced.

An account is given of redevelopment, refurbishment, and recession in the post-war era. The current location of firms in the area is analysed, together with the organisation of work in the local industry.

The occupational community of the Jewellery Quarter is described and analysed. The nature of interdependence, the daily interaction and the role of family are explained. The concept of work-in-leisure is discussed in relation to the Jewellery Quarter.

The formal methods of recruitment to the local industry are reviewed against the needs of the local industry, and it is shown how the community itself acts as an informal channel of recruitment. The ambiguities surrounding women's employment in the industry are explored. While women are still concentrated in low-paid, low skilled work, it is argued that historically they have also been present as owners and craftswomen, and the factors which enable this are analysed.

The methodology used in the study is detailed and the link between the methodology and concept of occupational community is discussed. In this study the broad use of the theory of occupational community has shown how the historical pattern continues to influence the community. Finally it is argued that the study contributes to the current debate on small firm survival and persistence.

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## CHAPTER ONE.

### INTRODUCTION

The Jewellery Quarter in Birmingham has occupied the same geographical area for over a hundred years, and jewellery, silverware and their allied trades have remained dominant there. Production and processes continue to be mainly carried out in small workshops and there are few large factories. The local industry's own craft training school, the Assay Office and the national association of the industry are based in the Quarter. Until the late 1950's it had a residential area on its fringes, and so had a potential local labour force. These external features, together with the interdependence of a craft-based trade, suggested that the concept of occupational community, which has been used in sociology to examine a variety of industries, would be an appropriate method of analysis.

The body of empirical studies which developed the idea of occupational community did not deploy a precise definition. Rather, certain occupations were observed to generate identification with work by the worker and to influence life outside of work in such a way that work took on a communal aspect. A number of monograph studies attempted to explain the factors in particular occupations which led to this communal quality. In the following paragraphs these studies will be briefly reviewed with these issues in mind. This will be followed by a review of Salaman's attempt to synthesise empirical

studies in a general definition and theory of occupational communities.

The occupational community of the miners, described by Dennis et al (1956), originated from work practices in the mine, the necessity of trust and teamwork, and a shared antagonism to employers and the danger of the work. This led to a hedonistic lifestyle and an attitude to leisure and family which derived from the insecurity of the work. Further, it was spatially determined with the mine dominating the lives of all in the community, and local institutions and the recreations of the area were circumscribed by this.

The features of danger and insecurity of mining are shared by the fishermen (Horobin 1957, Tunstall 1962, Lummis 1977). Horobin highlights the "apartness" of the group, also a feature of the miners' self-image, deriving from the nature and danger of the work (1957: 343-355). In addition, Lummis shows that the boat becomes the fishermen's home, and when they are ashore they share their leisure with other members of their crew, though their "hedonism" is confined to two days because of the uncertainty of the next job (1977: 58).

From these studies some common features emerge. Dangerous work conditions, specialised knowledge, team-work, insecurity, and high job involvement, in which family tradition of following these occupations also plays a part, are the common factors. Both industries are located in geographically homogeneous areas. Thus it is argued that these occupations take on a communal aspect.



Geography and family tradition result in a lack of alternatives for young workers: danger and specialist knowledge lead to an identification with the work; team work, insecurity and shared leisure generate a communal solidarity amongst workers.

At this point a further feature of such occupational communities can be noted. They are male-dominated in the two-fold sense of restricting employment to male workers who emphasise the "masculinity" of their work. Within these studies women appear in a subsidiary role, not as workers but as wives and mothers whose lives are dominated by the occupation from which they are excluded.

But the work experience is very different in Cannon's (1967) study of composers, another male work group, highly paid but radical, and recognised as highly skilled with a long craft training and strong union. Cannon argues that the actual features of the job - the unevenness of the work pattern, the social use of free time in the working day and the need to seek help frequently, creates a solidarity. Unlike the above groups this derives not from danger but out of a need to prevent frustration engendered by wasted time, and by membership of "the Chapel [which] is the formalized expression of the occupational community" (1967: 171). Cannon stresses the unifying use of "argot" and long standing work customs which have become "institutionalised" and help to "retain a sense of identity" (1967: 170-171). He explains how the group acts as a reference point for moral values and codes

of behaviour. Unlike the miners and fishermen, composers do not live in a geographically delimited area, but meet in local cafes and pubs with colleagues from a variety of firms. The wealth of evidence presented supports his claim of an occupational community among the composers.

Sykes' study of navvies (1969) indicates a further variation. Despite many shared world views, a feature of the above groups, navvies remained highly individualistic, their work groups constantly fluctuating in composition. They shared a resistance to forming long-term loyalties to either firms or work-mates and avoided collective action, which in any case was difficult because of the casual nature of the work. Hedonistic behaviour was a feature of self-image "for the benefit of those in the industry to gain prestige and glamourise the job" (1969: 166).

The last two examples of occupational communities stand in contrast to those of mining and fishing communities. Whereas the occupational community of the composers can be explained by the combination of a strong union and long-standing craft tradition, among the navvies Sykes gives evidence of a distinct occupational culture. The origins of these communities may derive from the nature of the work or from historical precedent. Although the navvies cannot be seen as an occupational community, by reason of their mobility, their work experience can be seen as an occupational culture. Hill (1976) points to this distinction between objective and cultural aspects of occupational membership. The argument

is that objective aspects are those surrounding work roles and the place of the worker in the social division of labour at work. The cultural aspects are those which give an occupation its social character and lead to the formation of a community or social system (1976: 7-8). In reality the distinction between the two is blurred, and Hill argues that "traditional" working communities may

"come to define themselves in occupational terms as expressed in strong moral involvement in, and commitment to, the occupation" (1976: 12).

The characteristics of an occupational community are the identification of the worker with his or her work, which is in turn so pervasive that it influences non-work life. The identification with work is strong and is associated with the formation of a community in work, and these communal aspects spill over into activities outside work. Examples of occupational communities such as these include miners, fishermen and the printers who meet outside work in cafes and pubs. It will be shown below that dockers and shipbuilders form communities in work, identifying with the work in which there is opportunity to form a community which is confined to work, but which does not overspill into their non-work lives. An occupational culture, of which the navvies are representative, again shows an identification with work, but the navvies, because of the itinerant nature of the work, do not form communities either in or out of work. The common factor to all three

examples is the identification with work, but it is clear that the nature of the community or culture which develops is dependant on other factors being present, and it is this which leads to difficulty in an unambiguous distinction between an occupational community and an occupational culture.

Brown & Brannen (1970) studied the shipbuilders on Tyneside, examining their orientations to work and the social structure of their relationships at work. The area was dominated by the shipbuilding industry and shipyard workers were seen to be homogeneous in class terms, with a shared experience of the Depression years. There are similarities with Cannon's compositors in that the workplace generated shared leisure activities (1970: 75). The level of union membership was high, it was a craft-based industry, and working conditions were dangerous and unpleasant. However, Brown and Brannen argue that there were both divisions and unifying factors among the workforce. They described the "traditional antagonism" which existed between trades, and the "sense of exclusive competence" in regard to certain jobs. Craft workers defended their jobs in an effort to maximise their earnings and prerogatives. The structural organisation of shipyard work was such that divisions existed between skilled and unskilled men, and contention around certain issues was apparent within union membership. Despite these antagonisms, Brown and Brannen claim that the common involvement in the production of a ship with its attendant rituals in the final stages involving families, shared

danger and stories and "the common conditions of work and employment .... generate pressures for both conflict and cohesion" (1970: 203). Yet, despite kinship links, shared "leisure-in-work" and craft traditions, the traditional antagonism between the trades fragmented the apparent homogeneity (1970: 207). The authors concluded that the shipbuilders were a close working community but one which is heterogeneous rather than homogeneous (1970: 203).

Hill (1976) examined docking as an occupation against a background of decline in the industry. He found kinship ties, personal allegiances among friends, together with a "sense of moral obligation dominating the culture of the industry and its typical forms of organisation" (1976: 7-8). Again insecurity in the form of casual employment, the danger inherent in the work and teamwork are identified. Hill noted that work roles were specifically defined, but stressed that the importance of the occupational culture was such that members came to define themselves in occupational terms expressed in strong moral involvement in, and commitment to, the occupation. This has acted as a bonding mechanism despite technical and employment changes which have affected dockers, but conversely there appeared to be "little resemblance to the old-fashioned, working class occupational community" as the residential areas around the docks had diminished. Their occupational community was firmly based in work and Hill argues that the dockworkers' "strong occupational solidarity cut across different firms

and docks" and they displayed a strong sense of identification with workers in other industries (1976: 201). There were, however, significant differences between dockworkers and the foremen so again it was not entirely an homogeneous group.

In summary, while a number of common features emerge from these studies, there are a wide range of variations. The key common factors are the close identification between the worker and work and the sense of shared solidarity with others in the occupation. This may only extend to an occupational culture, as in the case of navvies where the communal aspect is rather weak. It is stronger, as in the shipyard and docks, where work itself has a communal aspect. It is stronger still amongst miners and fishermen where all of life is incorporated into an occupational community. With regard to causal factors a variety of influences have been identified. Danger and insecurity, teamwork and geography are the significant factors in the formation of the occupational communities of fishermen, miners and shipyard workers. Other cohesive factors are antagonism towards employers between miners, marginalisation among navvies, craft and unionism amongst the printers

From the features displayed by these occupational communities, it is possible to make a comparison with the Jewellery Quarter and to ask which factors are appropriate. At this point we must anticipate some of the salient features to be established later, in order to demonstrate this theme of a mix of similarity and

difference. Although the Jewellery Quarter has certain features in common with compositors, in terms of craft definition and values, the key for Cannon lies in the strength of the union. In the jewellery and allied trades the Union has historically been weak, owing to the pattern of work organisation. Physical strength and shared danger are not part of the nature of the work in the community. It is a geographically distinct area, but those living in or near there, both in the past and currently, have never been wholly dependant on the jewellery trades in the way that, for example, fishermen or miners have been in some localities. This was because of the proximity of other engineering factories or small workshops, to which some skills are transferable. There has been no domination by large employers so there were never common grounds for conflict against owners, as with coalminers or shipyard workers. With the latter group it does share the "leisure in work" aspect, but this does not entirely depend on work or peer groups. Kinship is traditionally significant in the jewellery trade and this is a component shared with several occupational communities. It is also an industry in sharp contrast to the others, in that women have always been involved in the work situation albeit mostly in low paid tasks, but also as owners and craftswomen.

Although there are elements of commonality with the studies, there are difficulties because of the wide variations shown within these occupations. It is at this point that we turn to the work of Salaman (1974) who attempted to overcome the difficulties by developing a

precise theory and definition of an occupational community.

Salaman's definition of an occupational community is that of a relationship between men's (sic) work and lives, in which interests, values, friendships and leisure are "workbased" (1974: 19). His work is significant in its selection of the components and determinants, implicit or explicit, from other studies which he uses to define an occupational community. He then tests this model in the occupational communities of architects and railwaymen. The three components are identified as identification with occupational roles, a shared reference group with other members of the occupation, and preferred association with other members of the occupational group which is continued into their non-work lives (1974: 21). The basic determinants are defined as "involvement in work, marginal status or stratification situation, and the inclusiveness of the work or organisational situation" (1974: 27).

Salaman argues that in each of his selected studies the common feature was involvement in work. He argues that this is an insufficient factor alone, and so must be accompanied by at least one of the other features. The first key component is occupational self-image, supported by the worker's own role in relation to that of his colleagues, which Salaman argues has particular relevance for those in the professions. The right to this "title" has to be earned and is often highly institutionalised. He supports Becher and Carper's



argument that a value system is internalised - that the job title carries with it a method of denoting the characteristics which "are often systematised into elaborate ideologies which itemise the qualities, interests and capabilities of those so identified" (1974: 21-3).

This group, exemplified by jazz musicians, is also a primary reference group, as they

"regard their fellow members as the only other people.....really capable of judging their work performance or understanding their problems" (1974: 25).

The non-separation of work and non-work lives means that friends are selected from their own occupation. Salaman sees this notion of "best friends" as particularly significant, arguing that it is uncommon in non-occupational communities. He distinguishes between those who associate with work-mates and those who associate with others who are in the same occupation but work elsewhere (1974: 26).

Salaman details the features of occupational community which determine the above components as involvement in work, marginalisation and inclusiveness. He finds the commonest of these to be emotional involvement in the task which is valued for the satisfaction from using skill. Because of this involvement members do not separate work and non-work, and share a common identity

with others in the same occupation. The factors generating involvement are danger, responsibility, skill and status (1974: 25).

Marginality in occupation as argued by Salaman is derived from the frustrated desire of members for identification and association with higher status groups. This comes into play insofar as there is "discrepancy between status accorded to an occupation by those involved .... and status assessments of outsiders" (1974: 31). Where this discrepancy exists, it can result in a "retreat" into an occupational community.

Salaman gives examples of three types of inclusivity, which vary in pervasiveness. Thus some organisations adopt a system of norms and values which apply to members' lives both inside and outside work such as military life and some professions, which inculcate these through the training process (1974: 33-34). Other types of inclusivity are modern Western industrial organisations which attempt a degree of "organisational embrace" but Salaman argues that these meet with mixed reactions from employees, even when they supply non-work leisure facilities. The last type of inclusivity is that which derives from the nature of the job itself, and which Salaman calls restrictive factors, such as shift work and non-social working hours which prevent association with those other than similarly placed workers (1974: 35). Salaman argues that each of these factors are "only relevant to the first two components (occupational definition and reference group) through their effect on

people's friendship and associational patterns" (1974: 37).

Salaman's arguments have been presented in detail as it is from the discussions of these that he draws his model. He argues that in the studies, at least two of these determinants are present and one of these is always involvement, though it is an insufficient causal factor. He illustrates this with Ingham's (1970) study of manual workers who were involved in their work but exhibited none of the other determinants, and could not be described as an occupational community because there was no non-work association (1974: 37). He further argues that without involvement there is no occupational community, citing prison-warders as an example. Finally he separates the types of occupational community into local and cosmopolitan types. For cosmopolitan occupational communities the reference group is the occupation as a whole, and Salaman gives the example of members of a profession who identify with and understand the problems of, their professional peers. Local occupational communities on the other hand are composed of those who share specific work situations and whose members relate to their work mates (1974: 39-40). Both communities share the determinant of involvement in work, but Salaman argues it is a further determinant which is "causally related to the structure of the community". For local occupational communities this will be certain features of the shared occupation which are restrictive and which force into being an occupational community because of the lack of

opportunity to establish relationships with those other than their working colleagues. The parallel determinant in cosmopolitan communities is a feature of the occupation

"as a whole - either organisational pervasiveness stemming from some organisation of which all members of the occupation are members, or marginality - which limits the associational choices of the members of the occupation to all other members of the occupation, in as much as they will regard their occupational peers as the only people who are suitable as friends and as the people with whom they have most in common" (1974: 41).

Salaman's thesis is exhaustively argued and usefully analyses the characteristics of occupational communities, but the application of the model to his own empirical work highlights four substantive problems with the theory. The list of components is useful, but insufficient. The determinants become confused with the components in application. The rigidity of the model does not allow for further exploration of what happens in the world of work and how this is constructed. For the purposes of this study, the key criticism is the static nature of Salaman's model. These weaknesses will now be elaborated in more detail.

Salaman confines his list of components of occupational communities to self-image, a shared reference group and preferred friendships with others in the same occupation. By imposing these limits Salaman dismisses the variation which exists in the examples shown earlier. He rules out geographically separate communities as "quasi" communities while acknowledging that fishermen and coalminers are "true communities" (1974: 20-21) which would fit his model regardless of spatial and geographical separation. But he also ignores the variation which has been shown to exist among these groups, and variations at different times (Moore 1974, Harrison 1978, Thompson et. al. 1983). Salaman argues that involvement in the work task, marginalisation or "stratification situation" and the inclusiveness of the work or organisational situation are key determinants of an occupational community. But each of these ignores fundamental questions because of the limits which he imposes on the interpretation of these points. In this study it will be stressed that involvement in the occupational community does not necessarily result from involvement in a particular task, but from the community itself, and thus can include a variety of workers in the Jewellery Quarter.

Marginalisation is the second of Salaman's determinants and is seen to result from particular working conditions, as in the case of the shift work of the railway workers. Again, this is insufficiently explored. There is no information given of alternative work in the area which makes railway work preferable to other local

employment (1974: 70). Although railway work was regarded as a secure and well paid job in relation to other working-class employment, no information is given on the recruitment of workers, and as a result there is no indication of the occupational community sustaining itself by assisting in the recruitment through informal means, such as family or neighbours. Neither is there any exploration of the organisational structure of the railways which would indicate how the four groups selected - drivers, signalmen, firemen and guards - interrelate, so that the nature of the occupational community becomes subsumed under how individuals in an occupation feel about their own work.

In the case of architects, Salaman selected interviewees who all belonged to one branch of the professional association. Once again, Salaman does not explore the nature of the association, and the historical reasons for its establishment, which would shed light on the professionalising of this group of workers, nor does he give us any information on the training of architects. Thus he is limited by his own model. While we learn from both groups how they regard themselves and their work, according to his components and determinants, and gain an understanding of their orientation to a shared occupation, referring to these groups in relation to the concept of an occupational community seems inappropriate, because there is no evidence of a day-to-day communality as displayed in other studies. The occupations chosen are deemed to fit his model as they display the components which he has

identified. The application of the determinants shows the limitations of this approach.

A further criticism of Salaman's approach is that questions of race and gender are not addressed, and the nature of his model is such that the variation resulting from these issues cannot be incorporated. It is a fact that transport in this country is occupationally ethnically mixed. Salaman does not give us any information on this, making it unclear whether ethnicity is unimportant, or whether the study has been confined to certain workers. Further, his sample is made up of all male groups, although there are women workers on the railway. The occupational "community" of railway workers, is confined to male drivers, firemen, guards and signalmen. The place of the union in the railway is ignored, yet the closed shop which operates is a notable feature of this occupation and there must be divisions on this issue which would cause tension in the occupational community.

Similar criticism can be used in his study of architects. His model does not allow for variations in race or gender or class, which affect employment and promotion opportunities in the profession. Neither is it clear if any of the interviewees are women. The presence of a woman architect in the sample would have given more insights, for example, into training, the appointment of principals, and the kind of differentiation that occurs in work opportunities. It is unclear whether women are only fringe members of the community, if they feature among the

"five best friends" and what sort of voice they have in the formal associations of the society. An exploration of the way occupational communities are reproduced allows for the inclusion of the position of women within the community.

Salaman's model does not allow for variation, between occupational communities, nor for historic variation. His model is deemed appropriate for an occupation at any time. Although both the occupations of railwaymen and architects have changed over time, Salaman refers only briefly to recent changes experienced by rail workers. More recent studies of fishermen and miners (Thompson et. al. 1983, Lummis 1985, Bulmer 1975, Harrison 1982) have indicated the changes and tensions which have occurred in the occupations and which have had repercussions for occupational communities at particular times. Salaman's presentation of a static model does not allow for the incorporation of historically established determinants or variants. His use of the concept of an occupational community as an analytical tool to present empirical data is limited by not allowing for spatial and temporal variation. Blumer (1954) and Bulmer (1976) have both adressed these problems and it is to their work that we now turn.

Blumer argued that social theory should be concerned to forge stronger links with the empirical world to counteract theory deficiency. Attempts to deal with the problem



"take the form of developing fixed and specific procedures designed to isolate a stable and definitive empirical content, with this content constituting the definition or the reference of the concept" (1954: 5-6).

He argues that the problem of the definitive concept is that, by being fixed (as I believe Salaman's to be) it reveals "only what is common to a class of objects". Blumer suggests therefore the use of sensitising concepts which give a wider set of references and he gives examples of those which can be so described - "culture, institutions, social structures, mores and personality" which "rest on a general sense of what is relevant". He argues that "every object of our consideration .... has a distinctive, particular or unique character" and that it is this which makes the concepts sensitising and not definitive (1954: 7-8). It is the lack of this sensitised and flexible approach which detracts from the usefulness of Salaman's theory.

Further assistance with a more flexible use of the concept is given by Bulmer (1975). His paper was a result of dissatisfaction with previous models of mining communities. He argues that conflict models of the archetypal proletarian model which concentrated on an analysis of conflict based on class, and on communities being acted upon rather than changes from within, "directed attention away from the social relations of *gemeinschaft*". He argues that these social relations were

an important feature of mining communities. As the Jewellery Quarter is a mix of larger (but personally known) owners and very small businesses, of limited mass production and hand skills, the conflict model is not appropriate for this study either. For Bulmer, this fixed model overlooks "human motivation and collective action in the local situation" (1975: 66).

Kerr & Seigel's "isolated mass" theory was also inappropriate to Bulmer's needs even though it incorporated industrial characteristics of mining communities to explain a relatively high tendency to strike in the industry, concentrating on the determinants of "isolation and homogeneity" (1975: 67) to explain this propensity. Yet these very features are exaggerated, argues Bulmer, by stressing the industrial characteristics. He suggests that Blumer's work on the "variety of meanings" which men attach to their work should be incorporated and that this can be conceptualised through the occupational community theory developed by Blauner. Its usefulness is demonstrated by its ability to show

"structurally distinctive features of work and community in mining with an attempt to characterise patterns of shared meaning among those who work together in the same occupation"

(1975: 78).

This allows for the examination of the link between work

and non-work lives and the effect of this on self-imagery. Interestingly, Bulmer is critical of Salaman's dismissal of "quasi-communities", arguing that they in fact fit all three of his criteria and that

"incorporation of an occupational community position into one's self-image is closely related to the existence of an occupational community as a reference group. Values and norms are not merely the spontaneous creation of individuals but stem from, and are reinforced by, membership of more inclusive groups of 'significant others'" (1975: 81).

He is further critical of Salaman's non-recognition of spatial factors as constraints. Bulmer argues that occupational community can be used to "characterise sociologically" mining communities and that Lockwood's theory of ideal-typical social imagery can be used in the way that Weber used the concept of ideal types, as a conceptual tool, "to connect up .... workers' structural situation with his consciousness of that situation and the world at large" (1975: 82). Thus the "dominant characteristics" of the empirical world can be identified and it is possible to draw up a set of characteristics of an ideal-typical traditional mining community which can be used to focus data.

Bulmer acknowledges with Blumer that "interest lies in departures" from the model, and that in an attempt

to serve as a realistic description it will emphasise the "dominant characteristics of the phenomena under study and orders these characteristics in a logical manner in relation to each other" (1975: 84). He draws up the characteristics of traditional mining communities which can be summarised as follows:

1. Physical isolation.
2. Economic predominance of mining.
3. Nature of work.
4. Social consequences of occupational homogeneity and isolation.
5. Leisure activities - sport, drinking together.
6. Economical and political conflict.
8. The whole - communal social relationships. (1975: 84)

This is a broader list of factors than that presented by Salaman, and as Bulmer comments, the interest lies in the departures from this model (1975: 88). The fourth and sixth factors, for example, enable the researcher to describe and explain the variation according to spatial and temporal factors.

This point is clearly made by Harrison (1978). He shares Bulmer's dissatisfaction with the image of the miner as "the original and quintessential proletariat" (1978: 2). Comparative research indicates that there was substantive variation in the conditions of, for example, the Forest of Dean miner and the Scottish miner. His aim is to show that "the stereotypes of miners, mining and mining villages" is historically untenable, and that

"extraordinary social cohesion", always seen as a specific and necessary component of mining in particular (and occupational communities in general) is not reflective of homogeneity but "masks contrasts and tensions" (1978: 7-8). He protests against the usefulness of the ideal-type model on the basis that "facts" may detract from an important point which he explains thus:

"History itself is a variable. One must not only consider past, specific conjunctions between all the 'independant variables', but consider them in their aspects as memories and traditions which enter into the choices which coal miners made and have to make" (1978: 13).

The importance of this historical variable is commented on by Williamson (1982) who argues for an examination of the origins of mining communities, which "did not always exist as mining communities" but were built up to be so quite deliberately by the coal companies, and are thus described by Williamson as "constructed communities". This spurs a reactive response from communities where some of Bulmer's key characteristics are in evidence (1985: 5). With Harrison he stresses that "these qualities have to be grasped historically" and in relation to the particularity of the different communities which, while displaying commonality in some areas, also showed "subtle but powerful differences of structure, experience and attitude" (1982: 5).

Similarly, Thompson et al (1983) perform the same task for fishing. They do not see an occupation as determining a man's orientation and value system to work as Salaman argues. Rather, in their studies of different communities in different historical periods they show how the occupation "pulls in very different directions" and show the variation in radicalism and the divisions which existed. Some have been radical trade unionists, for example, while others stubbornly avoided trade unionism, "at a time when all were increasingly at the mercy of big capital". They show that, despite their living in socially isolated and cohesive communities, dominated by a single industry, "work also divided fisherman .... scattered at sea in small units .... individually owned and certainly actively competing" (1983: 4).

Here we have a combination of two kinds of methodology, the use of history and the search for what is distinctive among similar work situations, to make sense of the empirical data. This avoids the sterility of Salaman's model and indicates how the problem of variations not just among occupational communities per se, but in time and geographical area, can be tackled. My interest in the value of the historical dimension is as a tool to analyse data, as I believe that it is only by looking at the way the Jewellery Quarter has developed against a background of wider industrial change, and in its immediate area, that it is possible to understand how and why the social structure of the present community has developed, and how patterns have emerged and been retained

or modified. Thus it can be shown how the local trades can be described as an occupational community, with features in common with others, while at the same time displaying distinctive characteristics which have evolved over time. In my analysis of the occupational community of Birmingham's Jewellery Quarter, I have rejected Salaman's positivistic approach of specifying general determinants, and have used occupational community as a sensitising concept. I have deployed this historically to investigate the particular conditions of the Jewellery Quarter and to show how the characteristics of the Jewellery Quarter have been constructed, modified and maintained at different periods of time.

The next two chapters describe the origins and structure of the jewellery and allied trades in Birmingham. Chapter Two shows how the industry developed from the metal trades and toy trades of the eighteenth century. The localisation of the trades into their specific geographic location is traced and the adaptability of trades to fashion and market changes is shown. The origins of the Assay Office, the Birmingham Jewellers' Association, and the Birmingham School of Jewellery and Silversmithing, together with the trade union, are described. The chapter argues that by the late nineteenth century the trades had become dominant in the area, and the patterns of localisation and sub-division of the labour process were well-established by the end of the century. Chapter Three continues the story of the local industry to the present time. The consequences of the

plans for developing the area and stemming the decline of recruitment are outlined together with the resulting changes such as the introduction of retail outlets into the area. The refurbishment and conservation plans are described, while the impact of recession on the trades is shown to follow the pattern of the past, with an increase in small workshop businesses. The current working practices of the trade are demonstrated to have changed little since the early days of the industry in the area, yet the local industry has consistently adapted to challenges from the market. While the geographical area which they currently occupied has contracted, it is argued that the core of the Quarter remains the same as in the last century.

In Chapter Four the interrelationship of the trades and its relevance for the occupational community is analysed. The continuance of the sub-division of the trades and the operation of the outworking system is explained, and the meeting places for the community are identified. The relationship of these locations with the organisation of production in the trades is demonstrated. It is argued that the longevity of firms and biography are important factors in the maintenance of the occupational community. The role of the family, though weakened, is still a significant factor.

Formal and informal recruitment to the industry is crucial to the survival of the occupational community, and is discussed in Chapter Five. It is of critical importance in a city with a variety of other employment,



and has been of concern to employers since the last decades of the nineteenth century. The appropriateness for the local industry of formal courses ranging from the Youth Training Scheme to the degree course in jewellery design is analysed. Employer's dilemmas and student attitudes are discussed, together with the significance of the role of family, friends and the occupational community itself in the informal recruitment process.

In Chapter Six the history of women's involvement in the trades is traced against the background of the marginalisation of women's work in the nineteenth century. The role of women in the Jewellery Quarter is shown to be surrounded by ambiguity. The nature of the trade allows women, perceived as "nimble-fingered", to participate as workers in a variety of trades, while men have sought to constrain their opportunities through restrictions based on sex and skill to maintain their own wage levels. While the formal system allows the training of women on an equal footing it is shown that their employment opportunities as craftswomen using the skills in which they have been trained, are constrained. The role of the union in the subjugation of women workers is described, but it is argued that the small capital requirements and the continuance of family firms have meant that women enter the trades and become independent owners and workers. It is concluded that women have been, and continue to be, present in the Quarter and the nature of the occupational community is such that women are active participants in the occupational community.

Chapter Seven describes the research methods employed in this study. The research methods were dictated by the nature of the industry, and the nature of the community itself was discovered as a result of decisions taken on the methodology. The usefulness of key informants is discussed, together with unexpected aspects of the research which resulted in valuable information and also contributed to the understanding of the community. The contacts and the use made of these to obtain access to different types of workplace and different trades and processes in the industry are described. The main theme of the methods chapter is the interrelationship between the method and the substance of the research.

The final chapter summarises the main points of the thesis and links these to the concept of occupational community. The relevance of the study to current efforts to conceptualise the small firm sector is analysed by reference to flexible specialisation and small business theory. The Jewellery Quarter is shown to share some characteristics with the examples given by Bechhofer and Elliott, and Curran. Similarity is found with the flexible systems discussed by Piore and Sabel (1984), such as a combination of craft practices and use of developing technology, an interdependence which leads to the need to balance cooperation and competition, and a shared geographical location with supporting institutions. But it is argued that the Quarter contains a wide variety of industry-specific firms, in which it is possible for the worker to adapt to new materials and designs, but where

the old skills remain necessary. The supporting formal institutions are shown to have been weakened over the years, as the industry itself has declined numerically, while the informal support system is shown to be work-based, but independent of religious, political or ethnic ties. Small business theory is found to be unclear in its definition of what constitutes a small firm. Its concern with class analysis is a stumbling block in an industry in which the mobility of the worker in terms of employment, and employee/employer status is so fluid. The stress on marginalisation of the owners of small firms is shown to be inappropriate in an industry in which a variety of particular skills exist. It is concluded that there are problems with a general theory which is non-product specific and relevant to all small firms. The broad use of occupational community theory applied in this study defines the particular characteristics which have evolved and enable the local industry to survive. This approach also contributes to the study of the small firm sector in which informal relations play an integral role, adding to the broader debate of small firm survival which is currently attracting increasing interest. It is suggested that this study might contribute to the clarification of the characteristics to be considered by small-firm theorists.

## CHAPTER TWO.

### THE ORIGINS OF THE JEWELLERY QUARTER IN BIRMINGHAM.

An historical approach to the study of the Jewellery Quarter as an occupational community requires an examination of the factors which led to the growth of the jewellery and allied trades in Birmingham. In this chapter, the significance of localisation, the organisation of production and the establishment of the formal institutions are examined and are placed in context with an outline of the developing jewellery industry from its origins in the metal trades. Material from contemporary directories shows both the movement of the trades and their clustering in specific streets. Small workshop production was reinforced by the diversification of trades as craft-workers adapted to changing fashions, new materials and war-time restrictions. The origins of the formal institutions of the Assay Office, the Birmingham Jewellers' Association, the training school and the union and their function in the occupational community, are explored. These interrelated themes contextualise the historical material in terms of the development of the occupational community.

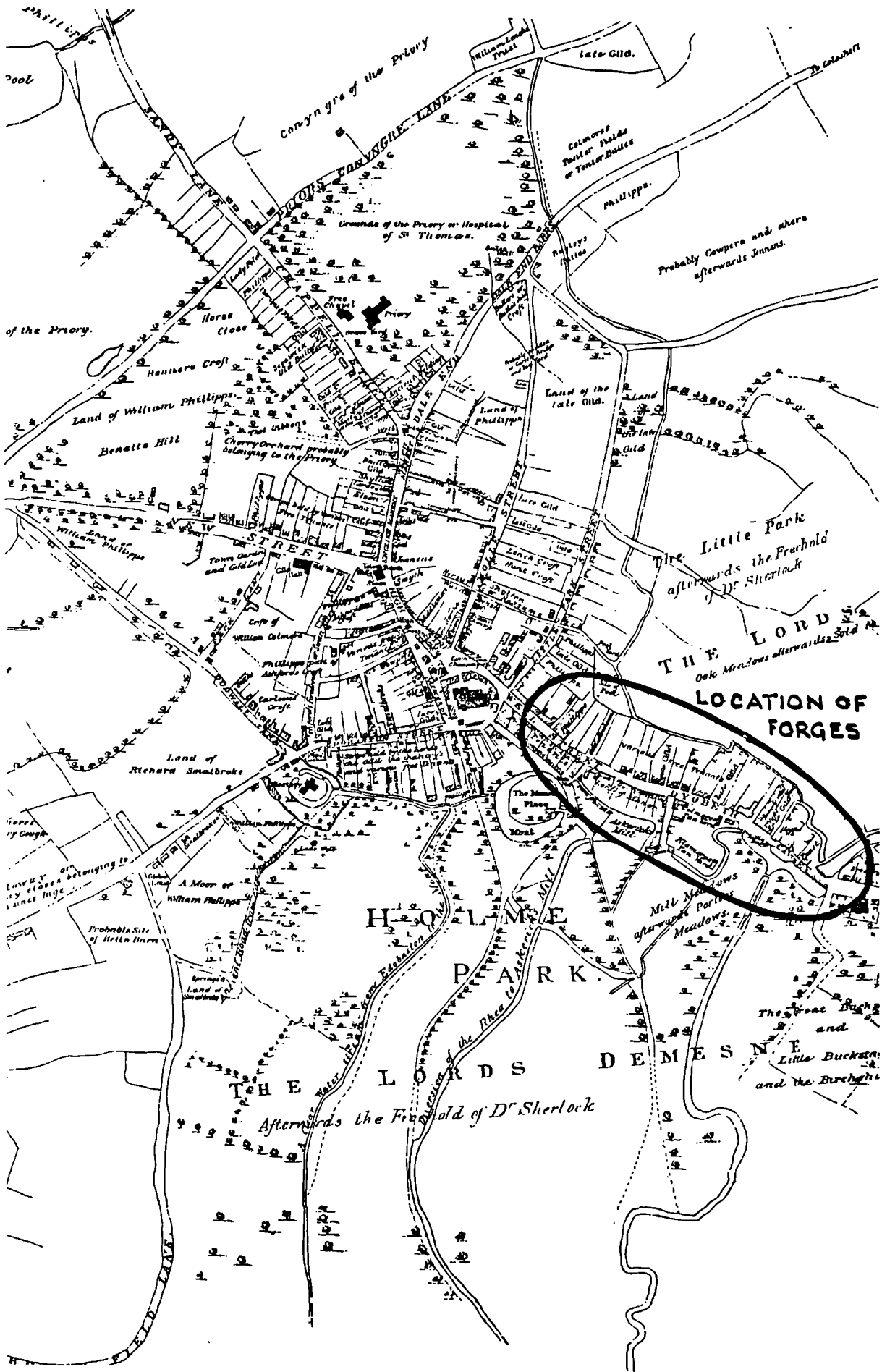
#### The origins of Birmingham's jewellery production.

##### The sixteenth century to 1945.

Birmingham did not have a long-established history of jewellery manufacture prior to the late eighteenth

century, and this section is concerned with showing how jewellery production became differentiated from the metal trades by the early nineteenth century and the effects of changes in fashion, markets, and availability of raw materials, among other constraints, in shaping the industry in Birmingham. The section illustrates how wide fluctuations in these influences have imposed a consistent need for flexibility and adaptability within the industry.

The development of Birmingham as an important centre of jewellery production parallels the growing importance of jewellery as a commodity. By the beginning of the eighteenth century the metal trades had displaced leather and textiles as Birmingham's staple industry, resulting from the discovery of raw materials in the district in the sixteenth century (Allen 1966: xix). A wide variety of metal goods was produced and 202 forges were recorded in the town in 1683, of which 115 were situated in the ribbon development of Digbeth, Deritend and Edgbaston Street (Gill 1952: 57). The smiths adapted their skills to a variety of products, from agricultural implements and horse tackle to swords and items of domestic hardware, and by the beginning of the eighteenth century had developed markets for trinkets and toys in France. This, together with the fashions of the Restoration period, which popularised ornamental buckles, clasps and lockets in gold, silver and steel, led to an increase in numbers involved in these trades. Rowlands (1975: 147) argues that the decisive period for the development of these trades from which the development of



Map 1 - Conjectural map of Birmingham - 1553.

the jewellery trades derived, was between 1710 and 1730, and that entry was facilitated by the small amount of capital necessary in manufacturing change-over, a theme which recurs in the developing jewellery industry. First references to new trades such as japanning, toymaking, and boxmaking, among many other specialisms, occur within the second decade of the eighteenth century. John Taylor developed large-scale manufacture of these toys, together with metal buttons and by 1755 employed 500 workers, some of whom were outworkers (1975: 155). With the decline of buckles in favour of shoe-strings, skilled workers diversified into button and small ware manufacture. The introduction of plating by John Taylor, and of the stamp and press before 1800, assisted in the development of these trades which required die-sinkers, and stamp and pressmakers, and resulted in a demand for sheet metal supplied by the rolling mills powered by Birmingham's natural water supply. Boulton's coin manufacture was one of the results of the availability of these processes.

The early period was still concerned with the toy trade. Allen has charted the changeovers of skill in response to new markets (1966: 13-24). Buckle making and iron and steel hardware production increased in both importance and ingenuity, until after 1750, and new markets were developed with the East India Company and in West Africa. The jewellery industry did not begin to separate off from the metal trades until 1790, and then only tentatively, remaining a sideline of the expanding toy trade. In 1780, only 26 jewellers were recorded in

Birmingham (Timmins 1866).

Table 1.

Numbers of firms associated with metal working, jewellery  
and toy manufacture recorded in Birmingham 1770.

Trade	Number
Button makers	93
Gun part makers	53
Toy makers	50
Buckle makers	42
Platers	40
Die-sinkers and engravers	28
Jewellers	26
Watch makers	19
Smiths (unspecified)	17
Sword makers and Cutlers	13
Lapidaries	9
Wire workers	8
Gilders	8
Stampers	2
Metal Refiners	2
Total	410

(Source: "The Streets and Inhabitants of Birmingham in 1770." Reprinted from Sketchley's and Adams's Tradesman's True Guide and Universal Directory. MDCCCLXXXVI.)

Between the seventeenth century and the beginning of the nineteenth century, Birmingham had developed its output from a narrow range of iron and steel smallwares and implements to a more diversified range of



metal products, and the new processes benefitted jewellery manufacture. Birmingham, a guild-free town, became the focus for skilled and diversified labour, while the surrounding areas of South Staffordshire, with its ready supply of raw materials, became the centres of cruder and heavier production. The canal building of the 1760's improved the supply of materials and delivery of finished goods. (Allen 1966: 49)

Table 1 gives an indication of the relative importance of trades in 1770 and is derived from a list of the principal manufacturers in each street. It shows a more limited range of specialisms than were to appear over the next hundred years as comparisons with Tables 2 to 25 in Appendix A indicate. The relative importance of jewellery as a separate activity is very limited at this time in comparison with button and gun production.

By 1820 the jewellers were beginning to define themselves as a separate trade from the toymakers. It was still relatively small compared with other trades, particularly the dominant button industry, and the rising brass industry. However, Wise (1951) suggests that 3,700 persons were employed in the jewellery trade and "there were 5,300 toymakers in the town, many of whom were no doubt making jewellery" (1951: 69). Expansion of their numbers is in part attributed to the availability of gas from 1817 on the Newhall estate for both lighting and for the jewellers' working flame, and a rising prosperity nationally after the depression of 1825. Small jewellery factories employing workforces of up to 40 people were

opened. The accession of Queen Victoria rescued the trade from near extinction and its growth in significance as a local industry can be traced from the middle of the century. Gold, previously imported from Mexico and Russia, with some supplies from Ireland and Cornwall, became more freely available after the discoveries in Australia and California to the great benefit of the expanding industry.

The fortunes of the trade were closely linked with availability of materials and with changes in fashion. The burgeoning middle classes were an important home market, in addition to the increasing numbers of the working class who could afford the cheaper gilt jewellery. Discoveries in Nevada brought silver to the height of its popularity between 1866 and 1886, though over-production and declining standards resulted in a fall in silver prices in the mid 1870's. By 1885 silver was rapidly becoming unfashionable and was superceded by gold, the demand for which, especially for objects under the value of eighteen carat, was reduced by American competition. There was a demand for precious stones from 1865, which increased twenty-fold in a year and led to an increase in the numbers of stone dealers, setters and ring-makers. The tables show that stone-dealers in particular were more numerous in 1876 than before, with setters and ring-makers increasing steadily, and their numbers peaking in 1906. (Table 13: Appendix A) With the rise of municipalities a new market was opened with the demand for official civic insignia, which joined that for church plate and masonic regalia. These branches were well established in the

Quarter by 1870. Allen (1966: 215) argues that in the depression years between 1876 and 1880, jewellery trades suffered but not all to the same degree. A revival in 1878 was halted by poor harvests and bank failures from which silver never fully recovered. Gold wares were the most seriously affected. Manufacturers tried to cut costs by replacing skilled craftsmen with machine processes which were performed by cheaper female labour, but this resulted in a deterioration in quality. The new branches were the only ones to flourish in these years. In 1876 for example, jet and black ornament makers were at their most successful, but declined rapidly over the next ten years. Their decline was more gradual until the First World War after which their numbers in the Quarter were negligible. (Chart 16: Appendix B) Occasions like the Jubilee of Queen Victoria in 1887 increased demand for medals and badges, insignia and presentation caskets, but the trade was also hit by royal deaths, when long periods of mourning precluded the wearing of any but the most simple jewellery. The importance of medallists which includes the allied trades of badge-making and enamelling, increased from the period of Queen Victoria's Jubilee, but achieved its greatest importance in the area after the First World War. (Charts 17 and 18: Appendix B)

The adaptability of the trades is evidenced by the changes which the trades made in their production. As demand for silver jewellery declined, silversmiths diversified into the production of small personal items such as silver-backed brushes, cigarette lighters and

cases, picture frames and smaller items of tableware (Allen 1966: 248-9). The number of firms of chasers, outworkers to the silver trade, shows a small decrease in 1886, but with adaptation to these new products their numbers were at their highest in 1906. They were in sharp decline in 1926, and had made only a small recovery by 1936. After the Second World War they no longer feature as a separate outworking trade. (Chart 26: Appendix B)

Goldsmiths responded to the decreasing demand for gold guard chains by producing gold studs, cufflinks and tie-pins. The growth of organised sport at the turn of the century meant a rise in the manufacture of trophies, medals, cups and shields, which incorporated many "jewellery" skills. Despite competition from Germany from the end of the nineteenth century, jewellery production was one of the two chief trades of Birmingham by the beginning of the First World War (Allen 1966: 250).

The war had a deleterious effect on the industry, both in terms of loss of man-power and the restrictions which the industry suffered in the supply of raw materials. Labour was diverted to precision work in munition factories, though some were engaged in the production of inexpensive sentimental jewellery which was popular in war-time. The importing of precious metals and stones at this time was allowed only by special licence from the Government. Early in the war platinum was recalled due to its value to the armament industry, forcing the trade to substitute palladium. The use of gold was eventually rationed out by bullion dealers. (Nott

1987: 10). A short-term post-war boom was eventually affected by depression, together with changes in women's fashions and the attraction of engineering for skilled workers in wireless and motor-car factories, which drew skilled workers away. Roche (1927: 59) argues that in previous downturns in trade the middle-class and working-class markets had been the first to be affected by economic slumps, which had resulted in the production of cheaper but well-made articles. In 1877, for example, this led to the expansion of cheaper jewellery at the expense of medium-priced goods, as those who had previously bought the latter bought cheaper instead. In 1920, the middle-class market virtually disappeared, as the popularity of cars, wireless and gramophones grew. This theme of expenditure on jewellery competing for disposable income is a recurring argument in explaining the decline in the industry. The accompanying tables for 1926 (Tables 14 and 15: Appendix A) indicate an actual increase in the number of firms by street in the Quarter, but this can be explained by workers setting up independent workshops. Roche has argued there was a decline in the numbers in the workforce and in those seeking training at this time, and a similar pattern recurred in the 1980's, as will be shown.

At the outbreak of the Second World War skilled jewellery workers were again in the armament factories, but other opportunities arose in the form of contracts to supply badges for the armed services, and 71 firms in addition to the usual contractors were supplying this

need. Prices of available goods increased with compulsory war risk insurance, and there were problems with supplies of materials, especially of precious stones from Austria and Czechoslovakia. Labour costs were higher as those in training entered the war. By 1941, Board of Trade Regulations restricted jewellery and plate production to ten factories but from August 1942, jewellery production was prohibited, although stocks could be disposed of (British Jeweller 1942: 11). The industry, which had never fully recovered from the decline after the First World War, and was beset by labour shortages, restriction on materials, and the burden of purchase tax after the Second World War, then faced a long period of competition from Italian imports, as well as the introduction of plastic jewellery and periods of decline in jewellery as a fashion item.

This brief outline of the development of the industry indicates the necessity of flexibility and adaptation to sustain manufacture in the trades. We now turn to certain key features of jewellery production in Birmingham. Localisation, the organisation of production and the establishment of its own formal institutions are identified as the underpinnings of the particular form of occupational community which developed in Birmingham's Jewellery Quarter.

### Localisation of the jewellery and allied trades.

This section describes how the geographical localisation of the jewellery and allied trades occurred. It is argued that the location of the jewellery trades in a particular area is closely related to the way in which Birmingham developed from a small, unimportant settlement surrounded by agricultural land to a large city where a diverse range of products were produced in a variety of small workshops and factories. This occurred as large landowners built initially residential property on their estates, from which rents were collected. The subsequent occupation of these by particular trades led to the formation of industrial working communities, the longest-lived of which is the Birmingham Jewellery Quarter.

The population growth and trade expansion during the eighteenth century resulted in overcrowding and congestion in the Digbeth-Deritend area and around St. Martin's Church (Gill 1952: 57). New residential housing was built to the north-west of the town, but leases carried restriction preventing occupants from engaging in trade or manufacture from them, so manufacturing growth was restricted to its original area until the middle of the eighteenth century. Restriction-free land was then developed on the main Wolverhampton road and toymakers, buttonmakers and gunmakers migrated to take advantage of the more spacious workspace on the Newhall estate. A significant number of silversmiths were to be found in these new streets and workshops were established towards the end of the century around the new church of St. Paul's





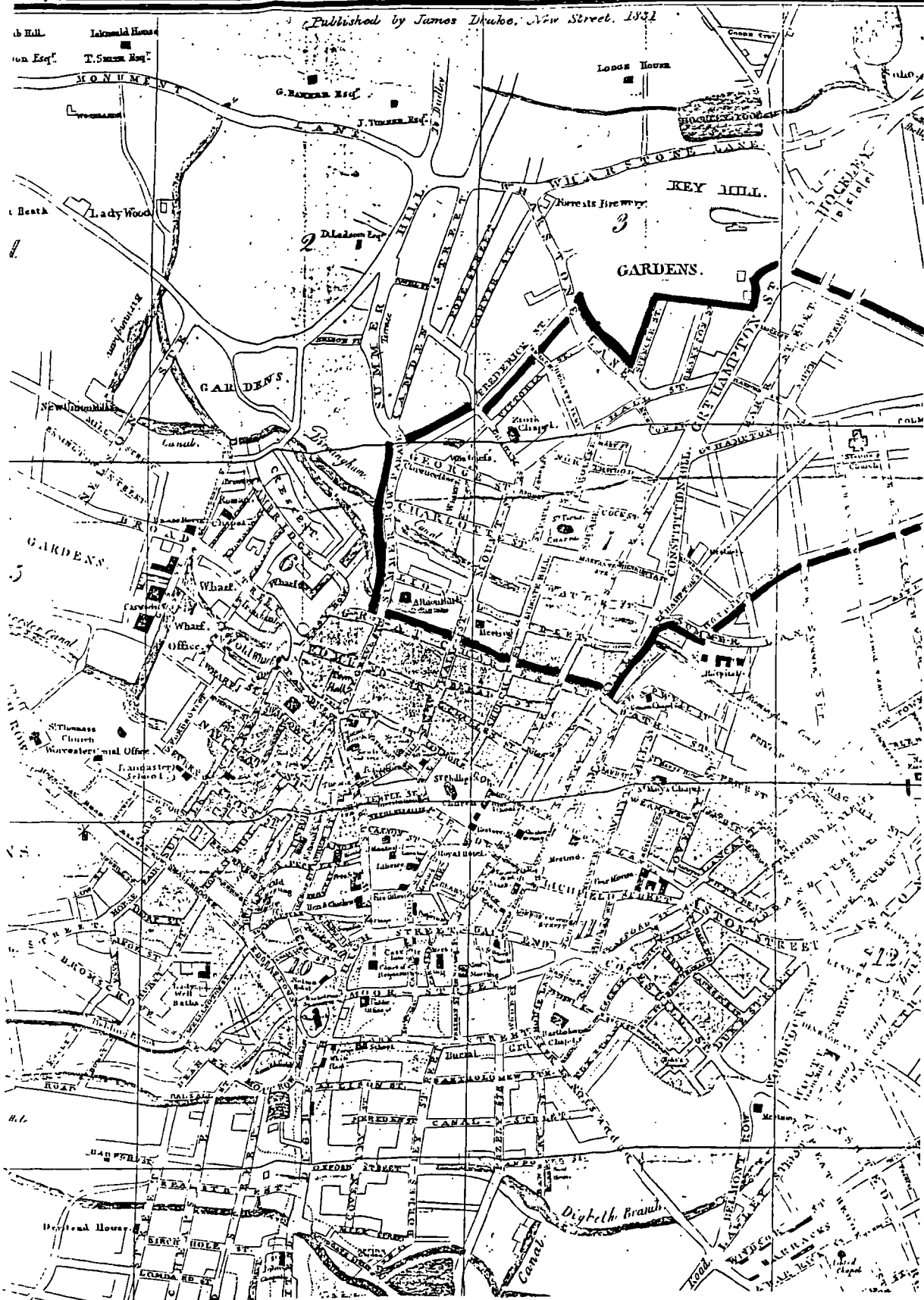


Wise argues that it is between 1796 and about 1830 that localisation "first develops as an important feature of the trade" (1951: 69). Although it is still too early to talk of localisation of the jewellery and silver trades at this time, the building of Matthew Boulton's Soho factory in the area was an incentive to workers to rent nearby housing. The training received there and in other workshops led to many setting up on their own account as toymakers and silversmiths, with a resulting increased demand for accomodation. Despite the preference of silversmiths for land near the new canal for easier movement of heavier goods and raw materials, they were unable to secure this and remained in the St. Pauls' area until the 1840's (Crisp-Jones 1981: 83).

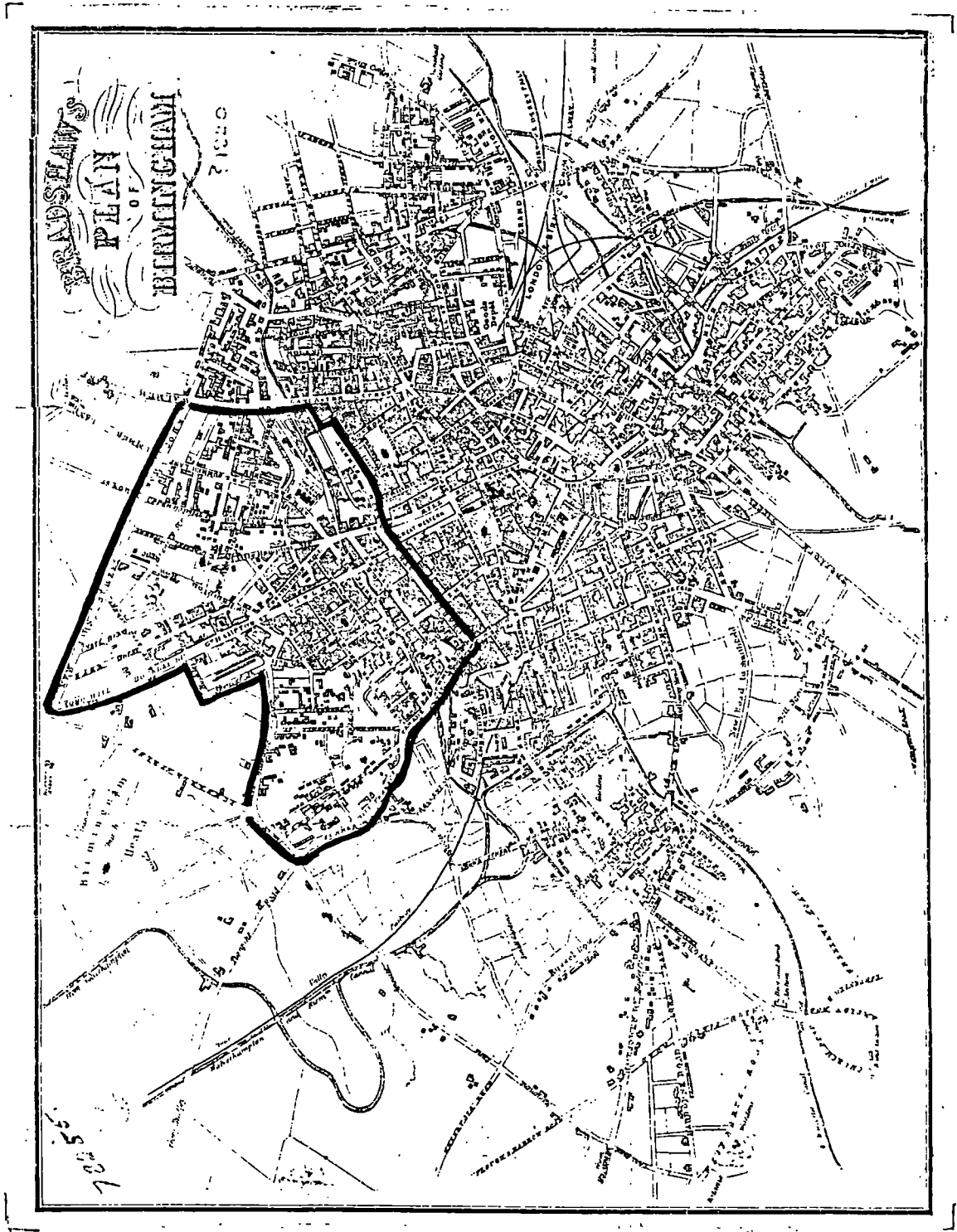
By 1820, jewellers and the allied trades were increasingly a separate and viable trade, and although some were scattered around the town, the majority were located in the streets north of Colmore Row, in Great Charles Street, Church Street and Newhall Street where they remained until the 1840's (Allen 1966: 55). In 1829 they were also to be found in the area west of Great Hampton Street, crossing it in search of more accomodation in 1845 (Wise 1951: 71). Jewellery and the allied trades were competing with the dominant button trade and burgeoning brass trade for workshop space. The accession of Queen Victoria and the gold discoveries in the middle of the decade coincided with the opening up of the Vyse estate for building. These immediately became manufacturing units, because the villas were larger than

# PLAN OF BIRMINGHAM,

*Alphabetical list of the Streets, Churches, Chapels, Principal Inns, &c.*



Map 4 - Birmingham 1831.



Map 5 - Birmingham 1840.

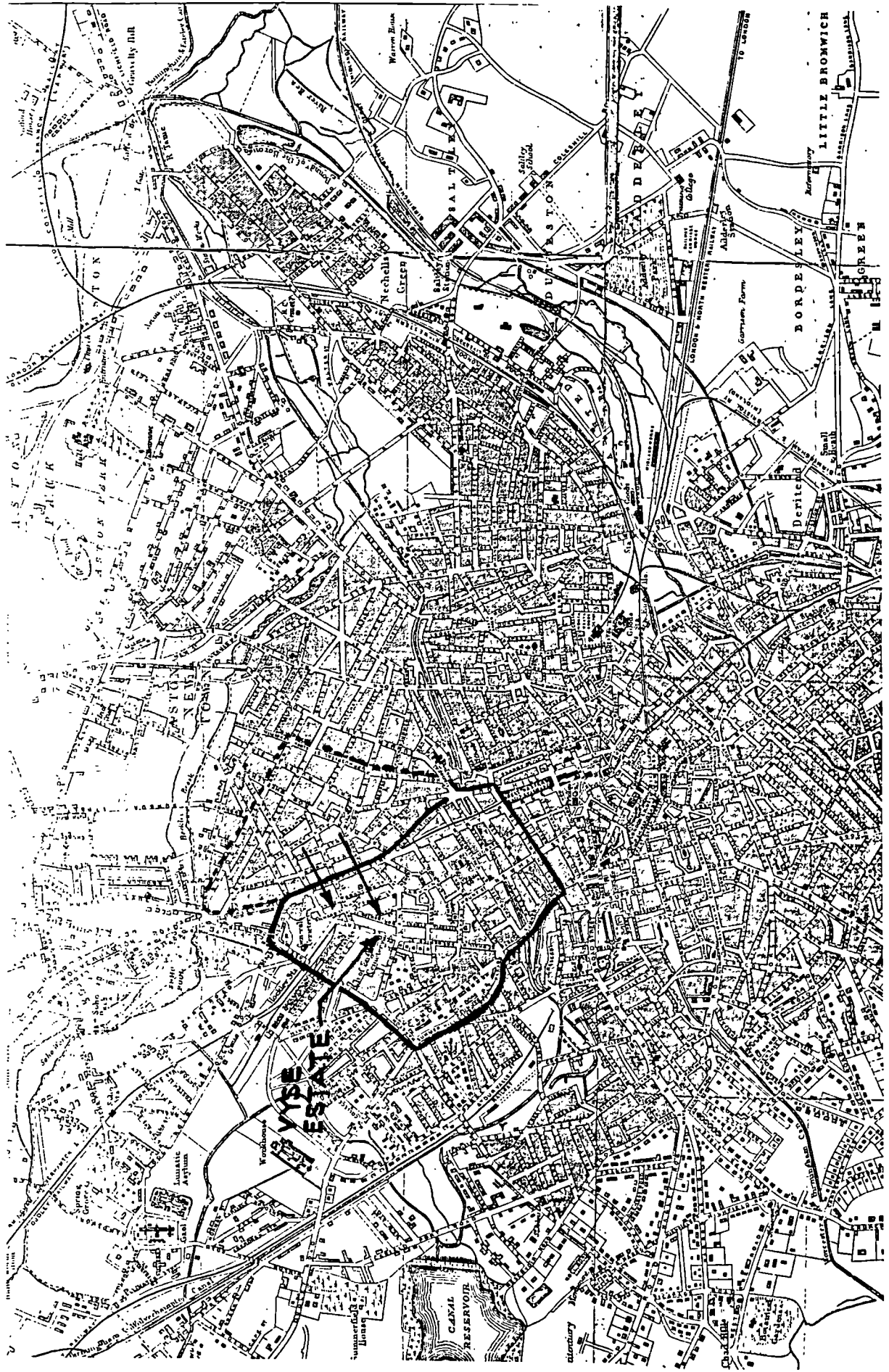
those previously available and included gardens long enough to accomodate workshops. Small jewellery factories with workforces of up to 40 people were opened up in Warstone Lane and Frederick Street. A local trade directory of 1850 shows the move across to the newly-opened estate gradually occurring. Great Hampton Street still retained 33 jewellery and allied firms, 17 of which were jewellers and goldsmiths. Caroline Street shows the next largest total with 25 firms, 13 of which were jewellers and goldsmiths. Vyse Street already had 10 firms, of which 9 were jewellers and goldsmiths. Spencer Street, on the Vyse estate, had 17 firms, more than half of which were jewellers and goldsmiths. Though the largest number of firms were still in the Great Hampton Street - Newhall Street area, the beginnings of the gradual move towards occupation of the Vyse Street area can be seen ("History, Gazetteer and Directory of Warwickshire" 1850: 289-394), (Table 2: Appendix A).

What Wise refers to as "the final shift in distribution" (1951: 70) occurred in 1865. The number of firms had grown steadily since the early 1840's. Trades migrated from St. Paul's Square and Great Hampton Street into Vyse Street, Northwood Street and the surrounding area. The jewellery trades were concentrated in the area in which Vyse Street and Frederick Street are to the west, Great Hampton Street to the east and Brook Street and Great Charles Street to the south, but they competed for space with "the entire range of metal trades except the gun trades" (Heward 1984: 45). With the decline of the

button industry, jewellery became the dominant industry. The accompanying tables show the intensive clustering of trade in core streets, of which Vyse Street, Spencer Street and Northwood Street became the most significant by the 1870's. The numbers scattered in other streets in Birmingham decrease significantly from this point. The figures collected from directories on a ten-year basis for a number of jewellery-related trades in the nineteenth century illustrate the increasing dominance of the trades. These figures only relate to the number of firms and not those in employment, and are selective in kinds of trades enumerated. While this brings them into contention with Timmins' (1866) figures, (1) the actual percentage of firms in the area remains unaffected in terms of proportion of firms over the decades. They clearly show the decline of the St. Paul's area and indicate that the Vyse Street area experienced few fluctuations in terms of the proportion of trades which clustered there. Even when the decline of the industry becomes noticeable in the twentieth century, the share of space remains high, and no other single industry competes for dominance. From 181 jewellers and goldsmiths recorded in 1850, numbers increased to 342 in 1861, with clusters of 26 in Great Hampton Street, 23 in Spencer Street, 20 in Northampton Street and 19 in each of Vyse Street, Caroline Street and Augusta Street. This illustrates the uptake of the accomodation in the Vyse estate and the beginning of the trend of supportive trades to gather round the main trade.

In Great Hampton Street in 1861 there were two stampers, three chasers, three die-sinkers and seal engravers, seven gold and silver engravers and seven silversmiths. By 1876, Vyse Street had 43 jewellers, with 57 supporting or allied trades, and 36 non-allied trades. In 1886, out of 138 businesses in Vyse Street, 113 were jewellery-related, with jewellers retaining their dominance, while in Great Hampton Street, 66 out of 174 were jewellery-related, a drop of 21 from 1876. By 1896, Vyse Street had 182 firms, only 34 of which were non-jewellery related while in Great Hampton Street, the numbers had fallen to 52. The Vyse Estate streets, from 1861, continue to displace the Newhall Estate as the focal point of the trades, and as specialisms developed in the last quarter of the nineteenth century, the dominance of jewellery and the allied trades becomes more apparent. Within the range of trades selected for the tables, (2) there were 310 jewellers in the Quarter in 1896, with 730 other allied firms including 75 engravers, 35 ring-makers, and 59 silversmiths. (3)

The key factor in localisation appears to be that of the need for small workshop space, combined in the early years with sufficient accomodation for family. As some masters achieved success they moved out to new residences in the Handsworth and Edgbaston areas, and their former homes were expanded as workspace either for themselves or for sub-letting to others (Heward 1984: 55). This system of sub-letting of accomodation continued to be of importance to the trades, not least as a source of



Map 6 - Birmingham 1870.



cheap workspace for the independent out-worker, and its relevance in the twentieth century will be discussed in a later chapter. These characteristics of localisation and sub-letting of premises led to a clustering of the trades which provided the physical conditions for the development of an occupational community.

### The structure and organisation of the industry.

The period between the late eighteenth century and 1850 was one of rapid economic change. The conventional image of the Industrial Revolution is that of large-scale production within factories. Perkin (1969) points to a gradual transition from domestic workshop to the factory system:

"with its twin principles of specialization within a large working team and the application of fixed capital in the form of labour-saving machinery" (1969: 111-112).

This resulted in a "vast increase in productivity which was the Industrial Revolution in its narrower, technological aspect". Despite its slow application to many industries, Perkin argues that this form of large-scale organisation dominated the economy by 1840. He supports his argument with evidence of large firms involved in spinning and other textile industries, pottery, brewing and iron ship-building (1969: 111-114). Berg (1985) however, has argued that a diversity of

organisational structures co-existed in the late eighteenth century. Even in textiles there was no simple transition from artisan, through the putting-out system, to the factory system. Rather, Berg demonstrates that

"features of all these types of work organisations and various permutations of them existed from the very beginning of the eighteenth century within and between the various textile industries" (1985: 199).

By focussing on particular industries in a broad historical period she has highlighted the organisational variations in and between industries. Briggs (1968) has argued that "the first effect of early industrialisation was to differentiate English communities rather than to standardize them", citing Manchester and Birmingham as contrasting examples, with the former dominated by large-scale production manned by de-skilled "hands" in contrast to the small workshop production of the latter (1968: 33). Birmingham represents a particular mix of forms of production which are exemplified by the emerging jewellery industry and this section analyses the particular features of jewellery production.

It has been shown that Birmingham had specialized in lighter metal goods, as described earlier, since the late seventeenth century and, as cruder manufactures were drawn nearer to the source of raw materials, the option for those left was to develop

specialisations, which in turn led to a labour force which developed the necessary skills for highly finished goods. From the beginning of the nineteenth century, there was no rapid transition from small-scale to large-scale industry, nor general introduction of machinery to replace hand-skills as in the textile industries. By 1860, Allen argues, Birmingham was responsible for almost all the middle-class and cheap jewellery production in Britain, and the industry was marked by the number of units rather than their scale. The scale of the enterprise, the limited role of the factor in the small workshop production of the industry, together with the lack of widespread sweating and of apprenticeship schemes are factors which suggest that this hand-craft industry was atypical of nineteenth century production as described by Perkin. It also differed from the large-scale metal industries of the nearby Staffordshire towns. The persistence of interdependent trades with their variety of small-batch production which limited the opportunities for standardised production, the involvement of family members in the workshop, and the particular features which emerged in the industry of differentiation of skilled tasks suggest that Birmingham fits more closely to Berg's model. The small trades were flexible in their responses to changing fashions and materials which led to the new handskills of stone-setting, jet and black ornament making, and mounting, which in turn offered opportunities for self-employment. The craftworker was central to the production process and remained unthreatened by the

mechanisation which resulted in mass-production, because of the necessity for their hand-skills at various points in the production process.

Allen describes the typical workplaces which co-existed in Birmingham and the surrounding district in the first sixty years of the nineteenth century, and which characterised the jewellery and allied trades. Purpose-built large factories employing more than 150 people working with power machinery were uncommon but not unknown among the diverse metal trades and one employed 400 workers. These were mainly concerned with gold, silver or gilt chains, with the use of semi-skilled labour. Medium-sized premises evolved from groups of converted dwellings into which firms expanded as their business grew, and which might also have power-driven plant. Workshops employing less than 30 or 40 people were housed in former dwellings or out-houses with no power. What Allen calls "the outworker, garret-master or domestic worker proper" worked in his own home or outhouse, employing family members and occasionally an apprentice or journeyman. Rented accommodation was cheaply available, and could consist of as little as sub-let bench-space in a room or out-house.

In the jewellery trades, manufacture of high-class products was performed by skilled craftsmen who worked either in small workshops of between 10 and 20 people, or as independent workers. Owners had usually been, and often continued to be, master craftsmen. Handwork predominated, and capital outlay was small;

"a bench, a leather apron, a few tools, a blow-pipe and a gas-jet, supplied on credit by the Gas Company, comprised all the plant necessary" (1966: 120).

In other areas of the metal trades, organisation of work in the first half of the century was based on the sub-contracting system organised within factories as Staples (1987) has shown, replaced between 1868 and 1891 by what he describes as the paternalistic system in which waged labour interest became aligned with that of the employer in exchange for community benefits involved with health and education provision. (4) While it seems likely that earlier factories engaged in toymaking followed the sub-contracting pattern, the paternalism of the larger factories is not appropriate to the jewellery industry because there were so few large workplaces. Heward refers to Winfield's Boiling Mills in Cambridge Street which organised a factory night school in the second half of the nineteenth century, (1984: 135) and there is some photographic and oral evidence of one firm which organised "outings". (5) In general, however, there were few large companies and when the need for training became crucial for the local industry, this was achieved on a co-operative basis as will be shown below.

In the jewellery trades, the element of sub-contracting assumed a different form from that described by Staples in his model of the earlier period. Specialised processes, such as setting and mounting,

engraving and polishing, were not carried out under one roof, but in independent workshops, some of which might temporarily work exclusively for one manufacturer. This sub-division of processes became more marked in the last Quarter of the nineteenth century, and even before that, Allen argues, the preparation of gold-leaf for gilding, stone-setting, die-sinking and engraving, and case-making, had been distinct trades. The stamp and hand-press produced parts for gilt jewellery such as brooch-tongues, and this too was a specialist task. Allen argues that, "a considerable subdivision of labour was not inconsistent with the survival of the small firm" (1966: 116).

In the craft-based jewellery and allied trades there were many hand processes which could not be replaced by mechanisation, and few required strength alone. Allen has argued that the new technology of the industrial era was not well-developed in the area even in the manufacture of goods for the cheaper end of the market. The steam-operated machinery which was introduced was in use only in the foundries and rolling mills. In the production of lighter goods, machines remained hand-operated until the late 1860's because of the availability of the cheap labour of women and children. The base of the industry remained the skilled craftsmen using few tools. Sub-division of processes continued and grew more complex as fashion changed, as with the growth in the popularity of precious stones. The importance of the skilled man was such that it prohibited the introduction of sweating on the scale in which it flourished in other industries. The

skill factor is significant, and Steadman-Jones (1973) has shown that among the London artisans, processes which became sub-divided led to semi-skilled and sweated work, often undertaken at home, among clothing workers, furniture makers, and the foot-wear trades. Morris (1986) has argued that while sweated labour and home-working have been regarded as residual characteristics of an earlier stage of industrial production, her evidence from a study of tailoring trades contradicts this argument and she concludes that:

"the reasons behind sweated labour were found in the dilution of labour skills, brought about by developments in the organisation of production, and in the ready availability of a supply of cheap labour (mainly women and girls)" (1986: 2, 236).

It has been shown that in the jewellery and allied trades this situation did not obtain on any large scale. Birmingham seldom featured in the returns of the Prosecutors in relation either to illegal child labour or sweating. (Birmingham Jewish History Research Group 1980) The organisation of work in small workshops, a product which must retain its quality in order to retain demand, and to which a skilled workforce was integral, and the involvement of the family, modified any tendency to the large-scale sweating which was apparent in other trades, despite the employment of juvenile and female labour.

Another distinguishing characteristic was the role of the factor in relation to different-sized firms. Factors (Allen 1966: 116) distributed products and often supplied raw materials and provided working capital. This latter function was not necessary for larger owners, but important to smaller manufacturers who received advances when their goods were delivered to the factor's warehouse weekly. Allen differentiates between "the shop owner and the domestic worker proper" by the degree of "financial dependance on a merchant intermediary", defining the former as concerned with administration and the latter as a craftsmen who must also co-ordinate production. Allen argues that the role of the factor, crucial in some areas of small workshop trades, was less so in the jewellery and allied trades. He attributes this to the function of the factor in the supply of raw materials. Their role in the jewellery trades was limited by two features of the trades. One was the sub-division of processes described above, and where only the main producer carried the capital costs, and the second the small cost necessary to set up as an independent firm. The factor's function in supplying initial capital was not relevant to the jewellery trades because small producers in jewellery and other trades dealt directly with large manufacturers. These also factored goods produced by out-workers functioning independently in their own workshops or, as Allen argues, by women working for the manufacturer at home. Not only did manufacturers add factoring to their business, but many factors became manufacturers. Thus



there was a mix of the larger employers providing work for the outworkers, and master craftsmen who co-ordinated the work in the jewellery trades, rather than the factor as in other local industries.

### Summary.

The role of the large factory in jewellery production was, in nineteenth century terms, very much at the fringe of the industry. Joyce (1980) suggests that capital intensive production was complete in the textile industry by 1860. In jewellery, small batch production was achieved with minimal capital, and depended on hand skills. These skills had developed from the older metal trades and were facilitated by the new source of cheap energy in the form of gas. Mass production was present and some factories existed, as was shown earlier, and these acted in the earlier period in particular as a training ground for new skills rather than as a threat to existing craftsmen. In other trades, such as clothing and footwear, skilled work had been divided into separate simplified and repetitive tasks performed by vulnerable labour exploited by the factor (Stedman-Jones 1973-4: 484). The factor organised the production by the control of the putting-out system into small workshops or to be performed by women and juveniles at home. It has been shown that in jewellery there are some similarities with this system too. There was a division of labour along gender lines, and there was use of family labour. In addition to outwork, there were tasks which were performed by home-workers. The factors

played a small role in the organisation of some of this work, but the jewellery industry remained fundamentally separate from the sweated system, and the factory system as typified by Joyce (1980) and Morris. There was a division of labour but of craft skills which were new to Birmingham and which were being developed by male workers. The role of the factors has been shown to be weak, and the family members were either partners or assistants in the enterprise. The jewellery trades themselves were not, in Birmingham, an old craft threatened by new methods, but a new craft which differentiated itself from older metal trades and within itself developed a division of labour between emerging crafts. Finally, unlike other new skills which emerged in new and developing nineteenth century industry, such as locomotive drivers and engineers, it was not necessarily employees who used the exclusivity of their skill to protect their trade from diluted labour. In the Jewellery Quarter, skilled workers were also working employers still exercising the craft in which they had been trained. Employees could become highly paid skilled craftsmen or become independent outworkers and employers. Thus there was little development of the craft unionism of the nineteenth century, or of apprenticeship linked to this, as will be shown later in the chapter.

The intensive localism of the trade documented earlier and the type of accommodation which was available affected the way production was organised in small workshops with outworkers integral to the system. Towards 1860 the new industry of jewellery production which had

become differentiated at the end of the eighteenth century had consolidated its position and this was reflected over the next decades by the establishment of formal institutions.

#### The formal institutions.

The institutions which emerged in the wake of consolidation were the Birmingham Jewellers' and Silversmiths' Association (B.J.S.A.) in 1887 and the Birmingham School of Jewellery and Silversmithing (B.S.J.S.) which originated the following year. The Assay Office, which had opened in 1773, relocated to the fringe of the Quarter in 1880. The jewellery workers' union, which underwent a series of name changes, was the latecomer and did not emerge until the early years of the twentieth century. The origins and aims of formal institutions are described here in detail because of their relevance to the occupational community.

#### The British Jewellers' and Silversmiths' Association.

By the last quarter of the nineteenth century, as a result of expanding markets and increased availability of materials, together with some technological improvements, the trade had joined brass, buttons and guns as one of the four dominant industries in Birmingham. The variety of processes and market changes resulted in uneven development, but it had evolved into a distinct and viable industry. An early attempt at association among owners was made in 1851, with the aim of mutual protection, but this was short-lived. In 1887 a group of owners floated the

idea of an association for the trade. A letter in 1887 to employers in the Birmingham industry (Nott 1987) expressed a concern to tackle problems of crime and insolvency, training and the downturn in trade which threatened to replicate that of the previous decade. Two hundred attended the first of several meetings at which the idea of an association was discussed and accepted. The resulting objectives were:

- "1) To promote art and technical education.
- 2) To secure uniformity of action in cases of failure.
- 3) To watch legislation affecting the trade.
- 4) To secure prosecution of thieves and receivers.
- 5) To assist in the development of foreign and colonial trade.
- 6) To seek through parliament or other competent authority the removal of all restriction upon, or the support of all measures for the development of the trade" (1987: 2).

The membership of the B.J.S.A. sought to regulate an increasingly important local industry in an attempt to ensure a multi-skilled workforce capable of adapting to changes in fashion and technology, and to establish a lobbying voice to protect and develop its trade interests. Bankruptcy was regarded as the main priority. In an industry based on sub-division of trades and out-working, a single bankruptcy had a ripple effect on the economy of the local community. The B.J.S.A. declared its intention to act on behalf of its members in cases of insolvencies, acting in an investigatory

capacity, in an attempt to "weed out rogues and mete out punishment to discourage others" (Roche 1927: 39). Bankruptcy proceedings took time and there were often acquittals of defaulters. The B.J.S.A. not only acted as arbiter but also as a moral force. The dishonest were treated as "outcasts" in the trade. In an industry which was so localised, and where there was continued inter-action between processors and manufacturers, this proved effective, and it seems probable that the B.J.S.A. was formalising an established practice. A further area for action was in debt collection. Over a period of time the B.J.S.A. was to influence the leniency of the existing laws under which commercial offences were not regarded as criminal acts (Roche 1927: 39).

The Quarter was described as being, at this time, "a happy hunting ground for thieves, burglars, housebreakers and receivers" (1927: 53). A Vigilante Committee was formed to apprehend and prosecute thieves, internal rules changed by employers who demanded references from new workers, and suspicious characters were reported to the Committee which also paid half of any prosecution costs. A watchman was employed at a cost of £230 for two years, but this measure did not prove cost-effective. Despite the assurance of the police to the B.J.S.A., the problem of over-lapping boundaries in the Quarter proved a hindrance to their effectiveness until a local boundary act was changed in response to the concern of the B.J.S.A. (1927: 40).

In addition to these attempts to improve security there were early attempts at price-fixing, in order to introduce some kind of uniformity of cost and quality, the latter having been eroded in some areas by the dilution of skills in the previous slump. This proved difficult to introduce because there was little standardisation due to the diversity of products and processes, and few large factories where strict controls could be introduced. Roche argues that the move was further hampered by the inherent distrust exhibited by the independent workshops who were reluctant to disclose their prices because of the keen competition within the trades. (1927:36) Despite these setbacks, the membership grew from 190 in 1894, to 352 in 1906 and 500 by 1927, though this remains a small number compared with the numbers of firms recorded. The B.J.S.A. soon became recognised by outsiders as representative of the trade. The Jewellery Quarter was represented by Joseph Chamberlain first as local councillor and later as their Member of Parliament, and he was effective in getting plate duties abolished to the benefit of the industry. (1927:45). This influential contact in the early years also assisted in their incorporation as a limited company in 1901, and in the same year they expressed concern to him in respect of the proposed extension of the powers of the Assay Office. This resulted in a third of the Assay Office's surplus funds being channelled to assist the Art and Technical Fund, and an agreement to consultation with the B.J.S.A. on the appointment of trade Guardians (Nott 1987: 66).

During the First World War the B.J.S.A. was active locally and nationally, negotiating the agreement of the rationing of precious metals by bullion dealers. The emphasis was not merely on trade however, as was evinced by the establishment of a fund for entertaining wounded local servicemen and later, a memorial for those who died. The B.S.J.S. was reorganised at the end of the First World War as a result of the growing importance of labour issues in the trade. Trade sections were created to provide representation to a General Council for the following trades:

Manufacturing Goldsmiths

Silver and Electro-Plate Manufacturers

Rolled Gold, Gilt and Imitation Jewellery  
Manufacturers

Platers and Gilders

Case Makers, Fancy Leather and Optical Goods  
Manufacturers

Die Sinkers, Stampers, Piercers and Material  
Dealers

Factors, Stone Dealers and Watch and Clock  
Dealers (1987: 12).

These sections were subject to change resulting in divisions or amalgamations which were the result of changing markets. The subscription system still in current use was devised at this time, and was linked to the number of employees and with increased services and improved benefits. The Trade Enquiry department was divided into foreign and domestic sections, a range of insurance was

offered and half fees for those members' employees who attended the School. As an association the B.J.S.A. became a member of the Federation of British Industries and Birmingham Chamber of Commerce. As early as 1915 the B.J.S.A. produced a Buyers' Handbook which was published in several languages and a Visitors' Room was established for the reception of visiting buyers (Roche 1927: 55).

The B.J.S.A. was active in the proposals for the marking of all imported silverware goods, in an effort to update the Merchandise Marks Act 1926. (6) Despite its activities on behalf of the national industry, it was not until 1943 that it became known as the British Jewellers' Association (B.J.A.), opening a full-time branch in London (Nott 1987: 13). From the outset there was an active social side to the B.J.S.A.'s activities, and it held the first of its Annual Banquets in 1889. (7) The trade magazine, "British Jeweller", grew from a trade gazette first published in 1909. This evolved into a monthly Bulletin of the activities of the B.J.S.A. with advertisement space for members and by 1929 contained commissioned articles (Nott 1987: 57). The first editor of "British Jeweller" was Norman Tiptaft, a member of a jewellery manufacturing family and local councillor who became Lord Mayor. The magazine first appeared under the name "Birmingham Jeweller" in 1933, but "Birmingham" was replaced by "British" within a few months in response to readers' demands. By 1940 a further monthly supplement, "British Jeweller Overseas" was added, for distribution through consulates and embassies. The first circulation



figures were 8,304 and the magazine contained trade news, both of firms, personalities, and the markets, and included specialised articles and notices of forthcoming prosecutions in the trade. It was used by members to notify customers of changes of address or to deny rumours that their businesses were failing, and gave details and reviews of international and national shows. During the Second World War it informed the trades of the restrictions on materials and despite its Birmingham editorial links, addressed the industry nationally.

The formation of the B.J.S.A. was typical of the late nineteenth century industrialist's response to the growing awareness of the need for technical training and government protection to face competition from the increased industrialisation in the rest of Europe. The priorities of the B.J.S.A. were founded in knowledge of the local industry and the hazards peculiar to trades dealing with precious raw materials. Their aims were to associate for mutual protection, against defaulting customers, internal and external threats to security, and to prevent or alter legislation which hindered the industry's profitability nationally and internationally at a time of global growth. The establishment of a training centre for the trades in the heart of the localised industry in Birmingham was a popular and significant move. It represented a recognition of the need for formalised training to sustain the dominant position of the industry, both locally and internationally. Though its membership was never large, it represented the leading local

employers, some of whom were involved in local government. It benefitted in its early years from the local association with Joseph Chamberlain, who was himself a member of a large metal trades dynasty and sympathetic to their problems. These local political connections contributed to its early recognition as the voice of the industry, a position which it sustained despite the later erosion of the importance of the industry to the city.

The relevance of the B.J.S.A. to the occupational community, despite its employer-dominated membership, lies in both the timing of its establishment, and its retention of localism. The core of the Quarter, established shortly after the opening of the Vyse estate for building as shown earlier, was well-established by the 1880's. From the 1840's the gradual development of the trade meant that successive generations of jewellery families had grown into influential concerns, with leading figures associated with local politics. Together with brass, jewellery production was a significant part of the local economy in terms of the numbers it employed. Although the B.J.S.A. developed a national membership, this localism was retained and in terms of executive membership, dominated the B.J.S.A. It gave members an opportunity to socialise at events and thus acted to bind them together, not in order to act against employees, but to act as a lobbying group for their industry. They were quickly confirmed in this role by the local authorities, as will be seen from the agreements negotiated with the Corporation in regard to the School. It served the

interests of a wide range of participants in the trade, in security, debt collection, lobbying at both local and national level and in the dissemination of market information. With regard to the moral order of the occupational village, it has been suggested that this might already have been in place given the proximity of firms and the ease with which information could pass between firms. It would be more accurate to say that the B.J.S.A. legitimised this order. Through its relationships with other trade associations it was able to obtain information which assisted its lobbying position. The significant contribution of the B.J.S.A. to the occupational community was the establishment of formal training for the industry in the heart of the Quarter.

The B.J.S.A. and the formation of the Birmingham School of Jewellery and Silversmithing.

The aim of the B.J.S.A. to improve training was realised with their establishment of the trade School, which has become a key institution in the Quarter. Its formation was a recognition by employers facing growing competition of the need for training in the relatively new industry and in skills in which there was no development of craft unionism to insist on the encouragement of apprentice training.

The trade was keen to have a variety of skills at their disposal which could be adapted to changing markets, and to ensure that hand processes and skills were retained. In 1888 the B.J.S.A. arranged for tuition to be given in Ellen Street School, a branch of the Municipal

School of Art situated in the Quarter. Classrooms were set aside for this purpose and in November, forty youths aged between twelve and twenty years old were entered by the B.J.S.A. and received tuition from special masters, with the cost shared equally between their employers and the B.J.S.A. Its success was immediate and by the end of the first term 108 students were enrolled, with the first prize-giving taking place the following February (Nott 1987: 47).

With the passing of the Technical Education Act in 1889 the way was opened for local authority support and the City Council was approached for assistance. The Report of the Museum and School of Art Committee was favourable, and reference was made to the importance of the industry to the city as an employer of local labour (Nott 1987: 47). Employers had been impressed by the drawing tuition but the B.S.J.S. was anxious to stress the need for technical education and larger premises. The Council authorised the thirty-year lease of a former factory at 82 and 84 Vittoria Street, in the core of the Quarter, and the Finance Committee provided a grant for alterations, fittings and furniture. The new premises were capable of accomodating between 200 and 250 students and "as a student rarely attends on more than three out of five classes a week, provision would thus be made for over 400 students on the books" (1987: 49). The Assay Office contributed £500 for tools and equipment and the building opened as the Birmingham School of Jewellery and Silversmithing (B.S.J.S.) in November 1890. The classes

offered included chasing, engraving, enamelling and mounting.

For the B.J.S.A. it was a considerable achievement to have established a trade training centre, initially at its own expense, and for its success to be recognised and accepted at a time when industrialists were concerned about technical training. At a local level it was a response to the needs of the industry and the alarm at the shortage of skilled labour, and the inefficacy of such apprenticeship schemes as existed. Despite the financial burden being removed by the local authority, the B.J.S.A. retained tight control on its staffing and curriculum, in its early years. Like the B.J.S.A. itself, its location in the heart of the Quarter was significant. Supported by the local authority, it eventually became incorporated into the Polytechnic. Its position in relation to the occupational community will be discussed further in Chapter 5.

#### The Assay Office.

The longest-established of the jewellery-related institutions in Birmingham is the Assay Office, which resulted from Boulton's lobbying of his influential customers. The offices had originated in England in the fourteenth century to protect the customer against fraud and the manufacturer against unfair competition. Until 1773, goods had to be sent to Chester, resulting in delays, damage and often loss through robbery, and was an expensive undertaking. Birmingham's first office opened in New Street, in rented rooms in the King's Head Inn, with a

staff of four who received goods on Tuesdays. After several moves the office finally settled in Newhall Street a hundred years after its opening, (Ransome-Wallis 1982: 45) which brought it nearer to the core streets of the Quarter. It became involved with the B.J.S.A. in hallmarking amendments in 1894 and again in 1907. Consultation with the B.J.S.A. on the appointment of Guardians was agreed in 1901, together with assistance for the B.J.S.A.'s Art and Technical Fund which supported the School, from the surpluses of the Assay Office's funds (Nott 1987: 66). Hallmarking of imported goods and awards for the School continued to be the main issues on which the B.J.S.A. and the Assay Office were involved. Its establishment was initially significant in that it gave the local industry a degree of autonomy particularly from the guild-controlled offices in Chester and London. During the early years of trade consolidation, its main benefit was the reduction of the expenses incurred in sending goods away. The Birmingham office differed from its counterparts in other areas which had remained trade-controlled. It was supervised by 36 Guardians, of whom not more than nine and not less than six were to have trade connections. Revenue came from its service charges. Its move to the Newhall Street premises in 1877 corresponded with the expansion of the local industry which had resulted in the trades moving into the Vyse estate properties, so its new location was convenient. Although its function precluded intimate association, as its status demands that it remain independent, the Assay

Office was an almost daily feature in the working lives of jewellers, and thus was a contributory factor in the evolution of the trade in the city.

The formation of the trade union.

One of the reasons for the re-organisation of the B.J.S.A. in 1919 has been given as the growth of trade unionism in the industry (Nott 1987: 12). Union history until the period just before the First World War remains undocumented though there were ninety strikes between 1825 and 1850 in Birmingham and these involved the brass trades, Britannia metal workers, silver platers and wire-drawers (Behagg 1979). The issues for these unions were "relationships between groups of workers, market needs and organisational ability to apply customary practice". The development of gas and steam engines and subsequent increase in machinery were eroding these relationships. Behagg argues that the changing workforce relationships which resulted in masters becoming "proletarian outworkers" led to a polarisation of the relationship between two types of manufacture, and the loss of effectiveness of upward mobility as a safety valve. Small metal-working firms, he argues, had lost out in the highly competitive markets of the nineteenth century due to their dependance on the factor for materials and markets. There were increasing problems with apprenticeships, and resulting frustration led to subversive action such as the strike. Behagg is not specifically referring to the jewellery and allied trades, and the relevance of his argument is to point to the

contrast with these newer industries and other metal trades. From the mid-nineteenth century, as a result of national legislation perhaps, there is no record of dispute in second half of the century. Heward has argued that skilled workers in the jewellery trade were amongst the highest paid in industry (1984: 36) which may have militated against action.

Cattle (1983) suggests that the Birmingham Britannia Metalworkers' Association listed in the 1861 directory may have been involved in an attempt to form a national organisation at the end of the nineteenth century (1983: Appendix 1) and notes Gilbert's evidence of the existence of the Goldsmiths', Jewellers' and Silversmiths' Mutual Aid and Protection Society in 1872 and the Silversmiths' and Electro-platers' Operatives Mutual Aid and Protection Society. In 1897, a federation was established of workers from the main centres of production in Birmingham, London and Sheffield. The trades represented included silversmiths, electro-platers and Britannia metal-workers. By 1908 this had transformed into the National Affiliation of Goldsmiths, Jewellers, Silversmiths, Electro-platers and Britannia Metal-workers of Great Britain. Cattle argues that the trades were divided among ten different workers' organisations. The union, known as the Amalgamated Society of Gold, Silver and Kindred Trades formed in 1911 from the federation of the early societies. This aimed to increase the bargaining power of the workers in the industry, but it was a further two years before the Birmingham organisations joined. Its



membership locally was 2,280, a small fraction of the reputed 30,000 engaged in the trades (Roche 1927: 60).

During the early years of the First World War, larger employers suffered from disputes, as in other industries. Sheffield was the union stronghold dominated by the manufacture of electro-plated goods, cutlery and giftware. Because of the weakness of local unions, the federated jewellery, silversmithing and allied trades were dealing with questions of wages and prices for the trade on a national basis. A pay increase was negotiated in 1916, when forty companies agreed to pay an increase of ten per cent. It initiated steps to negotiate with employers' associations such as the B.J.S.A., rather than individual companies in an attempt to achieve uniformity. In 1919 the Union pledged itself to work for a forty-seven hour week, and this boosted the membership to 4,500. At Conference a minimum wage programme was drawn up for negotiation. In the absence of employer response a strike ballot was held and notification given to employers. 1,100 silver and electro-platers went on strike, jewellers contributing to the levy. The employers were sufficiently alarmed to agree to a meeting and the strike was called off after five days when the employers agreed to recognise the union. A wage agreement resulted in job classification for all trades represented by the union (Cattle 1983: 18). This momentum was lost in the slump which gave the power back to the employers who sought wage cuts, an issue over which the membership was almost equally divided, and the results of which were most serious for women. The dispute

was resolved by a sliding scale of wage cuts, although no agreement was signed.

The Union was never to regain the temporary high membership levels of the 1920's and experienced a decline in the 1930's, though it managed to prevent further wage cuts in 1931. With the upsurge of the trade in the late 1930's it was able to negotiate better piece-work rates while conceding issues of shorter hours and paid holidays. A positive contribution was that of the establishment of voluntary wage agreements negotiated with the B.J.S.A. annually, and a regular consultation process which includes training as well as wages and other benefits. Its membership remained small and it continued to be dominated by Sheffield.

The record of union activity shows it to be one of continued weakness. The reasons derive from the intensive localisation of the industry and, I would argue, the fact that, unlike the other formal institutions already described, it did not grow organically from the needs of local workers, but had its foundations in Sheffield and London. Local conditions prevented its growth, as they had the development of associations other than benefit-associated societies since the early nineteenth century, when the industry was only beginning to establish itself as separate from other trade. By the end of the century, more diversification had occurred. The predominance of the small workshop, and the nature of craft production meant that the "master-man" was in most instances not a remote administrator but working alongside

other workers on the bench, and employed family members. In larger enterprises, the use of machinery in some processes and production had meant that women workers had long been part of the workforce but the union was reluctant to recruit them. In the electro-plating and silversmithing trades, usually carried out by larger workforces, the Sheffield workers were the most numerous nationally in the Union. In 1914, most union membership was drawn from polishers, who worked on piece rates in larger enterprises which were concerned with silver or other plate production (Roche 1927: 60).

The Union was a latecomer in terms of the institutions of the Quarter and despite the industry's large workforce was unable to make great inroads into the trades. The characteristic small workshop base of the industry militated against this, and an indication of this is the nature of the membership, which was greater in the heavy non-craft processes. The numerous small workshops made recruitment difficult, and its early development was hampered by its own reluctance to recruit women workers. The practices of employing family, of close working contact with employers, and the mobility of the skilled worker, including the relative ease of self-employment, prevented unity. The variety of trades, shown by the number of separate organisations from which the Union was formed, indicate the diversity of interests which existed in the industry due to the specialisms which had evolved by the end of the century. For these reasons, the Union appears to have been the weakest of the institutions in

the occupational community.

### Conclusions.

An historical perspective has been used to explore the factors which led to the localisation of the jewellery industry and the evolution of the Jewellery Quarter, and which contributed to the formation of the occupational community. Gilbert attributes the importance of Birmingham's jewellery industry to specific factors. These are defined as the decline of the buckle and toy trades which resulted in a pool of skilled workers, the influence of Matthew Boulton especially in the establishment of the Assay Office, and the increased supply of raw materials. The absence of trade guilds, the early introduction of gas and the relative unimportance of tableware products which precluded competition from stainless steel are also cited as important factors, together with "the unique propensity of artisans to continuously modify and invent new techniques, metals and processes" (1973: 3, 47). It is not disputed that these factors were significant cumulatively, but it is argued that by adopting the concept of occupational community and analysing the establishment of its origins, the importance of the factors of localism, organisation of production and the formal institutions indicates a coherent historical process.

The attraction of skilled artisans to the town was not merely the result of its guild-free status. Allen argues that there were other towns where this situation obtained, and the simple acceptance of the lack of guild control ignores the changes of the early eighteenth

century. These had resulted in the need for a skilled and adaptable labour force, but the manufacture of the products required little capital. Rowlands has shown that in the first half of the eighteenth century apprentices were recruited locally for the toy trades which implies that a skilled local labour force was already in being. A thriving market for the goods added to the town's attraction for enterprising artisans prevented by guilds and other legislation from following other occupations. Boulton was successful in lobbying for the establishment of a local Assay Office which benefitted the trades by freedom from guild restriction. His buckle, button and toy factory was an important training ground in the second half of the eighteenth century, where promising young men were given drawing instruction (Delieb 1971). Boulton's diversification into coin and medal manufacture and his use of plating, meant an exposure for many workers to processes and methods which they could use as independent workers and adapt to new products.

The feature of intensive localisation has been shown to be crucial to the development of the occupational community and the forms of work organisation which evolved. The examination of directory information and the resulting charts indicate the number of streets where related trades were settled, and the movement which took place over a period from 1850 to 1936. These show that the growing trade was large enough to dominate in the Vyse estate almost from its development. The sharing of premises, sub-letting and the propensity of certain trades

to gather in particular streets, date from this period when the trades were consolidating. These features are crucial to the development of the occupational community. The actual limits of the Quarter at specific historical periods have been shown, and are illustrated by the tables in Appendix A. These indicate that the area now designated as the Jewellery Quarter includes some streets which have never been of importance in the trade, and that others were only of importance at an early date, such as St. Paul's Square.

The organisation of production in the jewellery and allied trades as manifested in Birmingham is again linked to its origins. It is important to remember that Birmingham was not an ancient seat of jewellery production, but that skilled metal workers were able to respond to new market opportunities. Although some large factories existed in the eighteenth century and in the nineteenth century took advantage of machinery, albeit hand-powered, the bulk of the workforce operated in independent workshops with ten workers or less. These did not necessarily produce the complete item, but used the skills of other outworkers. With the changes of fashion, for example in the popularity of jet and stone-set jewellery, and the increase in demand for badges and trophies, more specialised skills were developed. The skilled man or woman was able to operate independently for only a small outlay of capital, as a result of this diversification, and to use the family as assistants. The production remained small-batch, with the large amounts

being dispersed by factors or manufacturers among the numerous workshops. Localism and the amount of small workshop accomodation, further expanded by "infilling" and the use of gardens and yards for the erection of workshops, increased the numbers of small workshops. This physical proximity is significant for the development of the occupational community.

The role of the institutions in this community is important insofar as they appear to grow from this industrial concentration, which resulted in an easy exchange of market information, and biographical knowledge of importance to customers and employers of the many trades. The B.S.J.A. was an employers' association which sought to retain control in a changing market, in terms of markets, standards and labour supply. The establishment of the School under their auspices reflected this and also ensured, through their control of staff and curriculum, an avenue by which the industrial community's values and norms could be inculcated. The dominance of the small family business and the diversity of trades in the Quarter acted against the interests of unionisation, which emerged late in the consolidation of the local trade, and was more influenced by Sheffield than local factors. This resulted in its being regarded as appropriate only in larger concerns, which were few in number. The establishment of an Assay Office in Birmingham, in 1773, in which Matthew Boulton was influential, can be seen as a benefit rather than a cause, and played no part in the migration. Its establishment preceded localisation, and it did not move

to Newhall Street until 1877 when the expanding industry necessitated larger premises. This site was a response to an already well-established localisation of the industry.

The Jewellery Quarter consolidated its geographic and economic position in the last forty years of the nineteenth century, and its main institutions grew from its success. Economic and social change were responsible both for its rise and subsequent diminution in the period after the First World War. The introduction of gas in 1817, from the nearby Broad Street area, was a benefit to, but not a cause of, the popularity of the area, as small workshops where button-makers and a variety of metal trades engaged in manufacture were already established. The mid-century expansion of the jewellery and allied trades benefitted from the opening of the Vyse estate which the jewellery and allied trades immediately colonised, and continued to dominate. The small-scale operations, with heavy use of out-working specialists, grouped together in a few streets and in multi-occupied converted dwellings, provided the conditions which give credence to the concept of an occupational community.

Finally, the industrial development of the area was assisted by the early improvement in transport through the canal system and, in 1837, railways, which Allen argues combined to provide wider markets and confirm localisation. The expansion of the jewellery industry as a result of social and economic change is paralleled by this need for accommodation. The evolution of specialisms overlaps these factors to produce a highly localised



industry, with core trades confined to less than a dozen streets. The small-workshop environment, originally determined by craft-production, was retained despite mechanisation of some processes, and little attempt was made to impose the large factory system which developed in other industries, including the craft-based engineering trades. The individual nature of the product demanded small-batch production, and the use of outworking processors kept capital costs low. The support of its local formal institutions, and the characteristics which were retained from a former mode of production and its location provided the conditions for the evolution of an occupational community in Birmingham's Jewellery Quarter.

Notes.

1. In Timmins, S. (ed) (1866) The Resources, Products and Industrial History of Birmingham and the Midland Hardware District. London, Robert Hardwicke, p.452.

Timmins gives approximate figures as follows;

Masters	500-600
Jewellers proper	3,000
Silversmiths	1,000
Gold and Silver chain makers	1,500
Gilt toy makers	1,000
Boxmakers, die-sinkers and subsidiary trades	1,000
Total	7,500

This is a widely used source in studies of the Jewellery Quarter, but the commissioned article carries a note to the effect that the author was unconnected to the trade and undertook the commission "because no other arrangement could be made." Thus the source of his information is unclear.

2. The trades selected were those which were most clearly related to the jewellery and silver plate industries and include manufacture, services and supplies.
3. The tables were compiled with information from the street sections of the following directories; Birmingham Corporation General and Trades Directory of Birmingham. William Cornish 1861. Hulley's Birmingham Directory 1876-7. John Hulley Birmingham. Kelly's Directory of Birmingham for 1886, 1896, 1906, 1926, 1936.
4. Staples (1987) in his study of Kenrick's hardware firm in West Bromwich, near Birmingham, distinguished between two periods of factory organisation in 1791, and 1867. The first of these he describes as a patriarchal system with an adult male internal group of subcontractors who employed their own families. From 1861 to 1891 this was replaced by the paternalistic system in which waged labour aligned their interests with those of the employer in exchange for community benefits involved with health and education provision from the employer. Staples, William G; (1987) "Technology, Control and the Social Organisation of Work at a British Hardware Firm 1791-1891," American Journal of Sociology, Vol. 93. No. 1. July 1987. pp.62-68. This kind of community provision is paralleled in the textile industry (Joyce 1980). In the jewellery trades, Heward (1984:135) refers to Winfield's Boiling Mills in Cambridge Street in the Quarter which organised a factory night school in the second half of the

nineteenth century. The lack of provision compared with that of other industries is due to the organisation of the trades, not into large sub-contracting or mass-production operations but into small workshops which, while seen as typical of Birmingham, is not the pattern throughout the West Midlands.

5. Interviews 2.10.86 and 29.4.87.
6. As a result of the pressure from manufacturers, from 1932 all silver and electro-plated cutlery items were stamped with the name of their country of origin, and other goods were compulsorily labelled. Imports were, and remain, a constant threat to the trade and B.J.S.A.'s Tariff Committee remained one of its most active sections between the wars (Nott; 13-14).
7. From 1890 Joseph Chamberlain was a regular guest at these banquets, succeeded by his sons Sir Austen and Neville, and a number of other politicians and royal guests. In the early 1920's a Luncheon Club was inaugurated at which technical lectures were given by guest speakers, and these were revived in 1932. Annual balls were introduced in 1933 at which trade goods were displayed and modelled. Golf competitions, introduced in 1909, have continued as an annual event, except in the war years. A Junior Council was formed in 1933 to prepare younger men for service on the Executive Committee. Their principal function was fundraising for local charities through social events.

### CHAPTER THREE.

#### POSTWAR CHANGE IN THE JEWELLERY QUARTER; REDEVELOPMENT, CONSERVATION AND RECESSION.

The foundations of the Birmingham jewellery trades described in the previous chapter provided the conditions for the evolution of the Jewellery Quarter as an occupational community. Almost a century later, the trades continued to occupy and dominate much of the same inner city area with the headquarters of its trade association, the trades school and services within it. The events of the years following the Second World War appeared to threaten the established patterns of the trades, first through redevelopment and later, recession. It is argued that while the uncertainty surrounding the redevelopment programme accompanied a decrease in the number of firms, the refurbishment programme of the 1970's and early 1980's has countered this through an emphasis on small unit development. The effects of recession are shown in reference to the industrial structure of the industry. At the same time, redevelopment and recession contributed to the relocation and demise of some firms. While other industries were under economic pressure to reorganise and modernise in the late 1970's, in the Jewellery Quarter the basic working practices established in the nineteenth century were maintained, and the local trades retained their proportion of the industry. In the second half of the chapter, the industrial structure of the Quarter will

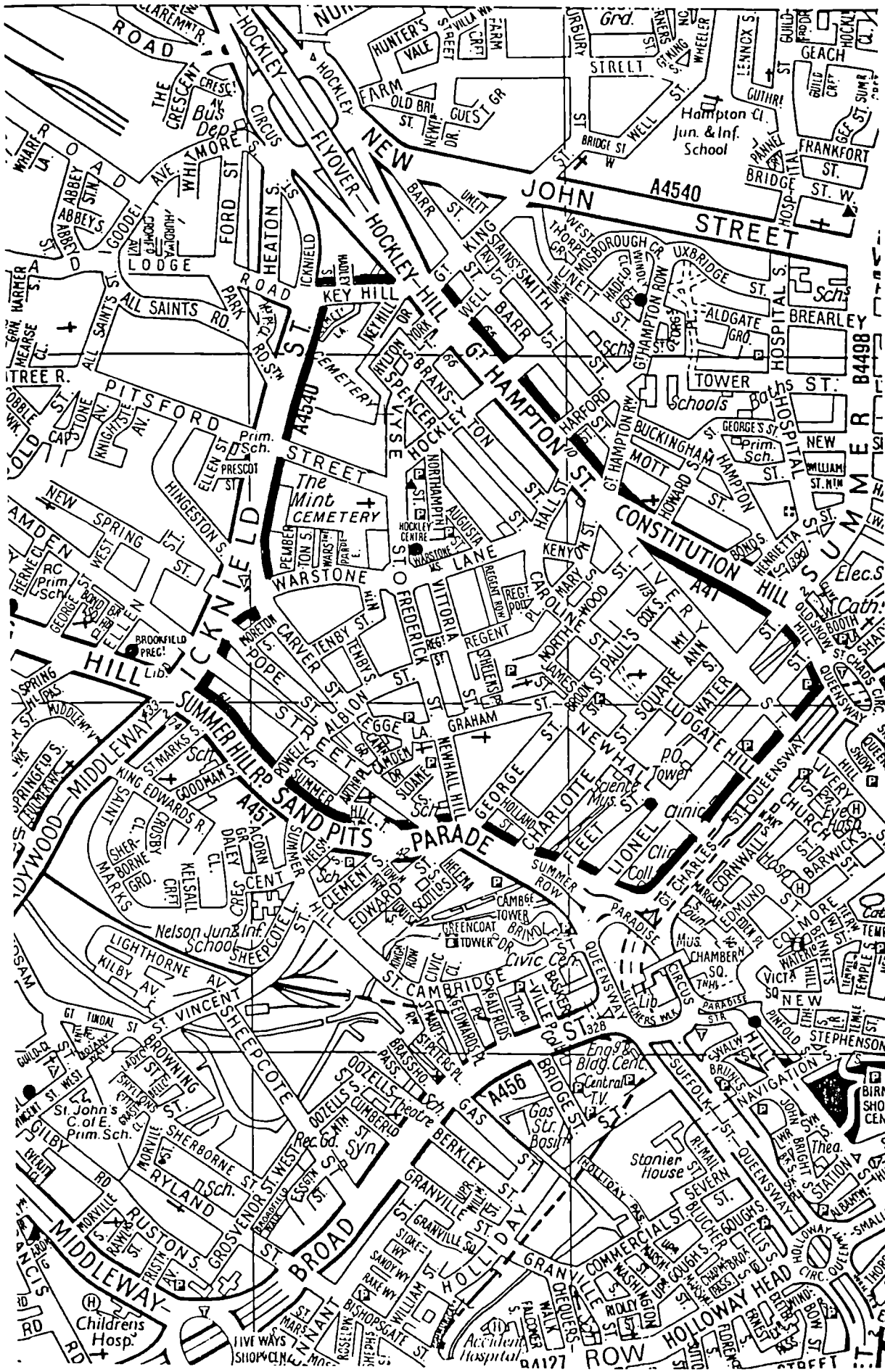
be described and this will include the effects of the recent recession on employment in the industry. The structural aspects add point to the effects of redevelopment and refurbishment and lay the foundation for the discussion of occupational community which follows.

#### The Quarter and redevelopment.

Sutcliffe and Smith (1974) have argued that between the late 1930's and early 1950's Birmingham's abundant land supply was gradually being eroded. Inner city congestion resulted in a smaller central business district than in other cities. Legislation prevented a practicable scheme prior to 1939, but in that year the City prepared a scheme, and its control was extended in 1943 by the Town and Country Planning Act (Interim Development). The City planned an inner ring road, an expansion of the central industrial district and the redevelopment of other areas under their control. The bombing of Birmingham had been spread over a wide area, rather than concentrated on particular sites, and therefore no government help was available (Sutcliffe and Smith 1974: 442). Thus municipal housing was the main priority and efforts were concentrated on the rebuilding of five nominated areas, but all schemes were delayed by government building restrictions which were not lifted until 1954. From then until the the 1970's, Birmingham was engaged in a massive redevelopment exercise with city redevelopment schemes which included the "Big Top" site at the junction of the main shopping area, the central retail market area of the

Bull Ring and the former Market Hall, the Central Library and Exhibition Hall complex, the wholesale markets, and the construction of the inner ring road. Each of these projects resulted in demolition and restructuring on a massive scale, and involved acrimony and frustration between the City, the Estates Department and developers (1974: 446-454). The plans for the Jewellery Quarter were part of this redevelopment, and surrounded by similar tensions. Despite the upheavals caused by the rebuilding of post-war Birmingham, the Quarter retained its geographical identity, and the following section describes the events of the period.

By the end of the Second World War the jewellery and silverware industry nationally had suffered from bombing of premises and houses, contraction of markets, metal restrictions and loss of labour. The concern in Birmingham was to attract labour to stem this contraction and improved working conditions were seen as integral to this regrowth. In addition to bomb damage there had been no major building in the Quarter since the turn of the century. Extra accommodation had continued to be achieved haphazardly by infilling, and buildings were in poor repair, due to variation in ownership and leases, which led to continuing deterioration. In many cases old leases were running out, and "peppercorn" rents were encouraging the continued use of decrepit premises. Over the next twenty years a variety of schemes were proposed yet despite the physical changes evident in the area the Quarter remained located where it had settled in the



Map 8.- Birmingham 1987.- (Scale 4" - 1 Mile)

previous century, with the largest concentration in the streets around Vyse Street, Frederick Street and Warstone Lane.

The Quarter had been described as cramped, overcrowded and unhealthy by the Bournville Trust publications during the war (1941, 1943) and it was seen as an ideal site for

"zonal redevelopment, where production was carried out in flatted factories which could adapt to the expansion or contraction of business" (Gilbert 1973: 46).

The first redevelopment scheme originated with the B.J.A. in its role as the central local institution of the industry. In 1943, a Sectional Reconstruction Committee was formed to meet weekly and draft a report for the Board of Trade on all aspects of the industry including the total redevelopment of the Quarter. A major landholder in the area was the Vyse estate and the Committee proposed that this area should be bought by the City, which indicated a continued commitment to the area by the industry. A scheme was commissioned which would keep the trades together, an important aspect for an industry in which interdependence was integral. This resulted in plans for two four-storey blocks which provided accomodation for various sized firms, with heavy trades such as stamping and plating, and firms with up to a hundred employees, on the ground floor, and the smaller firms with up to ten



employees on the fourth floor. A wide range of floor space would be available, in recognition of the varied needs of the trades. The bomb-damaged properties in Northwood Street would be demolished to provide the site with a possibility of six further blocks when present occupants had been "decanted" into the new buildings. A larger scheme provided for redevelopment of the whole Quarter

"by instalments, and....whole industries could be rehoused in less than half the area now occupied....The land thus freed might be developed into housing accomodation to enable jewellers' operatives to live near."

It was proposed that the buildings be controlled by elected trade members in order to provide "ideal working conditions for all branches of the trade" (British Jeweller 1945: 9-11).

Manifest in this scheme was the trades' aim to modernise working conditions while maintaining their specific location and the working practices. This reflected the complex interdependent structure of the industry which made it problematic for outsiders to legislate for change on an economic basis. An example of the latter approach appeared in an article pre-dating the B.J.A.'s own scheme. Southam's radical proposals included the relocation of the industry to a semi-rural area in the suburbs or to the city boundaries. The formal institutions of the industry, the B.J.A. and the School, were included

in this scheme. The alternative to these proposals would result in:

"a perpetuation of the chaotic conditions whereby so many firms are suffering the inconvenience and lack of supervision of workpeople being scattered in a number of small shops on several floors in one or more buildings entirely unsuited to the purpose" (British Jeweller 1943: 10).

This argument has the merit of highlighting the problem for firms wishing to expand, for which the wide variety of leasehold premises, infilled yards and entries and the multi-use of residential property did not allow. The B.J.A.'s own proposals, however, clearly indicated their continued commitment to their location. Their scheme included purpose-built workshop space which took cognisance of the need for the trades which comprised the industry to retain their differentiation and independence. No suggestion was made by the local committee to amalgamate trades under one roof in the sense of sub-contracting to one large manufacturer. Their concern was a rationalisation of space, and improved working conditions, rather than production reorganisation.

Neither the suggestions of Southam, nor those of the B.J.A. were implemented in the post-war years, partly due to the relatively high estimated rents (Gilbert 1973: 46). The industry was still suffering the ill-effects of

the war, including high purchase tax which had been levied on luxury goods. Not until 1950 did the City express an interest in becoming involved in the scheme which the Association had admitted it could not afford to implement. The City owned the cemeteries and other land in the Quarter and its concern centred around relieving congestion and allowing room for expansion. The City was anxious to act as a coordinator, believing that such plans "could not be operated by hundreds of different owners." The industry must have been dismayed by the City's lack of urgency, with the Chairman of the Public Works Committee speaking of the Jewellery Quarter Scheme being "under way in the next twenty years" (British Jeweller 1950: 83). This uncertainty meant that firms cast about for individual alternatives, thus acting against the expressed wishes of the city. Some were able to fund their own new buildings and obtained licences for this purpose, an easier task if firms were involved in the export trade, and necessary because of the shortage of building materials in the years after the war. Those firms whose production was virtually self-contained were able to take Southam's advice and move to the suburbs. In 1955 the plans still centred on the industry-in-one-block model, though the City Surveyor favoured single- and three-storey factories to make better use of the land and anticipated this would increase the work-force from 30,000 to 50,000. The problem at this stage centred on the purchase of land (British Jeweller 1950: 83).

By the end of 1955 plans were announced for the new quarter at a cost of £2,500,000, "the first time an industry as a whole has been considered for comprehensive redevelopment anywhere in the world" and "an example for industry housed in slum areas". At this time jewellery manufacture accounted for 82% of all firms in the sixty-acre area, and 950 back-to-back dwellings housed 2,800 people in the outer ring (British Jeweller 1955: 80 a-e). Enthusiasm for the scheme was dampened once again by delays and worries about rent increases were exacerbated as the City's priorities were directed to other areas. It was seven years before the B.J.A. urged its representatives to meet with the owners of the Vyse estate and the City Planners with a starting date as a priority on the agenda. At this time, the current Public Works Committee Chairman had visited Pforzheim in Germany, a jewellery-producing town, and old rival of the British industry, which had been rebuilt after bombing. (1) As a result of his visit, another joint committee was set up with the B.J.A. The Council had been buying up leases as they fell in, and the death of Sir Richard Vyse gave them the option of buying fourteen acres of land in the core area of the Quarter, which had featured in earlier proposals, and included land in the secondary and outer rings, so delay due to lack of sites was no longer a problem. (2)

Within a year, in 1964, an announcement was made of another phase of the scheme which reflected the influence of the Pforzheim visit. The amended plans

allowed for a new Assay Office, a restaurant and exhibition hall for the trade, together with the release of seven acres to the north of Hockley Street for the development of individual firms. While the B.J.A. welcomed these plans, the vexed question of rents was again raised (Birmingham Mail 1964). This recurring anxiety reflected a fear of changes to the established practice of sub-letting by small firms of unused rooms or space on a bench, and pepper-corn rents, on which many small firms relied, and which were an integral part of their survival. In the summer of 1965 the latest plans of the joint working party which had included representatives of the B.J.A. and the union were announced at a public meeting. The main feature of the model was a tall factory unit to house 144 firms, together with 16 flatted factories with parking space above, a 70,000 square foot office block, in which the B.J.A. offices might be housed, and a new Assay Office. The first phase, the small factories, was to commence in June 1966. The City's avowed aim was to retain the homogeneity of the trade and avoid the break-up which had occurred in the Gun Quarter. Although the scheme was welcomed, concerns were expressed about the flexibility of the units for sharing or expansion, rents, car-parking and daylight in the factories (British Jeweller 1965: 44-46). The B.J.A.'s own "industry-in-one-block" model with units of varied sizes geared to specific trades was replaced by a block of standard units.

Within six months work had begun on clearing a site for a permanent single-storey factory to house firms

which would have to move temporarily. It was hoped that double moves would only affect small firms, thus reducing the scale and costs of upheaval, and that their tenancy of temporary premises would be limited to two years. This rationale overlooked the mutual dependance of all sizes of firms in the local industry. Two other major factors had been ignored or misunderstood in the timing of the redevelopment programme. One was the cyclical nature of the trade, with production geared to the Christmas and summer holiday trade. Large-scale demolition commenced in September, at the beginning of an important production cycle. The other was the system of rents which was problematic because the city wanted a return on their investment. This concern emerged again at a public meeting in the autumn of 1967 when the plans for the eight-storey block, to be known as the Hockley Centre, were under discussion, with the B.J.A anxious to be involved in a settlement of rent and accomodation details. The City acknowledged the role of the School and Assay office, planning to incorporate new buildings to house these in the scheme, after the Pforzheim model, and responded to the request of the B.J.A. by provision of a police station, a new post office and other shop units in the second phase. A further public meeting the following year answered questions on daylight provision, the capability of floors to support heavy machinery and safes, and sub-letting, which was ruled out under the terms of the lease. This was a further discouragement to the many small firms from taking advantage of the provision of modern

facilities, and led to a perpetuation of the use of older property in varying states of dereliction, in order to keep costs low and competitive. Both the building contractors and the Estate Department rejected the argument that high rents deterred small firms, asserting that these made little difference to total production costs. They commented that:

"....[the] tendency among jewellery firms to go round the corner and find another hole in the wall is due more to tradition, prejudice and sentiment than to anything else" (British Jeweller 1972: 29).

This remark illustrates a lack of understanding of the economic and social base of the local industry, despite the attempts of the representatives of the trades to put these forward at meetings.

Gilbert has argued that 20 firms closed as a result of the first phase of demolition. The workforces either went into other local factories, giving up their independent outworker status, or others ceased trading. My figures for the number of firms in Augusta Street and Northampton Street before and after demolition indicate a much higher scale of loss, with no commensurate increase in firms in other streets. Given the unofficial nature of some sub-letting agreements, however, the numbers may be slightly higher.

By 1972, the second phase of redevelopment was

complete. The planned integration of the Assay office did not take place, the Guardians having meanwhile obtained the lease of an adjacent building which allowed its expansion. The amalgamation of the technical college at Gosta Green into the City of Birmingham Polytechnic led to changes in the curricula of both the School which became incorporated into the Polytechnic, and the college. The School continued to offer craft-based courses while the Polytechnic offered degree courses in a range of three-dimensional design disciplines including jewellery, so the School retained its building and location. Of the 112 firms which had vacated premises, only nine local firms moved into the flatted factories though five or six firms from other parts of Birmingham moved into the Hockley Centre. "British Jeweller" reported only seven firms "lost" in the clearance, with 18 moving out or closing down altogether. It supported the theory that many had relocated on their own initiative (British Jeweller 1972: 29). My research figures indicate that this was an optimistic view. My tables show that in 1963, of a total of 1,304 firms in the Jewellery Quarter as designated by the City, 711 were involved in jewellery and the allied trades. In 1973, the total number of firms had fallen to 879, 428 of which were jewellery firms. In Northampton Street in 1963, a total of 82 firms, 69 of which were involved in jewellery and allied trades, were operating. Augusta Street contained 42 firms, 28 of which were involved in the industry in 1963, and in 1973 no firms were recorded in those two streets. The building of the



Hockley Centre resulted in the virtual demolition of these streets, together with a section of Vyse Street, yet there is no increase in the number of firms operating in other streets after the reconstruction period in 1973. Property in Vyse Street at the junction of Warstone Lane, in the area of the Chamberlain clock, had been demolished to provide the site for the multi-occupancy tower block. Vyse Street had 137 firms in the industry in 1963, out of a total of 173, but in 1973 these had been reduced to 74 jewellery, silversmithing and allied firms out of a total of 95 businesses despite the accomodation provided by the Hockley Centre.

#### The Era of Conservation.

The period of demolition and concretisation of cities in the post-war years was followed by a backlash reaction to the loss of old buildings. In Birmingham this led to further changes in the Jewellery Quarter. The first intimations of the concern at the loss of buildings in the area was a report by local councillors in 1971 which deplored the wholesale demolition in the area and listed Frederick Street, Caroline Street and St. Paul's Square as containing buildings of architectural merit (British Jeweller 1971: 36). In the same year, St. Paul's Square, where the silversmiths had established their workshops in the late eighteenth century, was designated a conservation area. In 1876, the square had housed a total of 58 firms, 23 of which were involved in the industry. By 1963, only 13 firms were in the Square, with five of these in the jewellery and allied trades. Despite the declaration of

the conservation area, this had reduced to a total of eleven firms in 1973, the two losses being in the jewellery and allied trades. The concern at this time was rather for the retention of Birmingham's only example of a Georgian square, and its past links with the industry (Jeweller and Watchmaker 1971).

From the mid-1970's the City Planning Department was engaged in consultation with the B.J.A. and firms in the area, as well as other groups concerned with the preservation of architecturally notable or structurally sound old buildings from further demolition. The City Planners were also concerned with other practical problems in the area such as car-parking. (3) The Victorian Society (4) produced its own report on selected streets in the Quarter including Albion Street, Legge Lane and Frederick Street. It contained a postscript by Gilbert based on his own 1971 research in which he warned that further redevelopment on the lines of the Hockley Centre might result in the demise of entire trades, due to their interdependence and reliance on spatial proximity.(5) Further discussions ensued and in 1979 a public meeting was held at which it was announced that the Quarter was to be designated an Industrial Improvement Area (I.I.A.) within which two zones were designated conservation areas. Grants of up to fifty per cent were to be available to owners towards restoration and repair of old property within these areas, with work to commence early in 1980. The scheme was regarded by the City as "really a partnership, to encourage individuals to preserve an area

that is an asset to Birmingham and the nation".  
(Birmingham Mail 1979).

To ensure that information on grants was disseminated to all firms, members of the Chamber of Commerce made personal visits to all businesses in the designated areas with information. The main reasons for lack of take-up were identified as insufficient capital, as grants were available only on a pound-for-pound basis, or absentee landlords, where the building was usually in multi-occupancy with conditions described by the advisers as "Dickensian". (6) These findings meant that the aim of restoring a whole block of buildings in a street was frustrated and did not achieve the wholesale renewal of an area. The City had been buying up leases since the 1960's, in addition to the Vyse Estate, and began restoration of its own property in an attempt to militate against this.

In the I.I.A. Review of 1986, it was reported that the city had refurbished 52 properties which, with redeveloped workshops, provided spaces for 182 firms. Altogether 300 of the 560 buildings eligible for upgrading had been, or were being, refurbished; 500 new jobs had been created and 3,740 retained. The report noted that the jewellery industry was contracting as a result of tight profit margins, foreign competition and take-overs. It suggested that the way forward for the Quarter was tourism, "as a result of its unique character derived from its industrial heritage" and cited the opening of restaurants and clubs in the area by private entrepreneurs as an example of the enterprise which could be encouraged.

It warned that tourism should receive "sympathetic treatment" to avoid conflict with the industry. It suggested that money should be spent on improving approaches to the Quarter, and that assistance should be given towards the establishment of an interpretation centre, and with marketing, exhibitions and workshop development (I.I.A. Review: 1986).

Two significant changes emerged from the emphasis on improvement rather than redevelopment. These were the availability of units for use as retail outlets for jewellery sales to the public which had begun in the mid-1970's, and a greater availability of small workshop space at reasonable rents, the latter proving to be attractive to firms other than those involved in jewellery and the allied trade. (7) Historically, however, the industry, while dominant in the area, has shared its location with other industries, though in the past these have tended to be more closely related to the metal trades. A new development in Augusta Street, which was adversely affected in the original redevelopment programme, has sought to reinstate the concentration of firms in the street through the construction of an arcade of workshops and retail units, which originally offered a rent-free year. Currently (1986-8) it appears to have mixed fortunes, with firms closing down or transferring to other premises, and units remaining empty. In addition to jewellery retail units which also offer repairs, there is a hairdresser's, a cafe and craft shop, and a dress designer. Its fortunes may be linked to its geographical

position, which is in a back street behind the block which contains the Hockley Centre and public car-park. More successful are the shops and cafes on Warstone Lane, in the area of the clock. The original conservation area of St. Paul's Square retains now mainly historic links with the trade, housing architectural groups, flats in converted factories, and high-class restaurants, although Johnson Matthey, the bullion dealers, retain a large modern building there, and the "Jewellers' Church" set in the now landscaped churchyard, has become a centre for exhibitions and concerts, in addition to providing services. It has largely lost its jewellery industry connection.

At the time of writing, open-topped buses tour the Quarter, coach trips to the Quarter are popular in the weeks before Christmas, and three-storey Georgian houses and large workshops in Great Hampton Street on the boundary of the Quarter are being refurbished to provide a museum and replicas of workshops of the 1830's. The work is being carried out by the independent Birmingham Conservation Trust. Since 1982, a "Jewellery Trail" has proved an attraction. (8) Attempts have also been made to provide workshop space in which work can be carried out in public view so that tourists can watch work in progress. Some repair work is carried on in public view in a workshop in Warstone Lane, and in units in the Jewellery and Silver Centre in the arcade in Augusta Street. A recent report to the city (Segal Quince Wicksteed 1987: 70-1) found only one firm, engaged in the mass-production

of silverware, operating conducted tours, and one other where such a scheme was under consideration. It was indicated that glazing would be necessary in order to separate visitors and workshops. The report indicated that;

"for the large majority, secrecy about designs, security of goods/high value materials, conflicts with producing goods to deadlines and lack of space present real practical barriers" (1987: 71).

In addition, my own research showed a concern among interviewees with the "mystique" of production, which is regarded as something which the customer is purchasing, and with the possibility that a "museum" approach would act against the image of a living and viable urban industry, and imply a dead or dying craft from the past. (9) Further problems are concerned with the operation of the community in its day-to-day routine, as will be clear from the following chapter.

In addition to the initiatives by the City, private enterprise has invested £6.3m in the area, and six Urban Development Grants have been approved affecting ten properties. These have taken the form mainly of refurbishing buildings to provide small unit space (1987:66). At the junction of Graham Street and Frederick Street the former gold pen factory of Joseph Gillott and the Turkish Baths have been converted to provide 24 units

under the name of the Argosy Centre, though at the time of writing no jewellery or allied firms are tenants. A similar conversion has been completed in a building in Newhall Hill believed to have been a women's gaol which houses design firms including one silversmith (Hockley Flyer 1987). Both of these buildings, though situated on the bus route to the Quarter, are deemed to be too distant from the central area to become popular. An interesting scheme was announced in 1977 when the metal-finishing firm of Ashton and Moore proposed the building of the Jewel Court Project. It was inspired by the successful sponsorship of a design graduate from the Birmingham Polytechnic and was to have been built on land opposite the factory. A three-storey building was planned, with workshops of varying sizes to accommodate young crafts people in the jewellery and allied trades, together with conference and exhibition space and restaurants, with the sponsoring firm providing the commercial support. In a development of the scheme, living accommodation for the craftspeople was incorporated. However, the originator of the scheme left the company and the old foundry site on which the Court would have been built has since changed hands twice and is still derelict. (10) This scheme would have combined all the essential factors which entrants to the industry need combined with living accommodation, thus re-introducing a resident skilled community in the heart of the Quarter. The scheme would have been restricted to the industry, which the current redeveloped workshops are not. A more modest scheme, but one which shows a similar

commitment to the Quarter and the future of the industry is that of Deakins and Francis. They have been jewellery manufacturers in Birmingham since the late eighteenth century, and last extended their premises in 1905, but in 1982 added an extension containing twelve workshop units to rent to independent craftsmen (British Jeweller 1982: 25).

Currently Department of Trade Section 7 grants totalling £160,000 are on offer to local firms, including Birmingham Gems, which is now one of the largest employers in the Quarter. The West Midlands Enterprise Board also invested money in local firms (Segal Quince Wicksteed 1987: 73). The schemes have helped to retain or create employment in the industry, and the increase in small workshops at subsidised rents is an attraction for the independent designer, manufacturer and many outworkers in the industry, but these face competition for these units with other small businesses.

There are traditional and practical factors which neither redevelopment nor refurbishment has taken into consideration. The problems articulated by the trade have commonly been those of low rents and rate support, and the car-parking problem in the streets through which goods used to be transported by handcarts even in the post-war period. The practical aspects include the direction of light required by certain crafts. It was shown in the last chapter how Vyse Street and the network of streets which surround the Chamberlain clock have become the core of the Quarter, and it is the units



nearest the clock which continue to be the most desirable. Thus although Frederick Street is a popular location on paper, in reality it is only the buildings from the corner of Albion Street and towards the clock which house firms in the jewellery and allied trades, hence the lack of success of the Argosy Centre. The location of the Assay Office in Newhall Street does not affect the popularity of firms' disposition. My own mapping exercise has shown the historically most densely populated streets to have been affected by the redevelopment because of demolition, but the heart of the Quarter has not shifted and is just as desirable a location as it was a hundred years ago. A contemporary contributory factor to the continued favouring of this area resulting from redevelopment is the growth of retail units, many of which offer discount jewellery. (11) The popularity of these ventures with the public has encouraged small jewellery manufacturers to open retail premises which offers them another outlet for their quality work. The costs of this operation to a manufacturer are relatively small as the shops are usually staffed by female relatives with a knowledge of the industry. Despite the changes in the physical fabric of the Quarter, the tables in Appendix A show clearly that neither redevelopment nor refurbishment has shifted the traditional core of the industry.

#### The local industry; the organisation of work.

The term "Jewellery Quarter" has been established geographically, but its meaning as an

industrial area needs clarification, both in terms of the types of firms and their disposal in the Quarter and their organisation and markets. This will add substance both to the figures given in this chapter and to the later discussion of community.

The markets for which the local industry manufactures are wholesale suppliers to retail units, which include specialist jewellers, department stores and fashion outlets, and in some cases direct selling to retailers. The mail order business and party plan organisations have become an increasing part of the industry. Exports accounted for goods valued at £339.4 million in 1986, including imitation jewellery, in the industry as a whole (Segal Quince Wicksteed 1987: 21).

Firms in the Quarter are engaged in production, processing and services. It has been established that small manufacturers dominate, but not all small firms are manufacturers, nor are all outworking processors small firms. The two largest firms in the Quarter, which employ more than 100 workers, are not specifically engaged in jewellery manufacture but in allied trades. (12) Birmingham Gems, a costume jewellery firm funded by grants from the City Council among others, employs just under 100 workers and is the largest specifically jewellery firm in the Quarter (1987: 46). Firms employing between 15 and 30 people include stampers, spinners, casters and wire drawers. Manufacturers in this size group undertake most processes themselves, but send out electro-plating. Engraving, enamelling, setting and polishing, and

processes related to precious stones are typically carried out by firms of up to five people, with many one- or two-person businesses. These processors are sent work by individual manufacturers, but also work directly for mail-order suppliers, locally and nationally. Individual manufacturers may make for others in the trade and also in their own right, and for their own retail unit if they have one. Silversmithing firms are typically medium-sized in jewellery industry terms, and employ between 15 and 30 workers (1987: 47). In addition, the Quarter houses individual craftspeople who work for galleries and private clients, and sell work nationally at craft fairs and through design agencies. The smaller manufacturers all use outworking processors and services to some degree. The bullion dealers, refiners and smelters, sell and reprocess the precious raw materials of the industry. Wholesalers and the tool and chemical suppliers are also located in the Quarter.

Jewellery manufacture involves a mix of hand and machine processes, some of which it shares with the production of silverware and holloware. Model-makers rather than designers originate modifications in products and few firms locally employ a designer. Some model-makers work independently for manufacturers and private clients. Machine processes in the industry include die-sinking, stamping and piercing, processes which are also used in the badge trade, and casting. Hand skills include mounting and setting. Mounting is the making of rings which will incorporate stones, and setting is the process by which

stones are fixed into the ring (1987: 47). Mounters and setters often operate as one or two-man businesses, as do solderers, though independent solderers are now few in number. Specialist ring makers have increased steadily in numbers since 1876 and include masonic ring manufacture. Jobbing jewellers and repairers are included in the tables under manufacturing jewellers, though in reality they specialise in repairs or modifications to jewellery and serve the local retail trade, manufacturing jewellers and the public. Some retail units employ a repairer on the premises to perform these functions, in addition to ring-cleaning. Gilders and engravers are few in number. Enamelling has been regarded as "women's work" since the early days of the trade and there are still independent enamellers. Polishing, and plating and finishing, are the last processes which jewellery, badges and silverware undergo and the firms which perform these tasks vary in size. Watch importers and repairers have always maintained a small presence in the Quarter.

This brief summary of work performed in the Quarter shows the industry to be composed of a number of manufacturers and specialist outworkers engaged in a variety of jewellery and allied trades. The outworking trades are integral to the industry and further specialisms exist within them according to the quality of goods. These trades continue in firms which have remained relatively small in terms of modern manufacturing, retaining the historically-based separation and interdependence. The complex division of labour which

exists in the production of finished goods has little in common with the internal organisation of firms which corresponds with the hierarchical structure of other manufacturing firms, but is one which is still influenced by the presence of the "master-man" or craftsman-owner, who works on the bench beside his employees.

Jewellery production and employment: the effects of recession.

In this section Birmingham's share of jewellery production and employment locally will be compared with the national picture of the industry, in order to explain its significance. The industry as a whole has suffered from the recession of the early 1980's, but the available data confirms that Birmingham has retained a significant share of the industry in terms of employment, and that its production has remained concentrated in small firms and in the Quarter.

An indication of the effects of recession can be obtained from an examination of hall-marking statistics of British items published collectively by the four Assay Offices. As in any other industry, increases in the price of basic raw materials, in this case precious metals, affect employment and production. During the period from 1975 to 1980 there was an initial period of rapid expansion in output until 1977, with 10.02 million British gold items hallmarked in 1975, rising to 15.9 million in 1977. This was followed during 1978 and 1979 by recorded hallmarking at a similar level to that attained in 1977. In 1980 there was a sudden and substantial decline from

the 1979 figure of 15.7 million items to 8.6 million - a level lower than that of 1975. This can be related to the price of gold which over this period experienced a massive increase. In 1970 the average price of gold was £15 per fine ounce. There was moderate movement upwards during the early 1970's, escalating during the late 1970's to peak at £263.74 per fine ounce in 1980. Even by 1986 the average price had only declined to £251 per fine ounce. Silver items hallmarked in Britain over this same interval fell steadily from the 1975 figure of 6.7 million to almost half that, at 3.63 million, in 1980 (Segal Quince Wicksteed: 10-11). There was a significant variation from this trend when in 1977 the number of silver items hallmarked was almost 10 million, attributed to very short-term fashion-related demand for silver ingot-shaped "dog tags". The general decline continued in the 1980's and in 1984 British silver items hallmarked dropped to almost a third of their 1975 figure. By 1986 the figure had risen slightly to 3.048 million. As shown earlier, silver has experienced a relative decline in popularity in jewellery since the last quarter of the nineteenth century and has also experienced a decline in popularity for domestic goods since the introduction of stainless steel. Nonetheless the price increases which occurred over this period, exacerbated by the activities of the American Nelson Bunker Hunt's attempt to control the world silver market, affected the Birmingham trade despite its mixed production. (13)

The decrease in the hallmarking figures reflects the downturn in production due to the sharp increase in the price of the basic raw materials of the industry. It has been reported that the massive increases led retailers to cancel "almost all orders in the industry" (1987: 12-13).

Before presenting the employment figures, it is necessary to review the reasons why obtaining an accurate picture of the number of firms and the numbers in employment in jewellery production is problematic. Difficulty in this area of data gathering reflects both features of the structure of the industry locally and nationally, compounded by variation in statistical collection methods. SIC classifications changed in 1968 and in 1980. From 1968 the classification for minimum list heading 396 was used for jewellery and precious metals, and 392 covered cutlery, knives and plated tableware (14). Smith (1987) has argued the lack of clarity in respect of certain items such as teapots and trays made in precious metals which now appear to be classified under the heading of Jewellery and Coins 4910 rather than 3162, Cutlery and Tableware. Smelting and refining, important services to the jewellery trades and formerly included in mlh 396, are now excluded from activity 4910 (1987: 63-4). Thus allied trades and services appear under headings which appear to be inappropriate and insufficiently precise.

There have also been variations in the collection of statistics referring to the size of businesses and numbers employed in them. For larger firms

official statistics from the Census of Production have been grouped in varying size groups since 1971, from 200 and over in 1971, 500 and over in 1972 and 1973, and into two large groups, 200-399 and 400 plus in 1974-5, while in 1979 the largest group was 300 and over (Business Monitors: 1971-1979). These changes make it difficult to construct comparative tables.

Table 2:

Numbers of Firms and Enterprises in the Jewellery Industry in the U.K. 1981-1985.

	Establishments	Enterprises	Employment
1981	1,147	1,121	13,400
1982	1,038	1,017	12,400
1983	1,025	1,007	11,400
1984	* 1,660	* 1,635	11,200
1985	1,743	1,719	11,600
Change between 1985/1981			
	152%	153%	86%

\* affected by new register.

(Source: Smith 1987: 74.)



Statistics for firms in the lower size groups, 1-10, 11-19 and 20-49, are annotated to be used with caution as they are based on estimates and include part-time workers. No separate figures are available for the self-employed who form a large proportion of the industry, and who are included as working proprietors. With these provisos, the tables are useful in indicating trends in employment and size of production unit.

Smith (1987) has compiled a table of the numbers of firms in the industry nationally which shows the more recent changes, and Table 2 is a modified version of the original which excludes net output figures.

The values in Table 2 show a close correspondence between establishment and enterprise, indicating that most firms have only one production site. They also confirm that the numbers of employees per firm is small. In terms of the recession of the early 1980's, they show a dramatic decrease of almost 15% in employment by 1983 and a further decline in the following year, with a small increase in 1985. However, despite the recession, while employment is only 86% of the 1981 figure, the number of establishments has risen by a little over half. A probable explanation of this lies in the concentration of production in small units. Tables 3 and 4 analyse U.K. establishments by size.

Table 3.  
Size of Unit in the U.K. 1981.  
(Activity 4910, Jewellery and Coins.)

Size group	Establish- ments	Enter- prises	Employ- ment
1-10	877	869	3,700
11-19	141	141	2,200
20-49	92	91	2,900
50-99	27	25	1,700
100 & over	10	9	2,900
Total	1,147	1,135	13,400

Source: Business Monitor PA491 (1981:6-7).

The concentration of employment in very small firms is clearly shown by Table 3. 44% of employment in the industry is in establishments with less than 20 employees, and those with numbers under ten are jointly employing more than the ten largest firms. While Tables 3 and 4 illustrate the distribution of employment over different sized establishments, they also indicate the changes in the levels of employment over the period of recession, and the effect of recession in the number of firms. Smith argues that firms in the West Midlands Region account for 31.5% of employment in the industry nationally (1987:65).

Table 4.  
Size of Unit in the U.K. 1985  
(Activity 4910, Jewellery and Coins)

Number of employees	Establish- ments	Enter- prises	Employ- ment
1-9	1,507	1,500	3,700
10-19	139	137	1,900
20-49	70	69	2,200
50-99	17	17	1,000
100 plus	10	10	2,700
Total	1,743	1,733	11,500

Source: Smith (1987: 74).

Comparisons between Tables 3 and 4 show that employment has dropped by almost two thousand in the five year period. The number of firms has only dropped by six hundred, but the number of firms in the smallest group has almost doubled. Historically numbers of those made redundant have resorted to self-employment in times of recession or boom so it would seem reasonable to suppose that the increase is due to the establishment of smaller firms by some of those displaced from larger firms. The firms which are hardest hit are those in the middle bracket, employing between 20 and 90 workers.

From the national picture of employment in the industry, we turn now to local employment. These figures suffer from the above problems of classification and estimated numbers. The City of Birmingham collected figures from insurance cards to estimate local employment in the industry from 1951 to 1971 under the old classification of Jewellery, Plate and Refiners of Precious Metals, (City of Birmingham Annual Abstracts 1950-1972). These cover production in Birmingham as a whole and do not differentiate for the Jewellery Quarter and include the unemployed until 1968. Boundary changes also hinder the collection of specific figures and currently the area defined by the City Council as the Jewellery Quarter falls within three enumeration districts, thus figures include Aston and Handsworth as well as Birmingham Central (Smith 1987: 64).

In Table 5, the pre-1968 classifications are used for the Birmingham figures from 1951 to 1971. These have been combined with Smith's figures for the Jewellery Quarter from 1971, and for Great Britain from 1958, to produce a comparative table. Table 5 indicates a gradual increase in employment in Birmingham as a whole in the 1950's and early 1960's, peaking in 1963 when employment in the City accounted for over 42% of the national figure, for mlh 396/491 only. From that period the local industry declined, as did the industry nationally. Birmingham's share of employment fell to 27% in 1971, with a loss of 4,580 jobs. From this low point, a slow increase is observable, with an increase to 30% of national employment in 1977.

Table 5.

Employment in the Jewellery Industry:  
Birmingham and Great Britain 1951-1980

	<u>Total employment</u>			
	J Qtr	Bham	Gt Britain	Gt Britain 396/491 only
1951	*n-a	8,899	n-a	n-a
1952	n-a	8,295	n-a	n-a
1958/9	n-a	9,800	39,140	24,000
1960	n-a	9,450	38,000	24,000
1961	n-a	9,650	40,000	25,000
1962	n-a	9,480	39,000	24,000
1963	n-a	10,157	39,000	24,000
1964	n-a	8,062	41,000	23,000
1965	n-a	9,099	41,000	24,000
1966	n-a	7,859	41,300	24,000
1967	n-a	7,515	40,500	24,000
1968	n-a	7,962	38,000	22,000
1969	n-a	5,895	37,000	22,300
1970	n-a	5,709	34,000	18,600
1971	n-a	5,577	35,000	20,000
1971+	6,130	6,420	33,000	20,300
1972	5,790	6,090	33,000	19,000
1973	5,930	6,250	33,700	19,000
1974	6,420	7,720	36,200	22,400
1975	6,620	6,950	35,200	21,500
1976	6,610	6,930	33,700	21,400
1977	6,850	7,270	41,700	22,800
1978	7,220	7,610	35,600	23,300
1979	n-a	n-a	33,400	22,100
1980	n-a	n-a	30,600	21,100
1981	5,300	5,600	29,000	19,000
(SIC 1968)				
1981				
(SIC 1980)			25,800	17,300

\* n-a Figures not available

+ From 1971, unemployed not included.

Jewellery Quarter based on Aston, Handsworth and Birmingham Central employment exchange areas. Numbers in Aston never exceeded 200.

Source: Smith (1987: 64) and City of Birmingham Abstracts (1951-1970.)

The more recent national figures in Table 5 show the decline in the recession years of the early 1980's. Separate Jewellery Quarter figures for the late 1950's and early 1960's are not available, but the tables in Appendix A which show the number of firms present in the Quarter indicate that local firms, and therefore employment figures, were affected by the redevelopment programme in this period. The salient feature of the employment tables, however, is that the Birmingham jewellery industry has retained a share of employment which has not fallen below 27% of the national figure despite redevelopment and recession, and that the greater part (95%) of jewellery production in Birmingham is consistently carried out in the Quarter. If these figures are taken in conjunction with the hallmarking figures and the price of raw materials, it can be seen that employment was rising in the late 1970's in spite of the gradually rising costs of materials. However, when gold doubled its price in 1980, the effects on employment can be seen in the figures for 1981, when there is a drop of 2,000. Table 4 indicates that, as in past slump periods, redundant jewellery workers have attempted to establish themselves as independent workers in the trade. This option continues to be available in the industry because of the continued separation of processes developed in the nineteenth century and the relatively few large manufacturers, of whom there are only 27, (Table 3) employing more than 50. If small firms act as outworkers working on someone else's raw materials, their costs are

clearly lower. A further benefit is the dominance of production in nine carat gold in Britain, unlike the rest of Western Europe, which helps to keep British manufacturers competitive on price, (Segal Quince Wicksteed 1987: 27) together with the recent popularity in hollow jewellery, though it is difficult to distinguish whether this has been encouraged by manufacturers in response to the increase in gold prices, or whether it is a fashion trend with style origins.

The above figures can act only as a guide to the share which Birmingham, and the Jewellery Quarter in particular, has had of the national industry (15). Smith argues that industry in the Quarter has not been affected by the recent recession differentially, nor has the industry dispersed even to other parts of Birmingham let alone the West Midlands Region (Smith 1987: 65). The spatial concentration of the local industry has been retained despite the fall in overall employment figures, and its designation as a distinct industrial area still has validity. Employment statistics indicate that Birmingham's fall in employment during the recession was reflected nationally. The experiences of high raw material costs, changes in fashion and cycles of booms and slumps have historically been the experience of the Quarter, as in other manufacturing industries, and although the industry has contracted, the Quarter and its small unit production are a significant part of the national industry. Continuing localisation and concentration of production are important to the local industry, and the degree of concentration by

firms in the Quarter will be explored in the following section.

The disposition of firms in the Quarter.

The contraction of the industry nationally was shown earlier in table form. This has led to a similar contraction in the number of firms and their disposal across the Quarter as defined by the City Council in 1980, (16) which replicates that described by Wise in 1951. Mapping undertaken on foot for this study indicated changes in the population of the streets, and to put these findings into context a search was made of local street directories from 1953, 1963 and 1973-1974, using the street list from the City's definition. It was then possible to calculate the number and type of firm in the Quarter and to establish the degree of specialism which has been maintained in the face of post-war change. The trades which were selected for the counts are those which are most closely associated with the production of jewellery, silversmithing, and badge and trophy-making, but excluded cutlery, holloware and electro-plating firms, which are mainly to be found on the fringes of the Quarter.

A significant finding of the mapping exercise was that the Jewellery Quarter had contracted in terms of the location of these firms from the boundaries outlined by Wise, though the core of the Quarter remains situated in the immediate area of the junction of Vyse Street and Warstone Lane. Jewellery and the allied trades accounted for 776 out of 1,575 firms counted in 1953. In 1963, the figure was 711 out of a total of 1,304 firms, and in 1973,



the year following the implementation of redevelopment, was only 428 out of 828 firms. In 1986-1987, 457 out of 828 firms were jewellery-related. So although the decline is almost 40% over the last thirty years, the industry maintains its hold in relation to other firms.

In 1953, of the 47 streets within Wise's definition, 17 contained more than 26% of all jewellery firms. 1963 saw a considerable decline in several of these. The result of the redevelopment implementation is reflected in the 1973 figures which show that two of the most densely populated in trade terms, Augusta Street and Northampton Street, accounting for 109 firms, had disappeared in the construction of the Hockley Centre. In 1986-7, 361 jewellery firms were concentrated in the 10 most densely populated of the 47 streets.

Table 6 shows the contraction of the industry in the post-war years in the ten key streets of the area. The popularity of Vyse Street, which was affected in the early seventies by the demolition of old property to make way for the Hockley Centre, has been reinstated by the restoration programme, and is the only street to show signs of regaining its previous numbers. The effects of the redevelopment programme in terms of distribution of firms is illustrated by the examples of Augusta Street and Northampton Street, which disappeared as part of the building of the Hockley Centre, and where firms are now housed in one-storey modern units at the back of the Hockley centre. In Vittoria Street, where the School is situated, two new buildings, one housing a mail order

company and the other an office block for a bullion dealer, have replaced old multi-occupancy villas, which accounts for the drop in the number of firms.

Table 6.

Distribution of jewellery firms in the Jewellery Quarter  
by street in the post-war years.

Street	1953	1963	1973	1986/7
Vyse St.	153	137	74	113
Warstone Lane	108	87	32	55
Northampton St	80	69	0	15
Spencer St.	59	60	41	21
Branston St.	46	28	13	20
Augusta St.	29	28	0	21
Hylton St.	28	31	18	36
Vittoria St.	27	28	28	18
Albion St.	24	28	49	12
Frederick St	22	28	28	24
Totals	576	524	283	335

Source; Compiled from Kelly's Directories 1953, 1963, 1973, and mapping exercise 1986-7.

The old definition of the Jewellery Quarter, as described by Wise and still retained by the City, is no longer appropriate in terms of disposal of manufacturing units. The Quarter has contracted inwards since the post-war years. A striking feature is the density of firms

still present in the streets which formed the core of the Quarter in the middle of the nineteenth century, when the industry was consolidating its location as a distinct area. In the post-war era the remaining firms, and those seeking to join them, have concentrated more in the area around the Chamberlain Clock, which has become a symbol of the Quarter, (17) and where the retail units have developed. The results of the mapping exercise together with directory information from each decade since the 1850's (with the exception of the First and Second World War years) indicate the effects of markets, fashion, and a decreasing labour force. Vyse Street has consistently contained the largest number of all Jewellery Quarter firms and the trades have accounted for three-quarters of all firms in the street.

Table 7 not only shows Vyse Street to be the most densely populated in terms of jewellers in the post-war years but also demonstrates the inter-relationship of associated or supportive trades. It shows the decline of certain trades and processes, such as silversmithing and gilding, due to changes in fashions and technological change. The impact of the redevelopment programme is demonstrated by the decline in the 1973 figures, but there is evidence of a resurgence in recent years. Within this concentration of the area is a specific concentration of certain trades in particular streets which was perhaps more typical of the whole in the pre-war years, but in which patterns of settlement by trades have persisted.

Table 7.

Distribution of jewellery, silversmithing  
and allied firms in Vyse Street 1953-1986/7.

	1953	1963	1973	1986/7
Stampers	4	3	1	2
Jewellers	58	52	37	65
Setters	8	10	4	6
Engravers	9	6	1	1
Die-sinkers	5	7	4	2
Polishers	1	5	5	2
Solderers	1	1	0	1
Casters	2	1	0	2
Silversmiths	12	7	2	1
Stone-dealers	2	2	1	4
Trophy-makers	0	0	0	2
Pearl-stringers	1	0	0	1
Watch dealers/ repairers/supplies	10	6	4	6
Enamellers	4	2	0	1
Wholesalers	8	8	8	5
Tool-suppliers	0	1	1	1
Bullion dealers	0	0	1	2
Refiners	1	1	0	1
Mounters	8	7	2	4
Platers	1	1	0	0
Ring-makers	14	11	2	0
Gilders	2	2	0	0
Medallists	1	1	0	0
J. box mn.*	1	1	1	4
Others **	44	38	21	83
Totals	197	173	95	196

\* Jewellery box manufacturer

\*\* These include firms whose trade could not be identified and non-jewellery firms.

Compiled from Kelly's Directories 1953, 1963, 1973, and mapping exercise 1986-7.

Thus jewellery manufacturers are concentrated in Vyse Street and, in consequence, the supportive services of setters and mounters are also found there, as the table demonstrates. This pattern can be traced back historically, and is based on practical considerations dating back to the mid-nineteenth century when trades found Vyse Street property suitable for small multi-occupancy workshops. Multi-occupancy of the restored older villas persists in Vyse Street and other streets where older property is retained. The prevalence of moving between small premises continues (Gilbert 1973: 7.6). The area is shared with an assortment of engineering firms, most of which are also small in scale, and with other non-industrial firms, as it was in the nineteenth century with the button and brass trades, but jewellery remains the dominant single industry. (18)

### Conclusions.

The twenty year delay in the implementation of redevelopment plans in the area, and the final form which it took, promoted an atmosphere of uncertainty within the local industry and impatience with the local authorities which appears to have been reciprocated. (19) The City's aim was one of retaining the Jewellery Quarter in its traditional location while improving the physical appearance of the area. Assisting smaller firms by a system of differentiating rents according to unit size was not a priority. The eventual redevelopment occurred in the era when concrete tower blocks were seen as a solution to

land costs for housing and industrial development, which resulted in a building in the Quarter which was double the scale of any existing buildings. Despite their continued avowal of a commitment to retain the Quarter's location, and meetings between planners, council members and B.J.A. representatives, delays resulted in the concerns of the local industry being swamped. While the area was under constant criticism for its appalling dereliction, which was held to be a contributory factor to the contraction in recruitment, a decade passed between proposals and action. The original scheme proposed by the B.J.A. in 1945, reflected the structure of the local industry and would have integrated interdependent trades in workshops of appropriate sizes in four-storey buildings, and still have made good use of inner-city land. The B.J.A. could not afford to originate the scheme itself, and then hand it over to the City to maintain. In recent years, the historical aspect of the Quarter has been stressed by the authorities and under the refurbishment programme the Quarter began to benefit from grants, renovated workshops, and retail units though the latter are a contentious issue and the lease or purchase of new or refurbished workshops is not restricted to the trades. In addition, there have been the traditional problems for the industry to cope with. Foreign competition in the early 1960's from Italy paralleled that experienced in the late nineteenth and early twentieth century from Germany and America. Skill shortages had been endemic since the end of the First World War, as labour was attracted to high waged work in

factories, and the same was true in the 1950's and 1960's. A major problem in the late 1970's and early 1980's was the price of raw materials, and of gold in particular, but again, as in the past, the popularity of 9 carat gold helped to stave off disaster, and redundant workers set up on their own rather than leave the industry, as they have done since the eighteenth century. Smaller firms went on short time and it has been shown that the numbers of small firms actually increased while the numbers in employment were falling. The industry's structure has therefore acted in its favour, though unable to stem the national contraction.

The formal institutions have not been able to exert the same influence in Birmingham as in the nineteenth century. Since the late 1970's the Assay Office has sought more communication with the industry and invites senior members of companies to meet for lunch with trade wardens and senior members of the Assay team twice a year. B.J.A. and union membership have both been affected by the continuing contraction of the industry. The total membership of the former was 856 in January 1988 of which 208 were in the Jewellery Quarter, approximately a third of the firms located there (British Jewellers' Yearbook 1988: 81-112). The union, NUGSAT, has been absorbed into TASS as its membership is insufficient to justify its separation. This reflects the contraction of the trade since the post-war years and also the increase in self-employment in response to recession. Their membership is undisclosed, but it continues to hold monthly meetings

in the Quarter. The changes which have occurred in the School will be covered in the training chapter. The influence of the formal institutions locally has diminished with the contraction of the industry. The B.J.A. has increasingly been concerned with the national industry, although Birmingham remains the headquarters, and there has been a growth in International Fairs which the B.J.A. promotes through its membership of the European Fashion Jewellery Manufacturers, and through panels which represent members on Trade Fair Committees. However, it is still regarded as a spokesperson for the industry, and both the union and the B.J.A. have been consulted in the plans for redevelopment and conservation.

Redevelopment has resulted in the introduction of retail units and an increase in small rented workshops, now of a higher standard than in the pre-war years though workshops which are similar to those of the pre-development era still persist. The Quarter has contracted into fewer streets, but these are the same streets which have formed the core of the Quarter in the last quarter of the nineteenth century. The problems faced by the industry remain the same - foreign competition, fashion changes, and increases in the price of their raw materials, but the introduction of high technology processes has been limited, as will be shown in a later chapter. The old skills and working practices are still maintained. The continued existence of the jewellery industry in the same location for over a hundred years, particularly since the changes in Birmingham itself in the



post-war years, and with the damaging effects of recession on an already severely contracted industry, continues to be problematic. The following chapter will argue that an answer to this may be found in the workings of the occupational community.

#### Notes.

1. The rebuilding of Pforzheim had incorporated factories, workers' residences, exhibition space and training facilities, and was visited by Birmingham councillors.
2. The streets involved included Vyse Street, Warstone Lane, Northampton Street, Augusta Street, Spencer Street, Hockley Street, Branston Street, Hylton Street and Great Hampton Street. Most of these were densely populated by the trades, as can be seen from the tables.
3. The resulting declaration of the I.I.A. identified four objectives for resolution. These included the need to safeguard the economic viability of the area while improving its physical appearance, ensuring its conformity with safety regulations and improving parking problems. Jewellery Quarter Industrial Improvement Area. Declaration Report.
4. The Victorian Society is concerned with preservation and conservation of buildings which date from 1830-1914, and has 3,000 members nationally (1987) with regional groups who lobby and advise local planners. Interview with Alan Crawford, author of the report, 14.11.86.
5. Gilbert argued from his sample of firms that:
  - i) 83% of all firms obtained metals and stones from suppliers located in the Quarter.
  - ii) 80% of all firms obtained semi-processed work from other firms in the Quarter.

iii) 66% of all firms dealt only with other firms in the Quarter.

The Victorian Society Birmingham Group, (1977) Proposals for Conservation in Birmingham's Jewellery Quarter. Appendix. Supplementary Comments and Proposals by Clive Gilbert.

6. Interview with one of the Chamber members who visited firms as part of the information exercise. 9.10.86.
7. Examples of this use by non-jewellery firms can currently be seen in a restored Georgian block at the junction of Legge Lane and Albion Street which houses electronics and non-jewellery design firms. A more recent example is to be seen in Warstone Lane, and is a purpose built unit of brick "mews" style units fronted by six shops, of which three are occupied by non-jewellery retail units.
8. The University of Birmingham's Urban Studies Centre and the City Planners office collaborated in the production of an illustrated leaflet, "St. Paul's Square and the Birmingham Jewellery Quarter Trail" which leads the tourist along a specific route through the Quarter and provides historical and architectural notes.
9. Interview with jeweller, 5.8.87.
10. Interview with Michael Ashton, 6.6.87.
11. One of the manufacturing jewellers who opened his shop in November 1987 displays a notice declaring that over 90% of the goods sold are made in the Quarter.
12. One of these large employers is the Birmingham Mint which produces coins and medals for the export market, and Toye, Kenning and Spencer's who produces badges, trophies, medals and regalia, and has factories in London and Birmingham. These products have historically been part of the Quarter and involve similar skills and processes in their

production as those involved in jewellery manufacture.

13. Two interviewees recalled seeing silver goods being taken round to the bullion dealers to be melted down for cash at this period. Another working for a gold chain company, spoke of making chain in the morning and it being taken to the dealers in the afternoon so that advantage could be taken of the high price.
14. Definitions of Standard Industrial Classification. Orders XI Minimum List Headings, p.22. 392 is now 3161. "Cutlery, Spoons, Forks and Plated Tableware etc. Manufacture of spoons and forks, table knives, pocket and sheath knives, pruning knives, razors (not elsewhere specified) razor blades, scissors, manicure sets etc. Tableware of precious metals or plated with precious metals (e.g. silver-plate on nickel silver) and electro-plate and stainless steel tableware are included. p.22.  
Mlh 396 Jewellery and Precious Metals. Smelting, refining etc., gold, silver and pewter etc: cutting and polishing precious stones; and manufacturing ornaments of gold, silver and pewter or plated with gold, silver etc; jewellery, coins and medals. The Royal Mint is included. SIC Revised 1968. H.M.S.O. 1980 p. 23.
15. Attempts to cross-check the figures given for local employment through the use of the Companies' Directory were unrewarding. The directory includes only companies which have registered, which many small firms do not do. Directories which classify by trade had significant omissions. An example of this is the listing of jewellery finishers and polishers, of whom only seven were listed, with two of these in London. The mapping exercise undertaken for this study has shown 28 of these firms currently active in the Quarter. Similarly, of precious stone dealers, 35 were listed, but only two of these were listed as being in Birmingham, whereas 11 were identified in

the research (Kelly's Business Directory 1988: 699, 999). Kelly's local directory has changed its format from street classification to trade classification, though in the early 1980's this was broken down by enumeration districts. This directory has shown similar omissions to those of the national directories. Chamber of Trade directories and the B.J.A. Yearbook list only their members. Thus the above tables and the tables produced from the earlier directories which listed individual properties by street, have been used.

16. Maps of the area appear on the City of Birmingham information leaflets, and in the I.I.A. reports.
17. The clock is situated at the junction of Warstone Lane, Vyse Street and Frederick Street. It was erected to mark the landing of Joseph Chamberlain in Cape Town in 1905 and paid for by local subscription.
18. The area also houses Lucas's engineering works and Canning's which both occupy large sites on what has become, in the post-war years, the outer fringes of the Quarter.
19. A letter from the Chairman of Nathan Brothers, established in the Quarter since 1867, appeared in "British Jeweller" Vol. 33 No. 6. February 1966. p.51. It was critical of the lack of information to firms involved in Phase 1 of the development programme and alleged that the Public Works Chairman was treating the jewellers "like children". At a public meeting later the next year, Alderman Simpson's impatience was clear: "I do not want it thought that I am trying to wield a cudgel but it [is] a fact that factory inspectors would have to move into present premises to enforce the Factory Act. "British Jeweller" Vol. 35. No. 4. December 1967. p.107. In reality, few premises would have come under the Act, which is applicable only to those firms with twenty-five or more employees.

## CHAPTER FOUR.

### THE OCCUPATIONAL COMMUNITY IN THE JEWELLERY QUARTER.

Redevelopment and recession has resulted in the contraction of the jewellery and allied trades, which is manifest in that more than half of the firms now cluster into the core streets of the Quarter. The premises that remain are a mixture of small modern factory units, large older buildings, many of which are sub-divided, and the villas which allowed multi-occupancy and the yard workshops which remain. It has been shown that the improvements in the fabric have been piecemeal due to multi-ownership. The relative reduction in the area means that any journeys between firms and other institutions are short. Such journeys are part of the daily routine of the local industry, as will be shown. The informal community of the Jewellery Quarter which results is therefore located in factors which structure the local industry. It is argued that these are rooted in the historical evolution of the trade in Birmingham which pre-dates the establishment and location of the formal institutions of the B.J.A., the Assay Office and the School. The key components which are identified are the working practices associated with the small workshop and interdependence of the jewellery and allied trades, the involvement of the family and the existence of long-established firms. These factors, it is argued, militate against the loss of the local residential community which has been re-housed in

the post-war era. The data used in this chapter is the result of the fieldwork undertaken for this study. It will be discussed in reference to other studies of occupational communities.

Processes and work practices: the meaning of interdependence.

The main trades in the Quarter are concerned with jewellery production, badge-making and silversmithing. Of these, silversmithing is now the more self-contained, with most processes taking place under one roof, though there are separate areas of specialism. Jewellery and badge-making share some of these characteristics but although both can be mass-produced, there are few large self-contained manufacturers of either. There are a number of small firms involved both in the main production and in supplementary processes necessary to the finished article. The small firms providing these services are known as outworkers, and are independent specialists working for a variety of customers in the local and national industry. A large number of these small firms are involved in the production of articles. This can be illustrated by the instance of a wholesale and factoring business which supplies major mail-order catalogues, in-house incentives and department-store concessions and the export trade. A modelmaker is employed to design the ranges and the production manager is responsible for the selection of outworkers who perform the manufacturing processes in their own workshops. The firm buys in gold sheet or wire from the bullion dealers. This is then sent to outworking

stampers, to be stamped into earrings, rings, pendants and brooches. The stampings are returned to the firm and are sent to the Assay Office for hallmarking. The next outworkers to be used are the diamond cutters, and the final process is polishing, after which they are returned to the firm for packing. After each process the items are returned to the firm for dispatch to the next outworker. The firm is not involved in production because the bulk of their work is geared to twice yearly launches of the mail-order catalogues, which would mean laying workers off between seasons. (1)

In badge-making there is a similar dispersal of work by the smaller manufacturers. The manufacturer buys in metal already rolled into the required lengths for stamping, which is the only operation performed in their own workshops. The out-working die-sinker supplies the badge-die, and the metal is stamped by the badge-maker, and then clipped and pierced. (The clippings are sold back to the metal dealer.) The badges are sent on to the solderer to joint for the pin, and then go to the enamellers who colour the design and fire them. They are sent to the platers for the final process. After each process, the items are returned to the firm. (2) Large badge-makers who are more self-contained will also use outworkers such as enamellers and platers regularly both for large orders and for orders which are too small or elaborate. This movement of products between specialist outworkers and from the main manufacturing house is replicated by smaller manufacturing jewellers. These use

stone-cutters, enamellers and engravers, according to the design of the product. (3)

The outworkers themselves range from one-person firms to those with three or four employees, and operate from small workshops. The exceptions are platers, who need larger premises for vats containing different finishes, and who serve the gift trade in addition to jewellers and badge-makers. (4) The interdependence between manufacturers and outworking specialist is further complicated in some instances by outworkers who use outworkers, as in the case of stampers who use die-sinkers (5), enamellers who use platers for some jobs which are sent to them directly from private customers, (6) and casters who use outworking model-makers. (7) The outwork trades include casting, finishing which includes plating and polishing, enamelling, die-sinking, engraving and stone-polishing and cutting, and each of these are recognised as specialist skilled trades, and vary in the complexity of their operations. In addition to out-workers there are home-workers. As the term implies this is work performed at home by women workers, retired male workers and the disabled. Women casters, for example, who give up work during the child-rearing years, have a wax-pot at home, and work for their former firm, (8) and enamelling can also be done at home. (9) The carding of pudding charms, made by a badge-making firm, is performed for one of the firms by disabled people in their own homes. (10) In the past, when cheap brooches and necklaces were sold on cards, this work, together with paste-work "marcasite"



on brooches and unknotting chain, was a useful additional source of income to local residents and workers and would involve the family in the evenings. (11) In the years before the Second World War, firms' representatives would call on customers in the Quarter after each of the three daily posts to collect orders for his firm. (12)

#### The operation of the outworking system.

This continued separation of the trades results in a web of interdependency between those initiating the manufacture and the skilled outworkers who carry out the numerous processes. It is this interdependence which needs to be examined, as it is the root of social relationships in the Jewellery Quarter. This relationship, it is argued, extends beyond the purely economic, and its frequency fosters social relationships. The way in which the trade operates is through this localised interdependence which can be demonstrated through the way in which outworkers and firms make contact and how outworkers become independent. It has been shown that the separation of the trades pre-dated the formation of both the B.J.A. and the School, and would have been reinforced in the early days of the settlement of the trades by a resident workforce. The residue of this residential community can be found among older workers who were brought up in the area in the pre-war years, and it is from the set of relationships established then that they derive their later relationships. A finisher who was born in the Quarter and went to the local school considered that he and his

brother were "born in the trade" even though their father did not work in the Quarter. Many contemporaries from their local school joined the trade, so his contacts are those he grew up with. (13) A diamond mounter said:

"Everyone else in your age group comes up in your bracket, so if you want a special job, you will go to them, of course". (14)

The School is a further point of contact, in much the same way that the residential community was. The practice of using practising craftspeople to teach there which was a condition of employment at the establishment of the School in 1889, has continued. Some part-time tutors are independent craftspeople or outworkers, and they may offer jobs to promising students on the completion of their courses. Similarly students who later become independent will send their work to an outworker who has taught them. (15) Others who trained at the School, either full or part time, will use their contemporaries from training days. Others seek recommendation from others. A jewellery designer had to find her own outworkers when moving from a factory which had provided workspace and outworking facilities for her as part of a sponsorship scheme. She moved to a workshop in a multi-occupancy building, and found her outworkers by word of mouth. For example, the stone-setter in her building was too busy to undertake her work, but recommended someone he had been at the School with, whose

work was of the same standard. (16) In other cases it is longevity in the Quarter which will determine choice, and reliable firms will have a reputation passed on by word of mouth to both the customer and the processor. A manufacturer with retail shops who uses casters, mounters, setters and finishers who are all outworkers, explained:

"This is my thirty-fourth year here so I know everyone .... I select from those I know, from hearsay. It depends on the specific job so I know who to contact if it is a special". (17)

A diamond moulder commented:

"Now I do a lot of work by recommendation. They all know me in the trades, or they know the lads [his nephews who work with him] so that's how we get the jobs .... a man came into the Quarter from Manchester and he went to X and asked who they would recommend for the job he wanted doing and they suggested us, so he came in here and we were able to do it". (18)

Those who inherit long-established firms also inherit and retain the outworkers but because of death and retirement, there is a need for constant information about outworkers to replace these. (19) This will depend on the degree of contact with others in the Quarter. One silversmith who became self-employed after redundancy had worked for a

large firm. He knew where to purchase the quality of the materials he needed, but had difficulty finding a finisher of the standard he wanted because "I worked for a company where we had our own polishers, so it wasn't my concern". He made the point, however, that he would hesitate to recommend his own outworkers to others "in case it delays my work. So you guard skills, contacts, things like that, because it could be detrimental to your own business".  
(20)

Some of the outworkers and independent firms visited during the fieldwork established themselves independently after working for other firms. In the post-war years, this occurred as a result of trained craftspeople returning to the Quarter after war-service and using their gratuities to set up on their own. (21) Several became independent on their return from National Service. (22) Others have entered and continued the family firm. (23) Some attended the School for evening courses to broaden their skills, or were sent on day-release by employers. Interviewees related that they had learned what they could and then left the firms they trained with to become independent, and later their employees did the same. (24) In these various ways, the independent specialist has already established a reputation for a particular quality of work and will know who to contact for orders, and in the same way, the firms will also know of them. To an extent, the formal institution in the shape of the School is important as has been shown, but so too is the reputation of workers who have left firms. For

example, badge-makers will supply independent enamellers who have worked for them in the past. (25) Silver-ware firms whose workforces have contracted due to changing fashions and other jewellery manufacturers have shed workers in the recession, and one of these had used redundancy money to set up independently. (26) An independent designer commented that she has become successful because of the help she had in the Quarter, from firms who gave her information about outworkers who could help her with different processes. She believed that this contact had benefitted her business more than if she had worked from home, as the nature of her work would allow her to do. (27) Contacts are also a source of information about premises available at cheap rents for letting, or preferably sub-letting, when workers are ready to become independent. (28) So success for these respondents depends as much on their contacts within the Quarter as their business acumen, and this contact is derived from a variety of experiences.

#### "Out in the Trade".

The items for processing used to be taken around the Quarter in baskets on wheels, and even today it is easier, if the order is small, to deliver by hand, though this depends on the value of the goods. (29) It is this movement of goods around the Quarter, by car as well as on foot, which provides the opportunity for contact to be made between firms, and for the information described above to be disseminated. Contact is not confined to the

workshops. Two places are of significance, "the trap" and the street. The trap is the means of entry into the workshop and, in a multi-occupied building, each firm will have its own trap, a small sliding hatch in the door or in the wall at the entrance of the workshop, on either side of which is a small counter. Many firms which handle precious metals will nowadays have a video camera as additional security.

"Ten or fifteen years ago you could have just come up the stairs and come in. But now the insurance companies are keen on all this security". (30)

At the trap will be a bell or buzzer. Here, orders, deliveries, collections and enquiries are dealt with, and the caller, if known, will sometimes be invited into the workshop or office space on the other side of the trap, or talk across it. Only larger firms will have a receptionist. The hatch usually leads straight into the workshop area, so a number of workers, or the whole workforce in the case of small firms, is visible. Thus, contact is not limited to the owner or whoever responds to the bell, and in small firms, almost anyone who is around will join in the greetings and probably the conversation, while they work. (31) With those who are known, often no direct business takes place at all. The caller may be "just passing", and in the course of the conversation, local news will be exchanged relating to

other firms, the amount of work about, or personal news about family, or something in the newspaper. It is also a way to keep a check on the progress of work which is being done, or an indication that one is looking for work, and keeping up to date on what work might become available. (32) One workshop, for example, which is next to a cafe frequented by porters, may be visited by one or more of these each day. The owner was born in the area, and the conversation on these occasions is based on shared reminiscences of the area. (33) Two jewellers have recently moved into a refurbished workshop where they had space to arrange a sofa and coffee table in a customer reception area, and have since found that their workshop has become a popular meeting place (34) but this is exceptional and visitors call regardless of surroundings.

The street is a common meeting-place as visits are made to workshops, take-away cafes, the bookie's, the Post Office, banks and the Assay Office. It is rare for anyone to leave their workplace on an errand and not meet someone in the trade to greet or chat to. (35) The same kind of exchange will take place, and will occasionally result in a visit to one of the workshops to look at a particular project that a craftsperson is engaged on. (36) There is some contact at the pubs, though not so much by craftspeople at lunchtimes, due to the nature of the work. One group meet regularly in a pub which is local to all, and "exchange knowledge, shop talk". (37) During the war, a British Restaurant was run in the School, and in the post-war years, a restaurant was built in Frederick Street

opposite the B.J.A building to replace this. There were canteen facilities on the ground floor and the "master-men" enjoyed the facilities of a bar and waitress service upstairs. This was converted into factories in the era of redevelopment. Now there are several cafes and restaurants. Three of the latter are expensive, and generally attract business people and others from other areas in the City who are entertaining clients. There is a wine-bar which is popular with non-manufacturers in the industry, such as wholesalers and bullion dealers. (38) A smaller restaurant in the heart of the Quarter offers both waitress service and bar-lunches, and is popular with the "master-men" and other white-collar workers in the Quarter. St. Paul's Club in St. Paul's Square, established in 1859 for local businessmen and professionals, has always had some members from the jewellery and allied trades who can go there for lunch and a game of snooker. (39) Others will call in at the pubs after locking their workshops at night "to see who's about" and again catch up on the news. (40) The pubs are places where business might be discussed, and other transactions take place. Dayus recalled some of these which she observed in the inter-war years:

"....I would go on a Friday night to a pub called The Jeweller's Arms, with some of the girls I worked with. Many's the time I have watched the gaffers of these thriving little businesses exchanging hundreds of pounds or



packets of diamonds in corners of this and other pubs in the area". (41)

The Assay Office introduced lunches in the late 1970's for managers of firms which are held twice a year and give those who run firms the opportunity to meet Guardians and other Assay Office staff as well as each other. (42) The B.J.A. has re-introduced breakfasts and lunches for its membership with guest speakers to be held monthly. (43)

The smallness of the geographical area is an aid to this close contact, as are the multi-occupancy buildings. The Hockley Centre is the exception, and there is contact between units only if the firms are already known to each other. One respondent mentioned the practice of taking their breaks "out on the step" as an opportunity for socialising, (44) and another who has moved in to the Hockley Centre bemoaned the lack of this particular form of contact. Although his work was known by a variety of customers, he said he would not be recognised as he no longer stood out on his step and it was now his wife who went "out in the trade". (45) One of the features of the collection, delivery and other calls which occur in the Quarter as a matter of daily routine is the variety of people who are "out in the trade". The porters of larger firms have been referred to earlier, and some send out their youngest employees, which, as one setter remarked, is an opportunity for them to make their contacts for the future. (46) Wives and other female employees who are employed for general work, retired male workers, and the

owners themselves, including the self-employed one-person business, will make calls, and in their turn exchange news and information.

The separation of the trades, and the workshop structure provide the opportunities for contact, which has both a business and social content. It is an opportunity for an exchange of news, but can also act as a support group. (47) It operates on a number of different levels, which overlap, as do its functions.

#### The family in the firm.

The role of the family in the trade is another factor in the community, both in terms of long-established firms and in the day-to-day running of firms, and this has implications for the continuance of the occupational community. A result of the jewellery and allied trades retaining their location for over a century is that some firms which began as small manufacturers or outworkers to the trade have survived in some form. Others have amalgamated, or more recently, been taken over. The oldest surviving firm is a badge and button manufacturer, started by a woman in 1774, taken over by her partner in 1847, and still run by descendants of the partnership. Another firm which was originally a steel-toy makers has traded since 1777, and adapted to badge-making. A stamping firm founded in 1870 is still run by a family member. The major supplier of materials and tools to the trade opened in 1888. The oldest surviving jewellery manufacturer, still in the same family though part of a larger group now, was

founded in 1790. Another dates from 1849, and there are several more than a hundred years old. Silversmiths of long-standing and still owned by the same family include one which is a hundred and forty years old. Another, founded at the turn of the century has itself taken over other long-established silversmithing firms, and is run by the grand-daughter of the founder. (48) Of the workshop interviews conducted, over 70% had some family connection in the trades, and had either grandparent, parent, brother or sister, son or daughter currently in the trades.

Within these firms and others, family members are a valuable resource. These may be active partners in the firm, working craftspeople, administrators or managerial staff, or unskilled workers. There is considerable involvement of female family members who are generally involved in a non-craft capacity, as book-keepers, office managers, sometime trainers and more recently, working in the family retail unit attached to the workshop. Unskilled workers are often family members, such as middle-aged women or retired men who combine a number of functions such as packing, small polishing jobs, collecting and delivering work, fetching materials and making the necessary calls which are part of the business routine. This family involvement replicates the older domestic workshop system and is also, though not in every case, related to the value of the goods being handled. (49) Some "jewellery family" members may not work for the family firm, but are employed in the local industry or are running their own businesses in the Quarter. (50) A

silversmithing family in the Quarter since the middle of the nineteenth century is run by a direct descendant and his wife, son and daughter work in the firm. One casting firm founded in the early post-war years is run by the owner, with his wife as office administrator, a niece, son and daughter in the firm and a retired brother who does odd jobs. The founder was instrumental in helping his brother-in-law, who was also in the trade, to become independent, and this firm is now run by the widow and their son. (51) A female enameller started her own firm eight years ago after working in the trade for over 40 years. Her husband was the polisher until his death. She employs two daughters, a son-in-law and a daughter-in-law, and has a son-in-law who is also a skilled man in the trade. (52) An outworking engraver is the third generation of his family to work in the trade, though he is the first to be independent. He has no employees, but one of his two sons is in the trade as a mounter. (53) Redundancy gave a skilled polisher and finisher the opportunity to become independent and he is in partnership with his brother. His daughter now does the office work and he has taught her rhodium polishing in which she has trained their Y.T.S. trainee. (54) These examples show the kind of family involvement in the trades which links into other firms, and demonstrate its part of the occupational culture of the Quarter. The role of the family in recruitment will be discussed in the following chapter.

One respondent commented that workers like family firms. (55) This can be interpreted as a liking for

security as well as continuity, but there is evidence to show that skilled men and women have served long years with some firms, despite the many opportunities to improve wages by moving between firms in the area or to become independent workers. This adds to the continuity of the working community. Long years of service in the local industry have been celebrated regularly in "British Jeweller". In 1967 two women were featured, an 80 year old maker-up working for a silverware firm who had 60 years service with the same long-established firm, and an 80 year old polisher still working at a jewellery manufacturer's. (56) In 1980 the oldest remaining jewellery manufacturing firm still employed two master silversmiths, aged 72 and 77, who had worked together at the firm for 57 years. Two other employees had 53 years of service. (57) Employees like these were crucial to the training of new recruits to the industry, and though the practice of retaining older employees has been seen by critics as a deterrent to recruitment, (58) those who have trained with these older craftsmen "on the bench" believe they have received valuable training. (59) Among the older owners interviewed for this study, those whose fathers had been "master-men" had been involved in the trade since home-work was brought in for the family to do, and they had been in the factories at weekends and holidays since they were eight years old.

"I was polishing at four years old, working regularly on Saturdays when I was eight. At

twelve I was working on piece-work, I had to lap a gross [of enamel badges] in twenty minutes because he [father] could, and unknottling chain. When I was fourteen we worked from eight till six in the week and eight till twelve on Saturday, that was for five shilling a week".  
(60)

This early initiation to the practices of the trade is reminiscent of the practices described a hundred years ago. (61) In addition to long service there is continuity through other member's of employees' families joining the firm, or finding workspace or premises through the family connection in the trade when becoming independent. (62)

Family members in the firm and allied trades, long-established firms, and long-serving employees who are valued for their skill and ability to train and retain hand skills, are carriers of the culture of the area. Contact in the street or at the trap reinforces the communality, and also perpetuates the "myths and legends" of the Quarter through the retelling of old stories. These are related not only by older workers, but younger workers who recall being told them when they were first starting in the Quarter. Workshop visits perpetuate notions of skill and reputation. This is not to imply homogeneity. One of the disadvantages of this frequent contact is rumour-mongering which can be damaging to firms, some of whom have taken space in "British Jeweller" to reassure customers. (63) It was shown earlier that there is a great

deal of movement of firms around the Quarter, and the news of moves is disseminated by word of mouth as well as by more formal means such as announcements in "British Jeweller". "Rogues" and malpractice are believed to be monitored by observation, and suspicions relayed by word of mouth. (64) A feeling of community is expressed despite the fact that many firms are in competition with each other, and references to the Quarter being village-like were frequent among respondents.

"There's a community spirit here, it's very good, even with our competitors. We're all on Christian terms, it's a unique area for that. I can't walk along the street without fifty people saying 'Hello, W'. You have trust in people, though that doesn't pay off always. A £1,000 can change hands, no signature". (65)

Scrupulous honesty is maintained to be the norm. Thus, instances were given of stones being lost during polishing operations, and found months later and popped in an envelope until the customer called again (66) and of goods being lost on the way round the Quarter, and delivered back to the owner. (67) There are examples of the support given to competing firms and individuals. When a fire at the oldest remaining manufacturing jewellers destroyed two workshops just before Christmas 1977, other competitor firms in the Quarter offered workspace and finishing facilities. (68) Independent one-man businesses have

arrangements with colleagues whose work is of a similar standard and who take over for them when they are on holiday, or in case of absence. In these instances there is an understanding that no "poaching" of customers will take place. (69) A similar exchange takes place when jobs are accepted which the firm may not be able to do, either because of an unexpected rush of work, or temporary lack of materials. In these instances the work will be accepted, and then sent on to another, known firm, which may be known to be short of work at that time. (70)

These social relations arise from the structure of a local industry, and exist between autonomous firms. These remain geographically separate and largely based in small workshop production linked by interdependency, and these factors are the basis for the argument that the Jewellery Quarter is an occupational community. The following section returns to the issues of the nature and determinants of occupational community raised in Chapter One, to attain a more analytical grasp of the workings of the Jewellery Quarter community.

#### Occupational Community.

The evidence presented above documents the pattern of communal social relations, which occur and are renewed on a day-to-day basis. It is now appropriate to return to the issue of the nature and determinants of occupational community which were broached in the introductory chapter.

One of the key factors which have been drawn on to typify an occupational community is the propinquity of



work and residence. This is most clearly illustrated by coal-mining and fishing which have been shown to be dominant in their areas:

"Ashton is predominantly a working-class town owing its development to the growth of its collieries. The latter having drawn people and houses around them, the main pit is almost in the centre of the town. .... Most of the men in Ashton are miners". (Dennis et. al. 1969: 14)

Here the physical presence of the pit is dominant, and Ashton "owes its being to colliery development" (1969:15). Mining is the dominant employer, and two out of every three miners in the town work at the town's pits, the others travelling to nearby pits. There are few alternatives to mining in the area, outside ancillary trades such as the distributive and transport industries, in which men can work (1969: 23-25). Tunstall (1962) shows that in Hessle Road fishing was the main source of employment, and included the secondary processors (1962: 75) and Horobin (1957) argues that 60% of fishermen (skippers, mates, bosuns, spare hands and learners) live within a mile of the main fish dock. (1957: 346) In Wallsend shipbuilding and its associated trades were the dominant employers for the local workforces (Brown and Brannen 1970: 72). The situation in Birmingham among the jewellery and allied trades is different. The area incorporated low-rent housing, like Hessle Road (Horobin

1957: 346-347), until the recent redevelopment, but the trades competed for labour with the button, gun and brass trades in the nineteenth century, and the engineering trades allied to the motor and aircraft industry in the twentieth century. The trades have been shown to have declined significantly from the inter-war years but even so, have always competed for labour with other industries among the local workforce. Although the local community has supplied some workers for the local industry until the 1950's , when the last of the older housing on the fringe of the Quarter was demolished, proximity between workers and the industry has not had the strength of that shown by mining, fishing and shipbuilding communities. One respondent commented that, living near the Quarter and having been to school in the area, that "it [the jewellery trades] was the only job I knew about" (71). This was exceptional, however, and the link between work and residence is much weaker than is shown in the other studies.

In occupations which have elements of danger and insecurity, these have been regarded as unifying factors. Hazardous working conditions in mining result in death and injury rates which are high in comparison with other industries (Dennis et. al. 1969: 130-132). In fishing, Tunstall (1962) writes: "The fear of death pervades the occupation of trawling" (1962: 75). Brown and Brannen (1970) argue that shipbuilding workers are "bound together by the shared experience of .... the danger and harsh conditions which surround the manufacture of ships" (1970:

204). These extreme dangers which are described in the studies do not obtain in the jewellery trades. Insecurity of work is present in mining, fishing and shipbuilding. Shared experience of lay-offs and the depressions years are a further binding factor. In the jewellery trades, there is still a degree of cyclical working, though the unions have negotiated with the employers to ensure a minimum three-day week in periods of short time working (72). The nature of many crafts results in various strategies to overcome quiet periods. Small production units can adapt their production, so the problems of insecurity are not of the same nature as those in an area dominated by one large industry.

Linked to the factor of danger is that of team-work. Brown and Brannen argue that men who have worked together on a ship maintain social relations at work to re-form at a future date. Colliers and machine-men in mining work as teams and like those of the shipbuilders, these can continue "through many different contracts for years on end" (Brown et. al. 1973: 103). The mining teams ensure the regularity of good work and develop a mutuality and trust (Dennis et. al. 1969: 44-45). Similar patterns exist among dock-workers, rooted in the casual labour system, with work-teams based on bonds of kinship, friendship or religion (Hill 1976: 197). Again, the jewellery trades differ in this, and again the structure of the industry, with its separated processes, mediates against work teams as described in these industries. Rather, the mutuality and trust displayed by

these groups exists between individual firms and outworkers.

The communities discussed above have centred around male work groups. Only 17.4% of the workforce in shipbuilding was composed of clerical, administrative and professional employees, all geographically isolated from the manual workers. Brown and Brannen do not break these figures down by sex, but argue that there were only "negligible" numbers of women employed, and do not explain further the nature of their work (1973: 103-104). Women workers in the Ashton coal industry are not mentioned as being present in any capacity, neither do they appear in the studies of fishing or docking referred to. They are not present either in Cannon's study of printing. There appears to be no interaction between the women workers who might be present for example, in clerical or canteen work, and the manual workers, and therefore it is assumed that they play no part in the occupational community, other than as passive wives and mothers whose lives are dominated by the pattern of work among men (Dennis et. al. 1969: 204) Our knowledge of women manual workers has come from studies which have specifically concentrated on women workers, rather than factories or work communities per se. A later chapter shows that even though women may not be performing all the skilled or manual tasks in the Jewellery Quarter, nor enjoying equal opportunities with the male workers in terms of employment, they are active in the occupational community. Like the men, the degree of their participation in the community is dependent on the

size of the firm and their position in it, but it is clear from my own observations that women are often key contact figures, and as such are involved in the social as well as work transactions which take place. A later chapter argues that while women are not equal in their opportunities in the Quarter, they are present as students and workers, and these and other roles within this occupational community in work allow them to be part of the occupational community.

The role of the union as a cohesive force is demonstrated by Cannon's (1967) study of printers. Describing it as a "formalised expression of the occupational community", he shows that it covers a number of functions relating to the performance of tasks and mediation with management. Cannon argues that the institutionalisation of the customs of the trade, some of which originated from the working conditions, contributes to the sense of identity experienced by printers (1967: 171). In Ashton, where most working-men are miners, the union is strong because solidarity among the miners is regarded as "the base of its bargaining power" (Dennis et. al. 1969: 84-7). In the Jewellery Quarter the union which has evolved from the combination of societies representing different trades has had difficulty in recruiting in Birmingham. This has been shown to be the result of the high proportion of small businesses and the involvement of family and neighbours among the workforce which has militated against union membership. Employees have worked alongside owners and negotiated individually for wage

increases, though the union has negotiated voluntary wage agreements with the B.J.A. but it cannot be described as a cohesive or binding institution.

The print workers are bound together by the union, and this itself has evolved through the organisation of the occupation as a craft with a formal apprenticeship scheme. This serves to inculcate the norms and values of the craft in recruits and act as an inhibitor to undesirable behaviour (Cannon 1967: 171-5). Brown and Brannen show that a similar craft ethos exists in the shipbuilding industry, which is dominated by skilled trades. Apprentices learn the "skills and mysteries of craft" and are also socialised into "group membership and a homogeneous composition". This results in the craft group functioning as "a moral community and as an interest group" (1970: 200). The jewellery industry however, is not exclusive to one craft. The local industry has no history of guild tradition and apprenticeships have historically been few in number. The presence of the School as a training ground in which students have been taught by practising craftspeople has served as means of promoting a standard of workmanship acceptable to the trades. However, like the shipyard, the local industry is composed of a number of skilled trades involved in jewellery production, none of which dominates through a formalised association. While the union has incorporated "custom of the trade" in its agreements, this has related to maintaining pay structures and excluding women, but the agreement has in any case remained voluntary, and thus

dependent on employers and their needs. Craft has not therefore been a significant factor in maintaining the occupational community. Reputation for performing the quality of work required for a reasonable price in the specified time is not regarded as the province only of a "craft worker". The term "craftsmen" is applied to skilled jewellers and silversmiths, but there is no formalisation of the skills which can be paralleled with the print and shipbuilding industries, and social groups are not confined to particular trades. The interaction necessary as a result of sub-division and the regular contact between manufacturers and outworkers works against this.

These examples show the wide variation of the factors which determine an occupation as an occupational community. The variation between the studies indicates that a fixed model seeking to typify occupational community, as Salaman does, cannot allow for the qualifying nature of other factors in the individual communities. The above factors are not appropriate to the Jewellery Quarter. Though a local workforce was important in the past, this is no longer the case. It does not rely on a local workforce, nor is it united by danger or insecurity. There is no team work in the sense that this is present in mining, fishing and shipbuilding. Both male and female workers are employed in skilled and unskilled work, are owners and independent workers. The union is numerically weak and not exclusive to one craft. Yet despite its departures from the factors outlined above, it is argued that the Jewellery Quarter is an example of an

occupational community. The concept of "leisure in work" used by Brown et. al. 1973) is a useful starting point for a discussion of the factors which indicate that the Jewellery Quarter can be so described.

Brown et. al. used the concept of leisure in work to describe the social relations which result from the organisation of work in shipyards. They found a specific shared shipyard culture which was "made up of elements from the sub-cultures of the different occupations and other groups in the shipyard and in turn contributes to the wider working-class culture" (Brown et. al. 1973: 98). They distinguished between "time" and "activity" dimensions of work and leisure, and show that in the yards there is considerable opportunity for leisure activities because of the autonomy of craft workers in a craft-based industry (1973: 102). The complex pattern of production does not allow for close control or checking of time taken to perform tasks, and there are many legitimate reasons for movement about the shipyard including seeking tools or equipment, information or services (1973: 103). Though this in itself does not constitute a "workplace culture", the researchers observed:

"a pattern and continuity in social contacts at work and .... these result in sociable groupings that retain identities over time and become an important 'work satisfaction' in their own right" (1973: 103).



These social contacts fall into a number of distinct groups. These include the immediate work group and others such as the apprentices and younger tradesmen, each of which has "certain common interests specific to the work situation that give it an identity" (1973: 104). There are town groups with members drawn from specific localities, and interest groups which meet regularly in the yard such as card schools (1973: 105). The authors argue that the groupings are not merely compensatory mechanisms for a disaffected workforce, though this may have been of importance in the past when the piecework system among the steelwork trades was worked on a squad basis. Rather they suggest:

"the social relations and interaction of shipbuilding workers at work extend considerably beyond what is necessary for the performance of their roles in production" (1973: 107).

The style of conduct among the groups, with certain recurring topics of conversation, elements of horse-play and extension of the contact by some groups in social outings is described. The authors claim that this sociability at work is "an important intrinsic work satisfaction" (1973: 107). Brown et. al. are not claiming a "specifically shipbuilding workers' life style", but rather that there is "a strong occupational or workplace culture in the shipyards" (1973: 108).

With this study the authors broke down the

stereotypical image of industrial manual workers whose male solidarity was linked with leisure activities which incorporated sexual segregation. They showed that "home and family-based activities" (1973: 98) dominated their leisure time and that the segregation experienced in Ashton clubs was not present among the shipbuilding communities. Here family entertainment was provided in the clubs and drinking was confined to free time in the working day or Sunday (1973: 98). The working environment provided the impetus for socialisation. The men were engaged in the making of a single product, and the groups formed had meaning for them beyond the merely functional. Like the Jewellery Quarter the shipyard workforce encompassed a number of different trades, engaged in production in a fluctuating market. Although "town groups" formed, the shared communal experience was the organisation of production. The authors show the low level of direct management intervention and the degree of autonomy enjoyed by the workers.

The organisation of work in the Jewellery Quarter has parallels with the shipyard. The earlier section of this chapter illustrated the degree of movement of individuals around the area of the Quarter. This is legitimised, as in the instance of the shipyard, by the necessity for frequent contact with other participants in the production process. In this respect, movement is functional for those in the jewellery and allied trades. As in the shipyard it cannot be interpreted as compensating for rigorous work or alienation (1973: 106)

but neither does it develop from other sub-cultures in the Quarter. (1973: 98) Rather it derives from the communal organisation of the trade. In the case of the jewellery and allied trades, this lies in the continued separation or sub-division of the processes involved, and in the shipyard from the decentralisation of the task. Thus there is more opportunity for social contact than that experienced by assembly line workers, for example, and in both cases is legitimised by the cooperative or interdependent nature of the work process, and the sub-division of tasks. In the Jewellery Quarter it has continued despite the use of cars and telephones. The chief difference in the Jewellery Quarter which distinguishes it from the shipyard is that it is not a single firm, but a wide variety of competing independent firms operating in an interdependent industry. They operate in a fluctuating market which is dependent on the price of precious materials, changes in fashion and which has experienced pressure from foreign imports. The industrial structure of differentiated small firms which has evolved thus needs communal organisation, in the geographical sense of spatial proximity, and the sociological sense of mutual knowledge and trust.

This geographical proximity has diverse results. Historically the trades have clustered together for reasons of security, ease of contact, and the availability of low-rent workshops or workspace suitable for small-batch production or processing. Localisation is a key element and is shown by the tenaciousness of the

trades' commitment to their historically defined location, despite slumps, recession and redevelopment, which is well illustrated by the tables in Appendix A. Despite the reduction of the trades, there has been increased concentration in certain key streets, which have evolved into the core of the Quarter. Appendix B demonstrates that there has been adaptability to fashion, imports and availability or cost of materials by adapting skills. The adaptation of metal working skills led to the local production of jewellery. The tables in Appendix B show how, as some trades disappear, the numbers of firms in other areas increase. This process of adaptation was crucial to the survival of the Quarter as a centre for the skilled trades. The process of training on the bench and at the School continues to stress hand-skills, and few processes allow for mechanisation but the skills themselves allow for the flexible approach necessary for adaptation to different products and materials, which rapidly changing fashion demands. Thus craftspeople, while retaining traditional skills, must adapt to survive, and are not a passive or static group. The separation of the trades promotes the independent outworkers. The contacts which result from this system, confined within a relatively small geographical area which has contracted, but retained its core, have a social element which is critical for its continued survival. This social element contains an assumption of trust between individuals built up through a variety of factors, in which shared training, longterm links with associated firms, family involvement

and local knowledge are important features. The need for contact between firms has been shown, and it is evident that geographical proximity continues to be important to the organisation of production.

In the sociological sense of social relations, this communal organisation guarantees trust, allows for the exchange of information and facilitates flexible work arrangements. Durkheim (1966) argued that as contractual relations develop, non-contractual relations develop simultaneously. He discusses various forms of contract to demonstrate the latter, an important component of which, in relation to this study, is the "organised, defined pressure .... which comes from custom." By custom, Durkheim refers to an unwritten code of practice which is as binding as the legal aspects, resulting in a contract being possible only if the unwritten strictures are complied with. This social aspect of a contract is necessary to the existence of a codified contract law. This non-contractual element is not only implicit, but in its social origins is legitimised because it represents a consensus of the society:

".... exchange .... is not all there is to a contract. There is also the harmony of functions concurring. They are not only in contact for the short time during which things pass from one hand to another; but more extensive relations necessarily result from them, in the course of which it is important that their solidarity be

not troubled" (1966: 217).

Within the working community of the Jewellery Quarter, it has been shown that many encounters are taking place each day, across trades and age-groups, with non-skilled workers participating. Some of these encounters involve goods of variable value. There is little paper-work at the time of many of these exchanges in which there is also a social content. The words "trust" and "know" were used by some interviewees interchangeably to describe the selection of outworkers. The nature of these exchanges mirrors Durkheim's analysis of the non-contractual element, and this element in dealings in the Jewellery Quarter is an important cohesive factor for and in the local industry. It is difficult to separate out the social and economic relations which are part of the everyday functioning of the local industry, because it is a multi-layered relationship, which has grown out of practice and tradition. It is accepted by participants as part of their working life, because it extends beyond the economic and is built on regular personal contact. It is fostered by the factors of family involvement, biography and the separation of the trades.

In addition to a guarantee of trust which is present in the pattern of social relations is the exchange of information which takes place during the contacts, while participants are "out in the trade". This information is of relevance at a number of levels. The exchange of information can cover general news on prices, the fortunes of other firms, the availability of work, and

the firms or individuals who are looking for work. The usefulness of this kind of information can be seen therefore to have more purpose than merely "leisure in work" but is critical to the functioning of the firms though the dangers caused by rumour spreading have been shown earlier and the steps that have to be taken to deny these have been explained. In addition, more personal news is exchanged, including stories involving current "characters" and past escapades or events. In this way the newer members learn the "myths and legends" of the community they are joining. Accomodation problems for individual workers and firms can be solved by putting the word out in the Quarter, and other problems associated with work, such as the use of a particular technique, can be shared during the calls. Similarly, this sharing of information or problems can take place in the pubs and cafes, which are additional meeting places for some.

The flexibility of work arrangements is part of the work structure which enables firms in the Quarter to participate in the occupational community. The small firms have a degree of autonomy and in one- or two- person businesses can arrange their calls out in the trade to fit in with their own work flow. In others, the selection of a deliverer or collector might be more ad hoc. The employment of messengers is not as commonplace as it was in the pre-war years and a variety of workers now fulfil this function. In turn, if time is lost during the week through callers, then individuals will work weekends, either Saturday or Sunday mornings, when "there aren't any

interruptions" (73). The relative smallness of the geographical area and the knowledge which is built up through contacts, of biography, family, shared training, and longevity in the Quarter, also means that work can be passed between firms at holiday times, in times of personal emergency, or other critical periods. Thus the community provides the participants with a network of informal assistance. The particular character of what Brown et. al. describe as leisure in work, can be seen to be both functional to the working of the community, and also to incorporate social relations which enable trust to be guaranteed, information exchanged and flexible working arrangements to be maintained. Brown et. al. ascribed the occupational culture of the shipyards as overriding "older sectional and local identities" and as a basis for action (1973: 108-9). In the Jewellery Quarter, the practices described have been possible because of the close geographical area, and the face-to-face contacts which take place cross over boundaries of age, gender or trade, and originate, not as a result of alienation or conflict, but from the structure of the local industry, which has evolved over the period in which the trades have been in Birmingham.

The concept of occupational community has been used in this study as a sensitising concept together with an emphasis of the historical evolution of the industry in order to extract its specific characteristics. This chapter has described how the local community functions on a day-to-day basis, and the following chapters continue



this theme. The next chapter deals with the forms of recruitment to the trades, and the availability and use of varied training methods open to employers, which assure the survival of the local trades. This is followed by a chapter on the role of women both at work and in the community of the Quarter. The concept of occupational community together with a stress on the historical factors will continue to be the dominant themes.

#### Notes.

1. Interview with the administrative manager of a wholesale jewellery firm 14.5.87.
2. Interview with the owner of a badge-making company. 4.6.87.
3. Interview with a manufacturing jeweller. 22.5.86.
4. Interview with a plating shop floor manager. 26.6.87.
5. Interview with the owner of a stamping firm. 20.5.87.
6. Interview with the owner of an enamelling firm. 24.6.87.
7. Interview with the owner of a casting firm. 28.7.87.
8. Interview with the owner of casting firm. 28.7.87.
9. Interview with the owner of an enamelling firm. 24.6.87. The owner had been able to continue working from home while her children were at the pre-school stage. Dayus (1985) writes of her own pre-war experience when she was working in the day for an enamelling firm in the Jewellery Quarter. She took work home to do, and taught her landlady. See also Chapter 6.
10. Interview with badge and charm-maker, 20.6.87. Pudding charms used to be made of silver, but are now stamped flat in sterling silver. They are used in Christmas puddings and celebration cakes. Homeworkers string them on to card, nine to a card. The homeworkers for this firm are "invalids, glad of something to do". An

- engraver, brought up in Great Hampton Street, recalled the women of the area going to firms to collect items for carding to work on at home. 29.4.87.
11. Interview with gilder and finisher. 4.6.87. Both he and his friend, a badge-maker, recalled their fathers, who were owners of firms, bringing work home from their own firms and others for the family to do in the evenings, and even four-year olds were expected to help in the unknotting. They also recalled women calling at firms in the evenings for 'homework' and returning it the next day.
  12. Interview with metal-supplier. 6.5.87.
  13. Interview with finishing firm, 21.5.87.
  14. Interview with diamond-mounter. 9.7.87.
  15. Interviews with two craft jewellers, 19.5.87. and with an independent jeweller, 8.1. 86. They all sent work to the setter who had taught them at the School, and also used other out-workers who had been recommended by tutors at the School.
  16. Interview with jewellery designer 28.5.87.
  17. Interview 14.7.87.
  18. Interview with diamond mounter, 9.7.87. An engraver expressed the same view. "You get work by recommendation". 29.4.87. In an interview with a wholesaler-factor, he remarked; "You use who you know and from your own experience.....It's still a word-of-mouth trade". 4.5.87. A setter commented; "I can pass work on to a plater and polisher if I am asked. They'll be those I've grown up with.....Those who are now self-employed are another bunch of contacts". 8.5.87.
  19. Interview with ring manufacturer, 29.4.87. "We found our own engraver. My uncle [the former owner] found one in a pub".
  20. Interview with silversmith, 4.3.87.
  21. Interview with caster, 28.7.87. Interview with jeweller-mounter, 9.7.87.

22. Interview with engraver, 29.4.87. "I did my two years National Service, so I went back to the firm because they were obliged to keep the job open. I got married, needed the money ...I was taking on out-work so I gradually moved out, realised there was more money in doing this [being self-employed at the same job]".
23. Interviews with a gilder-finisher 4.6.87, a metal-dealer, 4.6.87, the manager of stamping firm, 20.5.87, a production manager at a casting firm, 21.7.87, a silversmith, 21.7.87, a manager at an electro-plating firm, 6.6.87, a production manager at a plating firm, 24.6.87, a badge-maker, 4.6.87, a jeweller-modelmaker, 15.8.87 and a ringmaker, 29.4.87.
24. Interview with model-maker. "I did a sandwich course at the Poly over five years, working for -. Then I did a naughty thing when that was over and started as a self-employed model-maker....I don't employ anybody anymore. For four or five years we did employ three or four others but they did what I did, we trained them and then they left to start on their own". (15.8.87.) A die-sinker commented "I had youngsters training to do engraving, cutting dies. Only two of these are left....All of them are good. But on the other hand, this training backfires. I don't pass on all my knowledge, all that I've picked up, because that would be cutting my own throat, but I will just before I retire". (24.6.87.)
25. Interview with enameller, 24.6.87. This practice is referred to by Dayus, whose previous employer, Butler's, supplied her with her first orders. op. cit. p.217. A finisher said "You know who to go to, see their work, you judge it, you remember those who do outwork for the old firm". Interview 9.7.87.
26. Interview with finisher 21.5.87.
27. Interview with designer-jeweller, 14.7.87.
28. Interview with engraver, 29.4.87. His son needed premises when he became independent, and his father

found these by word of mouth. Similarly, a friend who was dissatisfied with his firm, and considering leaving the trade, was found workspace at the bench of a mutual friend, and also supplied with work by that firm, though retaining his independence. During my fieldwork, an enameller asked me to keep her informed if I heard of suitable premises for her business at a reasonable rent. (Interview, 24.6.87.) On a later visit to the Quarter, 6.2.88, I met a mutual acquaintance, a badge-maker, in the street, and he told me that he had been able to find premises for the enamelling firm which were a great improvement on the Dickensian conditions in which I had interviewed them.

29. Interview with setter. 8.5.87. He has worked in the Quarter for over twenty years, and recalled porters taking parcels round to firms. If one was dropped, it would be returned to the firm. "That wouldn't happen now. There are too many newcomers, riff-raff, nothing to do with the trade". A gilder recalling pre-war years, commented; "When I was young, the porter could walk around, there was no danger". Interview 4.6.87. On every mapping and fieldwork visit, I saw boxes being delivered on trolleys, or more commonly, goods being taken around in plastic shopping bags. Some can be seen with brief cases chained to their arms, but these may be sale representatives or stone-dealers, as they are usually formally dressed, in contrast to the norm of white coats worn by most working owners, outworkers and employees.
30. Interview with model-maker, 15.8.87. Entry to the building now requires callers to press a buzzer which connects to the workshop. The door is operated from there, and will be opened if the caller is known, or has made a prior appointment.
31. This was not only reported to me, but evident at every workshop interview.

32. Interview with metal-dealer, 4.6.87. "Being nearer you are able to put pressure on when you want an order quickly, for example if you need badges for a special date". A badge-maker who introduced me into several firms used the occasions not only for a chat with those we visited, but also to check on progress of his work, or to arrange to bring work round when the firm would be free to do it.
33. Interview with an office administrator at finishing shop, 9.7.87. "There are three porters who come down here every day. One comes in several times a day sometimes.....goes in to A's cafe next door for sandwiches every day at a quarter to ten. Whenever G. and J. come in they all stay for half an hour to talk about the old days".
34. Interview with craft jewellers, 19.5.87.
35. Observations on mapping trips and fieldwork visits to the Quarter. On an early visit to the Quarter to map the area, I was approached by two owners of retail premises, who were concerned that I might be someone from the Council. It was a Sunday, and they were trading. Soon after that I notified the B.J.A. of what I was doing, and presently found that within the streets near the Clock I was being greeted, and when I had interviewed a few people and on a later occasion met them in the street, I would be expected to chat, or be invited back to the workshop for tea.
36. Interview with badge-maker. 24.6.87. He had a particular acquaintance with a craftsman who made scale models in silver, which were very detailed. They had originally met in the bank and when they met there or in the Post-Office, the badge-maker would go back with him to the workshop to see the current project.
37. Interview with engraver, 29.4.87. This particular group includes a cross-section including skilled men, independent workers, owners or managers of larger firms, and employees, and also cut across the trades.

They share a particular sense of humour, and indulge in practical jokes, as well as serious talk about work. They are also supportive of each other in times of both personal and business difficulties.

38. Interview with wholesaler, 14.5.87. and own observations during fieldwork in July and August 1987.
39. St. Paul's Club was founded in 1859, reputedly when half-a-dozen business and professional men who used to meet in a public house in Newhall Street, had a disagreement with the landlord and established their own premises. Its all-male membership is still drawn from professional and leading business men, but I was unable to discover how many current members are involved in the jewellery and allied trades, as the membership list is secret, and admittance to membership depends on recommendation by a member and a vote of the Committee. Few members are under 30 years old, and several are 80 and 90 years old. In the past jewellery and the allied trades accounted for many members. It remains a luncheon club, if there are sufficient members in at lunch-time to make this viable. The only evening activities are committee meetings and annual formal functions. The discussion of religion or politics in the club is banned. The Vicar of St. Paul's, the "Jewellers' Church" is always an honorary member. Interview with Honorary Secretary, 21.7.87. and with owner, metal-finishing firm, 6.6.87.
40. Interview with ring manufacturer, 14.5.87. and with modelmaker, 21.5.87. "After six I might go over the pub on the way home, see if there is anyone I know".
41. Dayus, op. cit. p.117.
42. Interview with retired Birmingham Assay Office Master, 5.10.87. This practice began in the late 1970's when "we wanted to communicate in more modern ways". Previous contact with some owners had been restricted to the telephone. Between twenty and twenty-five senior managers are invited to meet senior members of

the Assay Office team and some trade wardens (who they may know already). The purpose is a mutual exchange of information.

43. My fieldwork year coincided with British Jewellery Year, when the B.J.A. organised a number of functions to promote the industry. As part of this a conference was held in Stratford-on-Avon in March 1987, which I attended. The Chairman of the North Area Young Executives announced that regular meetings, in the form of business lunches or breakfasts, were to commence. At a later interview I had with the chairman he reported that the first of these meetings had been held, with a guest speaker to generate debate, and had proved successful. Interview 21.7.87.
44. Interview with engraver, 29.4.87.
45. Interview with moulder, 30.4.87.
46. Interview with stone-setter, 8.5.87.
47. Interview with engraver, 29.4.87. Interview with model-maker, 15.8.87. The latter commented "I hear all the news from people popping in, and my brother and his customers". He occupies a floor in the same building as the firm of which his brother is the manager.
48. Birmingham Post and Mail Year Book and Who's Who. 1988-9. p.91-95. Also Crisp-Jones, K. General Editor (1981) The Silversmiths of Birmingham and Their Marks 1850-1980. N.A.G. Press Ltd. in conjunction with Northwood Publications Ltd. Also interview, designer silversmith, 8.7.87.
49. Interview with caster, 28.7.87. After he had enumerated the members of his family who worked in the firm, he added: "It's security in this trade, eyes are worth their weight in gold. They are associated with the family so they can't get up to naughty things".
50. Interview with caster, 14.7.87. who has other family members involved in another independent firm. Interview with engraver, 29.4.87. whose son is

employed as a moulder in another firm. Interview with enameller, 24.6.87. whose son-in-law works for another firm in the Quarter. Interview with jeweller, 9.7.87. whose nephew had recently left the firm to become an independent jeweller. Interview with model-maker, 15.8.87. Although his brother is a craftsman manager of a firm of manufacturing jeweller for which his nephew also works, the model-maker retains his own independent business. The son of a long-established silversmith has his own business, though there are many family members involved in the original firm. Other instances are reported in "British Jeweller".

51. Interview with owner of casting firm 28.7.87.
52. Interview with enameller 24.6.87.
53. Interview with engraver, 29.4.87.
54. Interview with finisher, 21.5.87.
55. Interview with owner, stamping firm. 20.5.87. His firm was founded in 1870. The firm pays over the agreed wage rates, and provides canteen facilities and fringe benefits including bus passes. The peak age of their workforce is 50. The works manager is the longest-serving employee with 20 years service. This contrasts with a memory of the pre-war trade by a badge-maker whose father used to employ five enamellers and eight polishers and sack them all a fortnight before Christmas on the grounds that there was no work. The same workers would return in the New Year, when *business started up again*. 4.6.87. A gilder's father acted as a money-lender to his workers. "If they were short of money for the weekend, they would pawn with Father. He would charge them 10%". Interview 4.6.87.
56. "British Jeweller". Vol. 34. No. 7. March 1967 p.37.
57. "British Jeweller". Vol 47. No.9. May 1980. p.61.
58. Gilbert, op. cit. 9.22. The ageing workforce, particularly in the immediate post-war years was seen



as a deterrent to the recruitment of a younger workforce to the trades.

59. Interview with jeweller 9.7.87. "I worked as a jeweller with old craftsmen either side, the best training you could have."
60. Interview with a gilder and finisher 4.6.87.
61. Heward, C. M. "'Father gets such low wages:' the problems of the introduction of compulsory school attendance in the Birmingham Jewellery Quarter, 1851-1881". Heward quotes from the Children's Employment Commission;  
"105. Henry Aston age 11. ....Mind machinery pliers for drawing tubes....Work with uncle: he reckons for me; get 4s. a week" (p.10).  
Heward shows that "in the third quarter of the nineteenth century there were only a small number of factories in the town and most people worked in small workshops, many with family, kin or neighbours....Small children were often taken to work by their parents, siblings or neighbours as 'helps'" (p.13-14).
62. Interview at plating factory. A young manual worker had worked for the firm since the onset of recession, and as more workers were required introduced two brothers and three cousins who continue to work at the firm. The office administrator is a long-standing family friend who has been with the firm for over twenty years. *The brother of the owner runs the plating shop, and the son of the owner is production manager who also helps in the plating shop.* 24.6.87. Other family connections were listed earlier in Note 47. The details of the instances of a family member finding premises, and of a craftsman obtaining workspace are in Note 26.
63. "British Jeweller" Vol 48. No. 1. September 1980. p.73. Also interview with caster, 14.7.87. One of the owners who is also the office administrator had just

heard from a caller that a local firm for whom they worked had "gone today", meaning that it had ceased trading. The model-maker said that rumours were "one of the snags of the village grapevine. If you hear a rumour, I don't think they should do it really, because if you hear that someone is in trouble, you think hmmm, they owe me some money, so I'd better chase them up. Then if everybody does that then they might be in trouble and then you get nothing". Interview 15.8.87.

64. Interview with gilder 4.6.87. "Before the war ....You never signed for anything, there was complete trust. The only rogues were known". A jeweller commented; "You have to trust people here. For example, a silversmith might come in to borrow a plate in the morning. You trust him to return it, and he does, but it might be three months. So you help each other". Interview 9.7.87.
65. Interview with caster, 28.7.87. Of the mutual trust, a metal-dealer said: "The small men don't move, because everything is here, they work in smaller quantities. They know each other, they've been dealing with each other for some time, the orders are informal". Interview 4.6.87.
66. Interview with finisher, 21.5.87. The same trust has to apply when the cleaning of a workshop takes place. Polishers and finishers have a duct which draws all the dust into it when it is switched on. This dust, collected into a bag, is sent round to the smelters who burn off the dust from the precious metal and pay the workshop owner the market price for the metals extracted, less a service charge.
67. Interview with stone-setter, 8.5.87. and with jeweller, 22.5.87.
68. "British Jeweller" Vol. 45. No. 6. February 1978. p.169.
69. Interview with engraver, 29.4.87. "Engravers don't

price-cut, they stick together because they are so few. If you go on holiday, you get one of the others to look after your 'specials', it's an informal code of practice, mutual, a way of life, you can't envisage it anywhere else".'

70. Interview with engraver, 29.4.87. and with finisher, 21.5.87, where I was present when a similar incident took place and was later commented on.
71. Interview with jeweller, 9.7.87.
72. Interview with union official 26.1.87. This guarantee was part of the 1983 agreement between the Northern Area Manufacturing Goldsmiths' and Jewellers' Trade Section of the B.J.A. and the Precious Metals Branch of TASS (Cattle 1983: Appendix 11). A five day week has been the norm since the 1945 agreement.
73. Interview with jeweller-modelmaker 15.7.87.

## CHAPTER FIVE.

### ENTERING THE LOCAL INDUSTRY; FORMAL TRAINING AND INFORMAL RECRUITMENT.

A characteristic feature of "traditional" occupational communities is the method of recruitment to the industry. Studies of fishing and mining indicated that occupations pass from one generation to another, but there is evidence to suggest that instrumentality is a significant factor. The Jewellery Quarter firms appear to support this claim of generational continuity, but neither the model of instrumentality nor formal apprenticeship present in other occupations plays a large part. In the past the metal trades were practiced in a domestic workshop setting, and since the last decades of the nineteenth century the local industry has had its own specialised training facility in the form of the Birmingham School of Jewellery and Silversmithing, based in the core sector of the Quarter. More recently the range of students has diversified as a result of state intervention in all areas of education. Family and local contacts provide part of the answer to recruitment, and the School answers the problems of training only up to a point. In order to understand the response to the formal training provision, the informal has to be understood and placed in the context of the structure of the industry. An analysis of recruitment and training shows the range of dilemmas for the employers, some of which result from the structure of the industry

and the separation of the trades. The element of instrumentality in entering the industry which is present in some of the other occupational communities reviewed earlier is replaced in the Jewellery Quarter by a mix of formal and informal methods, which employers adapt to their needs.

#### Models of recruitment in occupational communities.

Fishing and mining studies relate to areas where these occupations are dominant, where opportunities for other work are limited, and the dominant industries are also those which are more highly paid. Dennis et al (1969) show that the high wages offered in mining and the availability of jobs in the industry were an incentive to young men insofar as other manual labour, which paid lower wages, did not allow him to "take his place in the community....to keep up to the same standards of leisure-time activity as the miners themselves" (1969: 176). 70% of miners did not encourage their sons to be miners, but young men continued to follow their father into the industry, although *mining was not always their first job*. In addition to the high wages offered, there were a limited number of other opportunities available locally, and in the post-war years young men could avoid National Service by becoming miners (1969: 178). In his historical study of the fishing industry, Lummis (1985) shows the variation which existed in different types of fishing in different areas at a particular historical period. Pauper children were given apprenticeships in the

Humber fishing fleets in the last decades of the nineteenth century, but this was unknown in the East Anglian industry. In trawling, Yarmouth was notable for its lack of apprentices because of "numerous centres of fishing and seafaring along the coast from which labour could be recruited" (1985: 23). Norfolk and Suffolk were other recruitment areas because there was limited industrial development to absorb "the rural surplus". Again, fishing gave relatively high rewards. The high number of apprentices in Colchester was due to the right to share membership of certain oyster fisheries invested in fishermen from prescribed villages, to gain which boys were bound to neighbours or kin but "effectively treated as free labour". The wages, as in mining, were relatively high in local terms, paid by crew position and a confusion of other factors (1985: 4). In drifting, many fishermen started their working lives as agricultural workers, following their fathers, who might also have been fishermen for part of their working lives. The incentive in drifting was that the work allowed men "to earn in eight months twice as much as a farm worker could earn in a year" (1985: 55), though it exceeded even the long hours in farming,

Tunstall (1962) in his discussion of recruitment to the Hull fishing industry, broke down the "myth of family tradition" (1962: 105) and showed cash and virility to be the reasons why young men entered the occupation (1962: 107). He argued that owners were prejudiced in favour of skippers' sons, while two thirds of young men

entered the industry at seventeen. Only five out of 74 took the physically difficult apprenticeships. The complex pay structure and the possibility of "backhanders" were incentives to recruitment. At sea, the boy "lives in the world of men" and can "contract out of his inferior position in the class system" (1962: 116-117) and impress others on shore, especially women and lower-paid workers, with "an aura of manliness and strength" (1962: 112).

In Brown et al's study of shipbuilders (1970) there is evidence that over half of their interviewees made their initial contact with the employing yard through kin or neighbour, (1970: 74) yet over 70% of shipyard workers, like miners, hoped their children would not follow them into the yards but would take white-collar jobs (1970: 76). Cockburn (1983) shows that in printing, another craft-based industry, sons follow fathers into apprenticeships (1983: Introduction). Both of these industries are more akin in terms of recruitment to the jewellery industry than the former occupations.

These examples serve to show that instrumentality is a characteristic of recruitment to these manual occupations. In single-industry dominated areas this instrumentality is the result of a lack of choice of employment. Mining and fishing are examples of this, and of the instrumentality of incentives in terms of wages which are higher in the dominant industry than in alternative employment in the area. Tunstall's study shows that particular work which has elements of danger, like fishing, is attractive to boys because of its association

with toughness and adult-hood. In the Jewellery Quarter, this particular model of instrumentality is not appropriate.

#### Recruitment in the Jewellery Quarter.

It has been shown that the jewellery and the allied trades were not the only industries in the Quarter or in the Birmingham area. Historically the industry had to compete with others for labour. In the nineteenth century these industries included the gun, button and brass trades. After the First World War the growth of the car and wireless and other engineering factories, where wages were higher and to which skills were transferable, attracted labour away from the industry. So there have always been work options other than the jewellery and allied trades. Wage levels have not been significantly higher than in other industries, and in Birmingham car factories and component manufacturers have had the reputation of paying more than other industries. There is no association, as in mining and fishing, with danger and thus no association with toughness or the conferring of adult status.

One common link with the above studies is that of the role of family and friends in making original contact with firms. In a sample of 37 workshop interviews, family connections with the trades had been significant for 18 of them, in terms of training, finding work or entering the industry through the family firm. In contrast only nine of the 37 had trained at the School. (1) In the trades of casting, enamelling and finishing, the



interviewees had trained other family members in their particular trade. (2) Of five jewellery manufacturers, three employed family members, both on the bench and in clerical or administrative roles. (3) Jobs for sons who wanted to enter the trade, but whose family were not owners, were found in the trade through family members. (4) One firm of platers had employed a neighbour as an office administrator for over twenty years, and another employee had obtained jobs for several members of his family with the same firm during a recent expansion period. (5) Other examples of recruitment among family and friends have been given in Chapter Four. These indicate that family and other social contact in the Quarter is an important factor in recruitment to the trades.

#### Training for the industry.

In the occupational studies described above, the training of recruits occurred in two ways, either through craft apprenticeships, as in shipbuilding trades and printing, or "on the job" as in mining and fishing. In the jewellery trades, apprenticeship has *historically been sporadic*, and there are difficulties in "on the job" training for specialist skills in jewellery, silverware and badge-making, though it is appropriate for some of the supporting trades of enamelling, finishing and casting among others. The industry has had its own specialist training school since 1888, located in the core area of the Quarter. This is only relevant to certain trades, and through a particular use of courses, as will be shown.

The School offers a degree course, through its incorporation into the Polytechnic, Higher National Diploma courses, the vocational courses of City and Guilds and the newly introduced BTEC, which can be pursued on both a full and part-time basis. The Youth Training Scheme for the industry has been based there since 1983. Commonsensically it would seem that these courses would feed directly into the local industry, with degree and H.N.D. courses providing designers, the vocational courses providing the craftsmen, and the Y.T.S. trainees being the production workers. In practice, this straightforward pattern of recruitment is not borne out, because there are issues within the industry, deriving from the workshop structure and the production processes, and within the changed courses themselves, which render this problematic.

i) The changes at the School.

Part of the reason for the ambiguities which exist between the School and the industry lies in the history of the industry's development. Historically the local industry did not derive from an unbroken guild tradition in silversmithing or goldsmithing, with an associated structured apprenticeship and a marked pattern of semi-formal training. Berg (1985) comments on the varied quality, "length of terms, types of training and opportunities available" for Birmingham apprentices in the toy trades in the late eighteenth and early nineteenth centuries:

"There were complaints that masters took on as many as possible as a form of cheap labour and to avoid employing journeymen" (1985: 306)

Prior to the establishment of the School, there was both a local workforce, who fed into the button, brass and gun trades, as well as the jewellery and allied trades, and evidence of a strong family connection, through family members following in the same or other trades in the same industry. Chapter Four showed how long-established firms in the industry have survived through the involvement of family members. As such they were an important factor in recruitment and training before the founding of the School.

The lack of formal training became a critical factor when, with Britain leading the other European nations in exports and foreign markets, the Birmingham jewellery and allied trades, which had been consolidating their position since the 1860's, were seeking to retain their home and export markets against the emerging foreign competition. The introduction of formalised training, subsidised by the B.J.A. in conjunction with the participating employers, was the response to a perceived need for "intelligent" multi-skilled workers, able to exercise handskills but also conversant with machinery, who would be the labour force which would help manufacturers compete effectively. Subsequent changes in the funding of the School, which came under local

authority control in 1901 (Nott 1988: 51) rendered it vulnerable to changes in national policy on education. These distanced the School curriculum from the immediate needs of the industry so that over time it was no longer in direct control of training for the industry.

Since the School's founding, when the B.J.A. and the participating employers paid the costs of classes for their employees, the courses offered have become more formalised in terms of examinations and have been structured in line with broader national educational policies. City and Guilds examinations were introduced at the School in 1892. (6) The courses were so successful that in 1898 day-time teaching was introduced "for the sons of employers and the better class of workpeople" and by the turn of the century the new Education Act (Byrne and Padfield 1978: 163-4) allowed the B.J.A. to approach the Corporation for financial assistance. As a result the B.J.A.'s influence became limited to their presence on the Education Sub-committee as employers' representatives. They exercised some control over curriculum design, limited by the *guidelines of the City and Guilds Institute* and other examining bodies at a later date, and staff appointments, through the practice of employing practising craftspeople as teachers which began with the establishment of the original classes. (7) In 1918 the Fisher Act (1978:164-5) required those over fourteen to attend continuation classes, though it was not until 1924 that the School opened a department known as the "Junior School" for boys aged from twelve to thirteen years old on

a three year course, from whom employers selected their labour forces. (Nott: 51) Under the 1944 Education Act the Junior Department was disbanded. (1978: 166) In 1970, the School became amalgamated with the other city art schools into the City of Birmingham Polytechnic. The vocational courses remained at the Vittoria Street site, while the new CNAA degree course in Silversmithing and Jewellery became one of seven courses in the Department of Three-Dimensional Design. Meanwhile at Vittoria Street the City and Guilds and Higher National Diploma courses remained as both part-time and full-time courses. Other courses were provided in horology, gemmology and courses leading to retail qualifications. (8) In 1980 the B.J.A. and the Manpower Services Commission initiated an elementary workshop training course, with guaranteed employment, which was abandoned after a year because of Union objections. This was followed in 1983 by the introduction of a Youth Training Scheme with young people based in local workshops and attending day-time classes in basic skills at the School. (Nott: 53)

ii) The industry's dilemmas.

The industry is one which is faced by a number of contradictions. There are ambiguities in the production of goods in which design plays a part but which must remain commercially viable. The industry is craft-based, but much of the work is in small batch production, and includes "one off" production. A skilled workforce is necessary, but adaptability is also essential because of fluctuations

in markets. Further, because of the high value of the raw materials involved, a degree of integrity is necessary in the workforce, but wages are not high for either the young worker or the semi-skilled and unskilled workers.

Further dilemmas for the trades are located in the structure of the local industry, and the separation of the trades. These are centred around training provision in the small workshop unit, which has greater difficulty in releasing staff to act as trainers, and the problem of speed in an industry which is producing goods to a certain quality and to set deadlines. The B.J.A.'s own survey (1986) and the tables in Chapter 4, have shown that the largest number of enterprises in the jewellery and allied trades comprises units of one to five workers. (9) These trades are located in small workshops where hand skills and traditional methods prevail. They can be concerned with single item production or they may combine small batch production of a range of jewellery-related items with the repairs or re-modelling of pieces for customers. Other craft workshops specialise in setting, mounting and engraving. Some processes such as enamelling, casting and finishing processes including polishing, and plating, are also specialised. These processes can be learnt "on the job" often in larger workshops where experienced workers are routinely used as trainers for young employees. (10) So the workshops vary not only in size, but in the kinds of skills which they employ, and these divide roughly into craft skills and supporting trades. Within these structures, the employer faces dilemmas when the need for

recruitment arises. The small workshop situation means that each worker has his or her own work allocation, which presents difficulties for teaching and supervision, and thus for the costs which this entails:

"We are working with a certain number of people and a certain amount of work. They (trainees) need several trainers, so it would be too disruptive.....but the problem is one of money too, and cutting our production". (11)

The trainee in craft skills needs to acquire both craftsmanship and speed in order to meet standards of quality and deadlines for orders either in individual or small batch production. At the same time, a very real risk for the small employer who passes on his skills through training, is that the employee will eventually decide to become independent, and become a competitor:

"I don't employ anybody anymore. For four or five years we did employ three or four others, but they did what I did, we trained them and then they left to start on their own so it seems a bit of a waste in a way". (12)

An alternative to costly training in the workshops is the training system which has evolved at the School. Workshop interviews reflected the needs of employers. The problem of the cost of training, for

example is not eased by having a craft, diploma or degree-trained worker because of the wage rates. The Union and the B.J.A. negotiate minimum wage rates for the trades annually (13) which are based on age linked with the amount of supervision required, so that those workers over twenty-one are deemed to be adult workers and command a commensurate wage. (14) Some City and Guilds students are aged between eighteen and twenty when they complete, while graduates and Higher National Diploma students will be over twenty-one, having completed a two-year foundation course before taking their further qualification. Employers may perceive these groups as expensive labour when qualifications are weighed against workshop experience which involves working to deadlines, and where, because of this lack of work experience, the new worker still requires some supervision. This relates once again to the problems of speed:

"I taught at the School and I don't feel they teach the right method. They are too airy-fairy, it's not a preparation for the real world. When I was interviewed....he said "I don't care how long they take to make it, as long as it's well-made." But that's the wrong attitude.....The girl we had, she had trained at the School, and had worked for one firm for a short while, but it was rush work and she couldn't cope with the problems because of the way they were taught ....she did lovely work but



she was slow....so she left us to do the books for another firm." (15)

A further problem is that of the current perception of the School by the employers, which has shifted since the amalgamation with the Polytechnic. Employers do not necessarily distinguish between the content of courses and the introduction of the degree course is seen as influencing all the courses and leading to a greater emphasis on design. For the employer engaged in small-batch production which is sold on to the cheap and medium range of the market, this is seen as either irrelevant or expensive. A small manufacturer with a production force of four, including himself, caters for the medium end of the trade, and has a reputation locally for quality work which is sold in his own small retail unit and to private customers:

"No one can afford designers, we need those who can make. The public don't want them either, they want traditional designs. The very few who do want something different can be catered for. I can draw enough to sketch something out, the customer approves, then I execute it. 90% of the trade is traditional". (16)

This dilemma between design and what is seen as commercially viable in the market place, results in few employment opportunities for graduate jewellers. One

casting firm used its own patterns, of which there were three thousand, dating back to 1870, and use die-sinkers to create new patterns:

"So we have die-sinkers, they don't design as such but they cut by hand from a drawing or an idea. We have got two. We have had a freelance, a girl from the School has done these earring designs for us". (17)

A ring manufacturer whose family has been in the Quarter for eighty years, specialising in masonic rings and other masonic jewellery, commented:

"We use pattern makers, model-makers, then we make variations on a theme for each new year, for example, in men's rings". (18)

This attitude to graduate designers is reflected in the B.J.A.'s own survey. This survey interviewed companies with five or more employees, and 78% of their sample employed between six and fifty workers. Only 28% employed design staff, with half of these dissatisfied with the standard of applicants, and one company was quoted as being "appalled" by the low standard of ability and technical knowledge displayed by design applicants. (1986: 12) The relevance of the School will be discussed later in the chapter, but it is clear that the formal full-time courses are those which are seen as problematic for the

employers.

iii) Employing strategies.

To combat the problems of training for the majority of firms in the industry, including the lack of control over the formal provision, employers use a variety of strategies to overcome the difficulties of renewing their workforces. These fall roughly into three categories; the selective use of formal provision, the use of family, friends and contacts in the local industry and the use of both part-time workers and trainees from the Youth Training Scheme. These categories are not mutually exclusive.

The original classes at the School were on a part-time basis, and over the years these courses have continued to be the most popular. In 1987 there were 340 part-time students, (which includes some from outside the trades pursuing courses as a hobby) as against 120 full-time students. (Nott: 53) The courses include part-time courses in City and Guilds, and evening classes in a variety of different skills. Evening classes in particular can benefit the small workshop which cannot afford to release workers in the day. These answer the problem of learning additional skills in order to respond to changes in the market as, for example, the resurgence in enamelling. Additional knowledge such as gemmology and retail trade qualifications can also be pursued in this way. (19) Employers continue to use the School as a means of recruiting trained workers. This can simplify the

process for them. They explain their requirements to the School and the decision as to which type of student will fulfil those requirements is left to the tutors. Thus there is no need for employers to distinguish between, or specify, a preferred course. The tutors then approach students deemed to be capable of filling the vacancy and the employer selects from those recommended. (20) The stratified nature of the courses benefits this process. In addition, the contact made by specialist firms through part-time teaching at the School is a useful means of recruiting a particular type of trained worker, as a gem-setter explained:

"My two employees here were originally my students. It wouldn't be appropriate for me to have Y.T.S. trainees because I need people who know the job, because I am very busy. I don't have time to train them". (21)

The favoured method of training is to use the part-time system in combination with workshop experience, and this is used both by employers whose family members join the business, or those who set up on their own. A caster, with previous pre-war experience in the aircraft industry and who was employed as an unskilled worker at a casting firm in the Quarter after the war, attended evening classes at the School, and developed a high-frequency form of casting, which allowed him to become independent. (22) It is usually the craftspeople who use the part-time classes,

however, and an example is a manufacturing jeweller of medium and high-priced jewellery, whose son is an employee and attends part-time classes. (23) Others may complete only part of the full-time course before finding or being offered employment, and this occurred to two students encountered during the fieldwork period, both of whom had eighteen months training at the School. (24)

Other strategies, such as the use of Government schemes, can assist in the renewal of the workforce. The abortive M.S.C. scheme was referred to earlier, from which one participating firm retained two of the three trainees as full-time workers. (25) The Youth Training Scheme has been operating since 1983, when it was a one-year scheme, and the trainees are workshop-based, with one-day training sessions at the School. Here they are taught by practising craftspeople specially selected by the Scheme Manager. Selection is not based on achievements in examination but evidence must be shown at the interview of "a special aptitude for art and craft work, together with good eyesight and manual dexterity". A further condition is that "because of the precious nature of the metals used, a degree of integrity is essential" (Youth Training Scheme prospectus). There were 22 trainees in the first in-take of whom a third were offered jobs on the completion of their training. At the end of the 1986 session, of the full complement of 30 trainees, 28 were offered jobs and the remaining two selected for full-time training on City and Guilds courses at the School. Applications for trainees, after initial wariness, exceed the number of

trainee places, which in turn are constrained by demands on accommodation at the School. The standard of the scheme is monitored by quarterly reviews and inspection of trainees' log-books, completed by workplace supervisors and tutors. (26) The trainees select four out of 23 main skill areas concerned with metal-working techniques. (27) The scheme has been operating on a two-year basis since the autumn of 1987. In the 1986-1987 intake, the largest number across both groups had placements in jewellery manufacture and seven in ring manufacture. Three were with silversmiths and two with mounters and engravers. There was one trainee in each of the branches of casting, earring manufacture, bracelet manufacture and diamond setting.

Three of the employers interviewed were participating in the scheme. A member of the B.J.A. Education Sub-committee supported the scheme because he thought that the trade had "backed out" of training in the 1960's but the present initiative deserved encouragement. Three trainees had been placed with his firm and two had been retained at the end of their training period. (28) A ring manufacturer regarded the scheme as a useful method of recruiting young people into the trade, and this is his only method of recruitment. He currently has three trainees, paid above the allowance because they are productive workers, and the work of one was being sold within the first month of training. This employer spoke of the difficulties of completing the logbooks, due to the reluctance of some trainees to learn new techniques, and

who consider they have mastered the skills to the point at which they can earn money. (29) Another employer, who had spoken of training difficulties, had taken on a trainee when the scheme first started:

"....it wasn't really the right time. Now...you have more choice in selection. He wasn't interested and that made us wary. It is difficult to get work experience when you are in College. So between the two, (City and Guilds and Y.T.S.) I would opt for Y.T.S. because there are safeguards in that they're an indirect student". (30)

The director of a casting firm was favourable towards to the scheme, saying that he was keen to see the young "come up" in the trades:

"I would like to see the skilled apprentices come back and the Y.T.S. won't replace that I don't think". (31)

It should be noted that this director had "married in" to the trades from an unrelated industry, and was probably unaware of the lack of apprenticeships in the Quarter in former years. He was, however, articulating the need for a formalised training combining longer on-the-job training with coursework.

Some of the trainees had Jewellery Quarter

connections which had led them into applying for a place on the scheme. Of the four second year trainees interviewed, three had family members working in the local industry. Among the 20 first-year trainees interviewed, nine had family or friends working there. One of the trainees had sought employment in the trade on leaving school. He had completed a metal-work course at school, but was unable to find work because the firms were looking for experienced workers. The Careers Office recommended the Scheme. (32) Another, whose father was a moulder and setter in the trade, started working at the same firm, and his boss "put me on this scheme". He commented:

"The first year has got nothing to do with it [work]. I wasn't bored, it was just nothing to do with work. This year the work is more relevant. I will be kept on at the end of the Scheme. The firm had a younger lad who is on the first year, the gaffer wanted him to go on the course because he was so busy. He (the employer) still teaches us". (33)

Another trainee had a placement at the same firm as his father, where he had known everybody "since he was five" and he commented on the course content:

"What we learn here you could learn in about six months at work. You learn more at work in the first few months, I've learnt already". (34)



A second year trainee came in through his family's firm, which includes a retail unit, and he had worked on Saturdays for them before getting his placement with them. He has transferred to another firm for the second year of the Scheme. A first year trainee had started the course in September, but as a result of his two-year C.S.E. jewellery and silversmithing, had "done all the stuff the Y.T.S. were doing" as a result of which the firm, which employed 27 production workers, had taken him on as a full-time worker. He was paid the rate for his age, but continued the School component. (35) Another first year believed that the combination of work experience and the School component made it a better option than the full-time course, and this had led to his application for a place on the Scheme. (36)

The Scheme Manager contrasted the needs of the industry and the make-up of the labour force from his own experience:

"Now there are opportunities for kids. ... the predominant age [when he entered the industry] was 50-60, which means they're not passing their skills on. My experience with the Y.T.S. shows that they [The workforce in the industry] are now predominantly young, between 16 and 30. One factor here is the de-skilling. They are not having to wait so long to get them, so there are more young people in the industry .... They would hold back from having trainees because

they were of no use for four or five years because of the nature of the industry. My own apprenticeship, for example, you paid a premium. It's understandable because they're not productive, it costs money to train. Now after a short period they are." (37)

The interviews with employers showed that the scheme is fulfilling a function both for recruitment and part-time training in some trades, and for the trainees it is a means of entering the trade. One City and Guilds student commented that in his experience at a workshop where he is employed at weekends and in the holidays, that jobs were not created for the trainees, but "were there anyway". (38) This may be true now, as the trades are emerging from the recession years. However, the owners of firms which require trained workers but have little facility for training find that the scheme is meeting its requirements in part. The scheme has experienced a growth in popularity and the numbers of firms applying for trainees exceeds the number of placements which the scheme can currently offer. Yet the trades' own survey found that only 24% of the companies interviewed were taking advantage of the scheme, while 34% were releasing workers to attend City and Guilds jewellery and silversmithing courses. Others were allowing, or would allow, courses in toolmaking, die sinking and engraving to be pursued in local colleges in the firms' time. (B.J.A. and Goldsmiths' Survey 1986: 11) In my interviews the variety of firms, and the skills

which were being learned by trainees, indicated that this group was not being regarded simply as production workers but that there was the possibility for some to learn specialist skills. At the same time, these opportunities are dependent on the attitudes and stability of the employing firm, most of whom are primarily seeking skilled workers.

iv) The employers' backgrounds.

The workshop interviews for this study give some indication of how relevant formal training has been in the post-war era, and the way in which the mix of part-time and full-time training, and family or contacts in the Quarter operates. From a sample of 37 interviews, only nine employers had trained full-time at the School. These were aged between 25 and 55, and included men and women. Nine were involved in jewellery manufacture, and two had opened retail units in the Quarter. Of these, seven had experience with other firms for a number of years before becoming self-employed, and five had other employees. Seven out of the nine were first generation in the trades. Six others in the sample came into the industry from jobs outside the industry, and four of these came into the industry through other family members. Thus, for example, a sales manager married the daughter of a family firm, who had herself come into the trade from another profession. Her husband joined the firm as sales director some years later. (39) Another employer, referred to earlier, came into the industry after the war because his brother-in-law

was working at a company in the Quarter. After pursuing evening-classes, he eventually became an employer, and runs a business in which five other family members are currently employed. (40) A daughter of another interviewee trained in retail and joined her father's finishing firm as office administrator, and has also learnt rhodium plating from him. (41)

A further five trained in factories where they had their first jobs, and of these three had since become employers in the outworking trades. Of those interviewed who were over 60, four had learned their trades in their family's firms, but only one of these had family - a nephew - who would continue the business after them. One said that he had ensured his sons had received a "proper education" and they were now professional men. (42) Another four had served apprenticeships and three of these were now self-employed, and one employed other family members. Only one of the apprentice-trained interviewees was under 50. Two others, both over 40, one a designer silversmith and the other a die manufacturer, had trained at the College of Art full-time. Two women were jewellery design graduates of Polytechnics and were self-employed, and there were three others with degrees or other professional qualifications, two of whom joined the family firms as directors and another who was self-employed.

This small sample indicates the variety of entry into the trades. Family connections were important to their entry into firms in terms of finding work for over half of these, but this was combined with formal training

for only five. The opportunities for becoming self-employed are not limited to the manufacturer. Those who had learned trades in the factories, such as casting, engraving, enamelling and the finishing processes of polishing and plating, are able to become self-employed. In all of these except engraving, the interviewees had trained other family members in their particular trade. (43) Of the five jewellery manufacturers trained at the School and with other employees, only one of these had a son in the same trade, and he was also a part-time student at the School. (44) Other family members were in clerical or administrative roles. This is supported by the evidence of the B.J.A.'s survey, in which 64% of the companies interviewed were family businesses. In their study 20 had formal degrees or qualifications, eight of which were related to jewellery and silversmithing including City and Guilds. In contrast 30 had no formal qualifications, although seven had been apprentices. 15 had learnt "on the job" and achieved their position through experience. Eight had entered from other trades or professions. In the area of production most senior managers had risen through the ranks in the industry or company concerned (1986: 9-10). This variety of ways of entry into the trades replicates those found in this study, and confirms that formal qualifications have been the experience of fewer of the interviewees than might have been supposed in a craft-based industry.

v) The relevance of the School.

If the experience of most of the interviewees is that formal qualifications are of less importance than family connections, then the question must be asked what the students on the full-time courses expect in terms of employment at the end of their courses. The views of employers on the role of designers has been referred to earlier in the chapter. The six undergraduates interviewed had no local connections with the industry, and only two had any contact with the industry at all. (45) They did not expect to find jobs in the Quarter, and were hoping to go into design groups producing work for galleries, or running galleries which specialise in designer jewellery. (46) They are physically isolated from the Quarter, and visit it only to obtain materials from specialist suppliers. No visits to firms in the Quarter, or elsewhere in the industry are organised for them as part of their course. So the location of the course in the city which has been an important part of the industry has no relevance for them. (47) Nonetheless, three former graduates were interviewed, two from Birmingham Polytechnic, who had established themselves as self-employed designer craftspeople in the Quarter, and who associated with ex-Vittoria Street students working there in various capacities, and had their networks of outworkers in the same way that other firms do. (48) One of these became established through sponsorship by a local plating firm. This company was aware of the dilemma of young graduates and School-leavers, and had proposed and

got permission for, a development which would have given workshop accomodation and shared business facilities, a project which would have created a sub-community of creative designers and perhaps have improved employment opportunities for them in the Quarter. This scheme was described in Chapter 3. The experience of these graduates shows that some design graduates do feed into the Quarter, if not directly into firms.

Prior to the recession, City and Guilds students were often able to obtain work themselves while still students, doing simple repairs or jobbing in workshops on Saturdays and during holidays from the School. Some are still able to do this, though there has been a dearth of this kind of work due to the recession. 24 City and Guilds students were interviewed and nearly a half had family or close friends in the local industry, and 12 had some previous experience in the trade or on some other courses. (49) Unlike the undergraduates, 21 came from the West Midlands area and had prior knowledge of the Quarter. The majority wanted to work in the local industry and aimed to become independent craftspeople, *but were realistic about the difficulties:*

"The tutors tell us that you must work for a firm for at least five years before you can go on your own. You need to get speed, and you are always learning. You are not really a craftsman when you leave here, it takes years". (50)

Only three of the students had been able to find part-time work in the local industry, and this was seen as a useful way of entering the workforce. Each of the three expected the contacts they had made in this time to be useful when they sought work. Others did repairs for family and friends (51) or bought jewellery at wholesale prices in the Quarter and organised jewellery-selling parties in the homes of friends. (52) Work in the Quarter was the goal of 15 of the students, with a further four planning to set up independent workshops with the aid of family. (53) Three other students intended to seek work in other aspects of the industry such as sales or administration, while continuing to free-lance in their craft. Their criticisms of the course were mainly centred on the changeover to BTEC which they felt diminished skills, the lack of business training which was felt to be integral to the course in view of their intentions to become independent, and their lack of speed, a particular worry to final year students who thought it would be a disadvantage to them in seeking employment. This group are the most likely to be recommended to employers who contact the School, because of their craft skills.

The other group of full-time students are those following the Higher National Diploma course. These have 'A' level qualifications and, like the degree students, will have completed a foundation course in Art and Design. Several of the H.N.D. students had originally applied for the B.A. course, but had been recommended at their interviews to apply for the H.N.D. course instead. (54)



The course is of two years duration and concentrates on the design of fashion jewellery in a range of materials including plastic and fabric. This course has a greater emphasis on original design than the City and Guilds course, and includes a History of Art component. Skills are taught as they are encountered in the making up of a design, rather than through a structured progression as on the vocational course. This was thought to be a hindrance to future employment by the students, and some perceived the City and Guilds students to be more employable because of this. 16 students were interviewed, and Birmingham had been the first choice for 14 of them. Five were from Birmingham and two had fathers in the trade. None specified working in the local industry on completion of their course, though six were planning to become self-employed.

Despite the reservations of some employers about full-time courses, the craft-based students were the largest group with Jewellery Quarter connections, and most of these anticipated that the combination of their full-time training and family contacts would help them to find employment in the Quarter. The degree of contact appeared to influence the attitude to local employment, both in terms of what the trades required and the possibility of work. This is in marked contrast to the design courses, which appeared to have little connection with the Quarter, either in terms of the courses, or of family, and were perceived by employers as irrelevant to their needs. Until the recession began to affect the local

industry, the School has been able to show that all its students have obtained jobs in the industry on completion of their courses, and the Youth Training Scheme has improved its record in this respect. The numbers of full-time students completing each year is between 14 and 16 on each of the courses, so this is not a large number to absorb into the industry, particularly where there are family firms or contacts which can be used.

### Conclusions.

This chapter has been an exploration of recruitment and training practices in the Jewellery Quarter firms, which indicates that occupations in the local industry have passed from generation to generation in many instances. Despite the variety of opportunities which have existed in the area and in Birmingham as a whole, the family continues to be a source of recruitment. The variety of trades mean that there is need for skilled workers and for craftspeople, and these skills cannot all be learnt in situ. Training problems are located in the structure of the industry, in which the majority of firms have under five employees. The formal provision located in the core of the Quarter is used selectively by employers, as the B.J.A. which represents the industry has lost control to the State and the changes which this has entailed have meant that the training is no longer geared to the specific structure of the industry. At the same time, it has been shown that the employers have continuously adapted. In mass production, this can be achieved by

de-skilling through the use of more automatic processes, or the production of cheaper items, but the need for skilled craftspeople at certain stages of the process cannot be dispensed with entirely. Craftspeople remain essential to the production of medium and high quality jewellery range for which there is always a demand. The employers have thus made selective use of the formal training provision and continued to assimilate family members, and the combination of these strategies allows survival. There is a greater use of part-time courses, and where the costs of training are not wholly incurred by the firm, as with the Youth Training Scheme, this has gradually been seen as a useful aid to training. Opportunities for full-time students depend on a number of factors such as connections through either family or friends in the trades, and whether the course they have taken is craft-based and therefore seen as relevant to the industry. If these criteria are met wholly or in part, they are likely to be assimilated, and their numbers are small enough for this to be possible. Despite changes in the provision of formal training facilities since the establishment of the School of Jewellery and Silversmithing, the decline in the number of firms in the local industry, and the inherent problems of the industry, the School is still an integral part of the provision. This provision of a local formal training facility makes the Jewellery Quarter different from other occupational communities. It is sustained because of the way in which it continues, through the selective use of its courses by

employers, to be interlinked with family and friends and other contacts in the working community. These factors distinguish recruitment in the industry from the model of instrumentality apparent in studies of other occupational communities.

### Notes.

1. Of these nine jewellers, four were self-employed and the other five were owners of small firms.
2. Those who had trained other family members included a finisher who had trained his daughter in the techniques of rhodium plating, (interviewed 24.6.87.) an enameller who taught her daughters and both daughters-in-law, (interviewed 28.7.87.) a caster who taught his wife and sister-in-law, (interviewed 28.7.87.) and a plater who trained his son. (interviewed 24.6.87.)
3. Interview with jewellery manufacturer (22.5.86.) who employed his son on the bench, his wife as office administrator, and the son's fiancée as a shop-assistant in their retail unit on Saturdays. Another jeweller employed his wife as book-keeper, and two nephews had worked with him on the bench, one of whom had become self-employed by the time of the interview. (Interview 9.7.87.)
4. An engraver was able to find a job for his son, who wanted to become a mounter, (Interview 29.4.87.) and a mother who worked as a book-keeper for a jewellery firm was able to find work for her son, after the firm he worked for had closed. (Interview 14.5.87.)

5. Interviews at a plating firm, 24.6.87. The son and brother of the founder were also active in the firm.
6. The City and Guilds Institute was created in 1880, after a suggestion that they should use some of their resources to support technical education. Its aim was to "encourage the teaching of practical subjects by conducting examinations". Lawson, J and Silver, Harold, (1973) A Social History of Education in England. London. Methuen, p.347.
7. Interview with craftsman-tutor, 21.12.86.
8. Prospectus, City of Birmingham Polytechnic. The Department of Three Dimensional Design offers six specialisations: Ceramics with Glass, Furniture Design, Industrial Design (Engineering), Interior Design, Theatre Design and Silversmithing and Jewellery. "The aim is to produce creative and effective designers or designer craftspeople with high professional standards and expertise".
9. The Goldsmiths' Company and British Jewellers' Survey 1986. Extract - The U.K. Industry. p.5. The smaller employers were omitted because "it was considered they were unlikely to be available for any other form of training than at evening classes or weekends".
10. The owner of an enamelling company explained that she had trained "hundreds" in her time at the largest badge company in the Quarter. Interview 24.6.87. A finisher had had the same experience at the companies he worked at before using redundancy money to become self-employed. Interview 21.5.87.
11. Interview with designer-silversmith, 8.7.87. A jeweller-modelmaker, commenting on the Youth Training Scheme, voiced similar doubts: "It's like training anybody because of the time. You are trying to do your own work so you can't give enough time." Interview 15.8.87.
12. Interview with jeweller-modelmaker, 15.8.87. A die-sinker said: "In 1972 we came to the Hockley

Centre and had twelve employees. I had youngsters training to do engraving, cutting dies. Only two of these are left.....But on the other hand this training backfires. I don't pass on all my knowledge, all that I have picked up, because that would be cutting my own throat". Interview 24.6.87.

13. Interview with B.J.A. Executive Secretary, 28.5.87.

14. Cattle, Fred. A Case Study in Male Dominance; the Birmingham District of N.U.G.S.A.T. and its approach to women workers: an historical perspective. M.A. Dissertation, University of Warwick 1983. Appendix 11. Agreement 7.1.1983. between Northern Area Manufacturing Goldsmiths' and Jewellers' Trade Section of the B.J.A. and the Precious Metals Branch of T.A.A.S. Clause 12. Minimum rates of pay.

a) The minimum rate of pay for skilled workers aged 21 and over shall be; £85.73 per normal working week.

b) Minimum rates of pay for semi-skilled and unskilled workers aged 19 years and over shall be; Semi skilled £77.40. per normal week. Unskilled £62.52. per normal working week.

Second schedule; Definitions.

Class 1. Skilled.

1. Any workers capable of performing without supervision any job which the custom of the trade would expect them to perform; namely Diamond Setters and Mounters, Gem Setters and Mounters.....

15. Interview with jeweller model-maker. 15.8.87.

16. Interview with manufacturing jeweller. 22.5.87.

17. Interview with owner, stamping company. 20.5.87.

18. Interview with ring manufacturer. 29.4.87.

19. Interview with former stone-dealer, who had learnt "on the job" but obtained formal qualifications in gemmology before setting up independently. 14.7.87.

20. Interview with ex-employee of jewellery firm now a part-time jeweller. 8.1.86. Interview with manufacturing jeweller. 22.5.87.

21. Interview with gem-setter. 8.5.87.
22. Interview with owner of casting firm. 28.7.87.
23. Interview with manufacturing jeweller. 22.5.87.
24. Interview with retail jeweller, previously a setter, 15.7.87. In addition a student failed to keep an interview appointment because he had been offered, and taken, a job in the Quarter. Fieldwork notes, 11.2.86.
25. Interview with caster, 28.7.87. "We got a grant for three months for three people. They paid the wages. I got three girls who were making waxings. I've been able to keep two on, the other was unsatisfactory."
26. Interview with Scheme Manager. 7.1.87.
27. The skill areas are:
  1. Shaping, (sawing, filing, shearing, drilling and piercing)
  2. Spinning.
  3. Hammering.
  4. Punchwork and Chasing.
  5. Hand/Machine Engraving (including Engine Turning, Diamond Milling.)
  6. Making up and Soldering.
  7. Electroplating.
  8. Enamelling.
  9. Ring-making.
  10. Bracelet-making.
  11. Stone-setting.
  12. Mounting.
  13. Waxing and Casting.
  14. Model-making.
  15. Stamping (including Force-making)
  16. Hand/Power Presswork.
  17. Use of Machine Tools (Lathes, Millers, Grinders, E.D.M. etc.)
  18. Lapping.
  19. Cleaning up and Polishing (including Burnishing)
  20. Sanding and Mopping.
  21. Diesinking.

22. Toolmaking.

23 Chainmaking.

Source: B.J..A. (Northern) Youth Training Scheme information leaflet.

28. Interview with owner of stamping company. 20.5.87.
29. Interview with ring-manufacturer. 29.4.87.
30. Interview with designer silversmith. 8.7.87.
31. Interview with sales director, casting firm. 21.7.87.
32. 2nd year Y.T.S. trainee. 19.2.87.
33. 2nd year Y.T.S. trainee. 19.2.87.
34. 2nd year Y.T.S. trainee. He continued: "It's a waste of everybody's time, mine because I could be being useful at work, work because I could be working for them, the teachers who are teaching us. .... I look forward to it (School course) because it breaks the work up, but I could be more useful working at the company."
35. 1st year Y.T.S. 7.1.87.
36. 1st year Y.T.S. 29.1.87.
37. Interview with Scheme Manager. 4.3.87.
38. A third year City and Guilds diamond mounting student. 19.2.87.
39. Interview with sales director, casting firm. 21.7.87.
40. Interview with owner of casting firm. 28.7.87.
41. Interview with finisher. 21.5.87.
42. Interview with badgemaker, 8.7.87.
43. See note 15.
44. Interview with jewellery manufacturer. 22.5.86.
45. Two degree students had relatives in the industry. One had a brother who was a goldsmith in South Africa, and another had a father who was a jewellery retailer.
46. Two of the undergraduates planned a year off before beginning their careers. The others had made no contacts, apart from one who had a friend with a jewellery workshop in London. One said she might "end up" in the Quarter, and was uncertain whether to stay, but did not think it important.



47. One undergraduate thought that the Quarter had no place for graduates because of their lack of technical skill, and that production had not advanced there for over a century. Another student reiterated this view:

"The Jewellery Quarter sums up the idea of poky little benches, people doing five hundreds of things, sawing up rings, all bench work rather than design work, turning out one thing after another".

This student described the area as scruffy and unsafe. Interviews, 4.3.87. A second year student thought there was no place for designers in the Quarter:

"All the jewellery is mass-produced, there's nothing new. It's very tacky, very traditional .... I feel they're twenty year behind, and retail buyers are guided by tradition".

48. These were all women, two of whom graduated from the Polytechnic in the mid-1970's.

49. City and Guilds interview. 19.2.87.

50. Interview with third year City and Guilds student specialising in advanced diamond mounting. 19.2.87.

51. A third year City and Guilds student works on commissions for friends. A first year City and Guilds student does commissions, having gained initial experience in her father's firm. A second year student had had a summer placement painting sketches for a jewellery catalogue, which she had obtained through the School. Interviews 21.2.87.

52. Two third year City and Guilds students were engaged in party-plan selling. Interviews 19.2.87.

53. City and Guilds interviews, 19.2.87.

54. Six of the sixteen H.N.D. students mentioned this. Interviews 27.2.87.

## CHAPTER SIX.

### WOMEN IN THE JEWELLERY QUARTER.

This chapter explores the role of women in the jewellery industry and the Jewellery Quarter community. Most of the earlier studies of occupational communities have been concentrated in male-dominated industries in which men are seen to be the productive workers in heavy manual work such as mining, docking or fishing, or in craft industries such as engineering and printing. In these studies women are depicted in non-occupational roles as wives and mothers. The women workers in the industries, such as cleaners, caterers, clerical workers or other "bye-workers", remained unresearched. Early interviews in the formal institutions in the Jewellery Quarter for this study and observations in the workshops showed women in the local industry working in a diversity of occupations and playing an active part in the occupational community. My attention was drawn to a small number of craftswomen working in the Quarter, and this raised questions about the historical role of women and their relationship to skills in the industry, and the influences which militated against, or encouraged, women's work. The situation in the jewellery, silversmithing and allied trades is more ambiguous than in other industries. Differentiation existed in the trades in the nineteenth century, as in other industries, and there were and are tasks defined as "women's work". The processes of

exclusion and segregation were not complete however, and there is evidence of the presence of women in skilled work and ownership roles both historically and currently. This chapter is an attempt to separate out the contradictory influences present in a complex situation. It will relate the findings of the study to historical material in order to define the situation of women's work in the local trades in relation to changes in the late eighteenth and nineteenth centuries in other industries. In the second part of the chapter the factors which enable women to be present and active in the jewellery and allied trades and in the occupational community, are analysed. These include the nature of the trades, the availability of training, the small capital requirements, the role of the family, and the weakness of the union. Each of these factors displays ambiguities which result in a particular situation for women in the occupational community.

#### The historical context.

##### i) An overview of women's work.

Both Clark (1968) and Lewenhak (1980) have explored the involvement of women in family and domestic work in the pre-industrial period. Although women's work was differentiated under feudalism (Beechey 1976: 156), Lewenhak argues that it was during the feudal period that "women became legally rightless but kept a freedom of movement and equality in earnings which they later lost" (1980: 105). The wide range of craftwork open to women only narrowed as feudalism declined, and she asserts that

women's guilds were structured in the same way as those of men, while mixed sex guilds were able to use their regulations to prevent women becoming independent and to retain women's assistance in family businesses. Nonetheless Lewenhak asserts that the main purpose of the rules was to exclude a variety of "interlopers" who were not exclusively women (1980: 112). Clark has demonstrated that a variety of work was performed by women under the system of family-centred domestic industry in the seventeenth century. Her work supports Lewenhak's argument that women's work was differentiated but Clark shows the variation which existed according to the status of the family and the type of industry in which they were engaged. (1) In the craft trades, especially where there was guild organisation, she finds little evidence of women apprentices, but stresses their rights through marriage and widowhood. Clark emphasises that women were active in these trades, and were not the domestic servants of their husbands, occupying "assured positions" wherever family industry prevailed (1968: 157). By the late eighteenth century new patterns of industrial organisation were resulting in changes in women's work from the situation recorded by Clark (1969), Lewenhak (1980) and Charles and Duffin (1985). The family wage was gradually being replaced by the individual wage and the location of work was being transferred to the premises of masters. By these means some women were prevented from sharing in their husbands' occupation while the rapid increase in wealth allowed other women to abdicate from work allied to the

family business (Clark 1969: 296). Charles and Duffin argue that the factors which contributed to these changes included the increased amount of capital necessary for independent businesses, demographic change, remarriage, migration and changes in the local economy (1985: 17-182). Richards (1974) and Lewenhak (1983) argue that new opportunities were in decline as far as women were concerned after 1820 and Richards suggests that in the metal trades in particular diversification led to a decrease in opportunities for women's employment (1974: 228-229). The growth of unionisation and the ideology surrounding working women further diminished women's opportunities. Alexander (1976) argues that in the nineteenth century an ideology emerged which was a "blend of political economy and evangelicism" (1976: 31). Women working outside the home became a focus for legislation which aimed to protect the spiritual and moral values of the family of which the woman was seen as the pivot. Heward (1984) has shown the effects on Jewellery Quarter families of legislation such as the Workshops Act 1869. This restricted women's working hours, and she argues that education legislation also helped to force married women into working at home (1984: 36). Yet Alexander's evidence is at variance with that of Richards' and she argues that despite the growth of industrialism, small specialised trades in which many women worked were not affected by modern methods of production (1976: 40). Some women were working in skilled crafts such as engraving, and involved in the precious metal and watchmaking trades, and as

instrument makers (1976: 41), which remained unaffected by mechanised production methods. So in some metal trades and outworking processes, specialisation and the separation of processes may have contributed to women retaining their employment, and the amount of capital outlay required in some of these which was, and remained, small, allowed women independence.

ii) Nimble fingers and low wages.

The changes were thus uneven in their effect on women's work, but Lewenhak demonstrates that the effects of these changes became more apparent in the West Midlands during the nineteenth century. Prior to the expansion of industrialisation, Lewenhak argues, women in the metal trades had been independent workers and exploitative employers in the same way that men were. Seventeenth century women metal workers had equality with their male counterparts in terms of independent production and operating cottage industries. They were free from guild control and able to engage in any manufacture "for which they had the strength, abilities and materials" and to adapt to changing markets (1983: 2). In the South Staffordshire trades she finds that women began to lose their occupations to men by the middle of the nineteenth century. This was due in part to urbanisation and the growth in the size of the unit of production which contributed to their loss of ground as independent workers and sub-contractors. Until this time, women's wages and job opportunities in the West Midlands "could compare with those elsewhere except cotton power-loom weaving" (1983:

8). The period of transition from domestic to factory production marks a watershed in women's job opportunities in the West Midlands generally. Women became increasingly confined to low-waged work which was also regarded as low-skilled. Employers demanded the cheapest labour, and because of the changes described above, this meant the employment of women and children.

The ambiguities surrounding women's employment become apparent in the precursors of the jewellery and allied trades, the toy trades. Berg (1985) has shown how employers sought women's perceived attribute of "nimble fingers" for these trades in Birmingham but that women remained unrecognised in terms of comparable financial reward (1985: 151). This is attributable, according to Berg, to women's skills being seen as biologically determined rather than the result of formal training which was available to their male counterparts through apprenticeships. She argues that the increased use of mechanised processes in the eighteenth century created new opportunities for women's employment as the volume of new products grew and differentiated. With the introduction of piercing and stamping machines, employers specified young girls in their advertisements for workers for the processes of annealing, stoving and polishing (1985: 151). Berg comments on the employment of a contradictory ideology constructed around women which was demonstrated not only through discrimination in skill terms. Women were engaged in heavy or dirty work while men had the lighter work of tool-fitting, maintenance and supervision, a division of

labour which persists in modern manufacture (Pollert 1974, Swords-Isherwood 1985).

Berg argues that in the late eighteenth and early nineteenth centuries wage differentials became based on age and gender, a double bind for younger women employees;

"While women were employed in piercing and cutting-out work they received only 8s-12s a week, and girls got 6s-8s, while the toolmaker who superintended the work claimed 30s-40s....men made high-class jewellery, and women and girls were left to the cheap end of the trade in gilt articles and chains" (1985: 36).

Heward argues that women's wages continued to fall behind those of men in the second half of the nineteenth century, remaining static while those of men showed variation throughout the trades (1984: 38).

Berg concludes that the women in the toy and metal trades occupied a lower economic and socially subservient position in relation to men. Where they ran businesses, she supports the view that this occurred as a result of widowhood or the loss of a father. However she argues that because of the small scale of the workshop firms, "success for a woman as much as a man was dependant on skill and on knowledge" (1985: 311) confirming Lewenhak's argument that women were present in the trades



in capacities other than as cheap labour. Attempts to confine women to certain trades had to be achieved by definition of class of goods, as there was no local guild tradition to ensure women were excluded. In general, however, she concludes that women's work remained circumscribed by their perceived natural abilities:

"'Girls'' jobs often required nimble fingers and artistic ability, like chainmaking, japanning and lacquering" (Heward 1984: 37).

The Second Child Employment Commissioners' Third Report 1864 indicates that opportunities for women were less than for men. The report recorded 1,500 males under twenty employed in jewellery trades as against 800 females, and 1,750 males working with gems, but no women under twenty years old were employed in either trade, (1984: 78) indicating a lack of opportunity for women to train in the workplace in these trades.

iii) The nature of women's work in the jewellery and allied trades.

The separation and restriction of women into particular jobs continued to be breached in the areas of skilled craft work by married women, widows or daughters (Charles and Duffin 1985: 126). Women's opportunities were less restricted in the small family production units. Toy-making and jewellery were largely carried out in small workshops which retained the pre-industrial system of domestic production, with family members forming the

labour force. In this context the level of women's participation becomes hidden. The Street Directory of 1770 for the Birmingham area (Sketchley and Adams) which lists the principal households in Birmingham shows only one female buckle-stamper out of 44, one female smith and brass-founder out of 33, one plater (a widow), one filigree worker and two toy-makers out of a total of 48. Almost a hundred years later, the Gazetteer of 1850 lists two out of 28 chain-makers who were women, and three out of 48 gilt toy-makers were female. Only three women jewellers and goldsmiths were listed. Difficulties arise in assessing numbers comparatively because they are rarely present in the records as householders (Charles and Duffin 1985: 10), but the figures show the persistent presence of women owners of firms in skilled processes. Not all of these were the heirs or widows of craftsmen or processors. Some founded firms which continue to the present day. One of the leading silversmiths in the Quarter, though now much diminished since the recession, began as a repair shop which expanded into the manufacture of buttons and small toys. It was established by Mary Barker in 1801, in an area close to the present Jewellery Quarter. In 1864, Harriet Samuel established her jewellery manufacturing company, which she developed when her son went to Manchester to open retail outlets, which became known as H. Samuel's, in 1876. These examples and the figures quoted above indicate that women owners were as adaptable as men and support Lewenhak's argument (1983) that in some of the "womens'" metal trades in the Midlands, women were

able to become sub-contractors and "garret mistresses" (1983: 5). As such, they are examples of the incompleteness of the attempts to exclude women from skilled work and confine them to work defined as low-skilled and which was low-paid. In the twentieth century however, these attitudes persisted, and were endorsed by the male-dominated union, as will be shown. Yet while legislation and exploitative employers were attempting to restrict areas of women's work, the increased availability of training for artisans was allowing women access to skills.

iv) Women and craft training.

Callen's study (1979) shows how training for middle-class craftswomen opened up in the nineteenth century as a result of the increase in the number of art schools, though their employment opportunities remained circumscribed. She argues that formal design education for women arose partly from the demographic changes noted by Richards. Middle-class women for whom earning a living had become a necessity were bound by social mores and constrained by their negligible education which prevented them from engaging in paid work. The hand-crafted work produced by some of these women was sold anonymously, to protect their social position, by philanthropic societies. The increase in the number of art schools in the mid-nineteenth century attracted large numbers of middle-class women seeking opportunities for training.

"Officials were perplexed to find classes designed for females of the working and artisan classes flooded by desperate gentlewomen" (Callen 1979: 36).

There were problems for the serious recognition of their work, because they had previously made goods for charity sales, and they were further hampered by the myth of the "nimble-fingered woman" resulting in their craft work being regarded as "natural" rather than a learnt skill. As late as 1908 Ashbee, the founder of the Guild of Handicrafts, was critical of their work and interpreting it as a threat to the artist-craftsman's ability to sell work at a viable price (1979: 26). Women were further criticised for a lack of business acumen, yet when they displayed a knowledge of the market were castigated for their lack of "femininity".

The most successful artist craftswomen were those trained in teaching establishments sympathetic to the training of women, among which was the Birmingham School of Art. The pioneer schools of the 1840's evolved from the artisan schools, (1979: 28) and the aims of the first Female School of Design in London were to train the young middle-class woman to "obtain an honourable and profitable employment, and to improve design" (1979: 36). Women were accepted for most classes except life drawing classes, or those set up for certain crafts which were considered "male" or "for certain trades which engineered the exclusion of women from their classes" such as

bookbinding. Despite an increase in training provisions, opportunities for employment were few. In addition, some classes in crafts such as lace-making, embroidery and illumination closed, due to the introduction of machinery which performed the task quicker and more cheaply for the volume market. Only the more affluent could continue in private classes, otherwise the closure of classes virtually cut women off from training in some areas. The situation was exacerbated by their exclusion from apprenticeships. Employment opportunities remained limited and women were thus forced into the uncertain world of free-lance design, or into teaching where even then their opportunities were limited to "the category of traditional socially-sanctioned female accomplishments" (1979: 42).

The later decades of the nineteenth century were notable in the history of design for the Arts and Crafts Movement and the craft-guilds which this spawned, as an attempt was made to raise the standard of design and unite it with function. The first male Art Workers' Guild was formed in 1884, established in response to the male artist craftsmen's need for "a common identity". Women were excluded and Callen interprets this as evidence, "at the highest level of the extent of women's isolation" (1979: 15). A Women's Guild was founded in 1907 but Callen argues that "it was too late....for it to fulfil the functions needed, particularly in the early struggling years of the movement". With the popularity of the Arts and Crafts Movement, a number of small clubs, guilds and workshops formed in which women could obtain some support and

encouragement of those with similar aims and ideals (1979: 9).

Craft classes were therefore the only means of entry into training for the artist-craftswoman, and these increased with the growth of interest in artistic jewellery as part of the craft revival of the period. Jewellery manufacture was regarded as a suitable occupation for women because it was possible for them to have a small workshop in the shelter of their homes rather than in an employer's workshop, and used their "natural dexterity".

"The number of ladies who have achieved success in jewellery design proves this, indeed, to be a craft to which a woman's light and dainty manipulation is peculiarly adapted" (1979: 155).

In Birmingham, in addition to the tuition at the School of Art, women were admitted to the City and Guilds classes of the B.J.S.A. in 1891 and taught separately by a woman tutor (Nott 1987: 51). In common with other craftswomen, women jewellers often married fellow craftsmen, and while this enabled them to continue their creative work, it could also result in their work being constrained by, or obscured in, that of their husband. Thus in spite of an economic need of middle-class women for employment, the contradictory ideology surrounding the myth of inherent skills and the role of women in society worked against them as it did for working class women. The training which

opened up nationally and allowed these women to obtain formal training in craft skills did not expand their employability, due to both the attitudes of employers and male craftsmen who feared them on economic grounds. For many artist-craftswomen, the solution lay in teaching or independent craftwork but they suffered exclusion from the support of craft guilds and on marriage, the likelihood of their own creativity being "hidden". Callen argues that for the middle-class artist craftwomen in the nineteenth and early twentieth century, women experienced not only the "external, practical constraints and roles imposed by Victorian society" but also the "ideological constraints, namely the conflict between 'woman' and 'artist' .... 'ladies' and 'work'" (1979: 219). The union for the jewellery industry workers formalised the constraints on women workers in the trades from its formation in 1911, and it is to the nature of this treatment of women workers by the union in the jewellery trades that we now turn.

(v) Women and the Union.

Cattle's study (1983) *highlights the problems of women workers in the jewellery and allied trades in the early part of this century as male workers struggled through the Union to retain the monopoly of skilled work. He argues that the Union attempted to subordinate and control women workers while neglecting their interests.*

Lewenhak (1983) has argued that women in the West Midlands had organised all-women Friendly Societies from the 1770's, in addition to being members of mixed

societies, and that, as these societies were usually composed of the "labour hierarchy" then women must not only have been present in the skilled trades, but in the top grades. She argues that they were active in agitating for the repeal of the Anti-Combination Acts, after which strike action was taken by jewellery workers. In 1834, Birmingham was particularly associated with the Grand National Consolidated Trade Union which, while supporting the unionisation of women workers, proposed that this should be through segregated unions (1983: 5). The effect of this, together with other social and economic factors, was that no women were recorded as members of craft societies which pre-dated the Amalgamated Society of Gold, Silver and Kindred Trades (A.S.G.S.K.T.) which became the National Union of Gold, Silver and Kindred Trades (N.U.G.S.K.T.) in 1915, and as such was the representative of the jewellery, silversmithing and allied trades.

Cattle agrees with Pinchbeck's findings that this lack of record was not an indication of a lack of women in the skilled trades. He has established that opportunities for women in the industry were increasing in the 1880's, in warehousing and clerical posts, where they constituted a third of all workers in these areas. Women's wages continued to be as low as half of those of skilled men, and where they had the same skills, wages were based on differentials such as the class of goods manufactured. Women were largely confined to the cheap end of the industry so the wages remained low in the twentieth century as they had in the late eighteenth and nineteenth



centuries.

The Union, formed from a number of craft societies in 1911, was numerically weak as has been shown, and this was due to the predominance of small workshops and family firms. It would have been strengthened by women's membership and a suggestion that they might be admitted as auxiliary members was made in 1912, but efforts remained concentrated on unionising male craft workers. Sheffield took the initiative in proposing a Women's Section, a move taken up by the General Council in 1913. The reason given for their inclusion was the opportunity for the Union to retain control of the areas in which women worked, which posed a threat to men's wages. Under the rules, women were not entitled to funeral benefits but could make a weekly payment in order to qualify for marriage dowry benefit, on receipt of which it was understood that they should leave the industry. The ambivalence of the Birmingham branch was apparent when the first five women applied to join in 1915. They were deemed ineligible because of the company for which they worked, while male workers from the same company were admitted. The Sheffield branch warned Birmingham that it was jeopardising its potential to become the largest of the three branches by this restrictive action, and the first five women were admitted a few months later (Cattle 1983: 10).

In the war years the shortage of male skilled labour increased the bargaining power of the Union, but tension was created by the openings that were created for

women by the skill shortage (Phillips and Taylor 1986: 64). There followed a series of meetings about the dilution of labour, within the Union and with the employers, the aims of which were to ensure a return to pre-war conditions and maintain the dominant position of craftsmen. At this time, the Birmingham branch had a membership of 1,471 males, but only 49 women members, and this total was itself a small proportion of the workforce of 20,000 (1983: 10). Only three unionised companies entered into the agreements. The approval of a clause in dilution agreements which stated that "women were not to teach women" serves Cattle's argument that the Union approved of the structural division of labour in regard to women. It is also an indication that skilled women were active in the trades (1983: 31).

The six women of the First Women's Committee which formed in 1919 were all from silver and electro-plating trades, areas in which firms were larger and which thus allowed for unionisation. All but one of the jobs they were employed in were defined as skilled, further evidence that *skilled women were employed in the industry*. Cattle argues that after the First World War women had made encroachments into the skilled trades. They constituted 27% of goldsmiths and gem-setters, 24% of silversmiths and makers-up, 13% of mounters and 9% of engravers. These figures relating to the highly skilled "male" trades are an indication of the inability of the male unionists to confine women to the non-craft areas, but there are no earlier figures of women's employment

with which to compare them. In the early inter-war years women still comprised the largest percentage in semi-skilled work, forming 45% of platers, 62.2% of press workers and 65.5% of polishers and scratch brushers. Out of the 8,450 women in the industry nationally, only 1,700 were unionised (1983: 31-33). Despite the large number of women present in the trades, their membership of the Union remained small and the women's section went into decline in the early 1920's and its revival in 1926 was short-lived. The last recorded half-yearly meeting of the section planned for June 1939 did not take place. The female membership in Birmingham at this time was 188 (1983: 40).

Dilution was not an issue in the Second World War, because of the restrictions on working with precious metals described earlier. The 1945 Wage Agreement shows that women's wages were still almost half those of men in all grades, being based on the pre-war agreements on men's and women's rates and skill. Anxiety was expressed by London and Birmingham that the new agreement meant an increase in job opportunities for women, and the Birmingham branch reworded a clause to ensure that it was not interpreted by employers as such. (2) A resolution at the 1946 Conference tried to restrict women members' rights to out-working benefit but this was defeated. In the 1950's and 1960's no progress was made in the representation of women workers and the membership in 1961 was reduced to 2,789 of whom only 428 were women. In 1963 a resolution was passed calling for the doubling of

women's contributions and benefits and the next seven years saw a resurgence of union activity as it negotiated a forty hour week, an increase in minimum wage rates and overall pay, sickness pay, and an agreement to annual negotiations, from which women as workers benefitted (1983: 40). Due to the dismissal of the Secretary of the Birmingham District Office, and a dispute over his reinstatement, the female Office Assistant became the Acting District Secretary. Her post was made permanent and she became the first woman to be a union official and the first to be elected to the Annual Conference and to represent the Union at the Birmingham Trades Council. As Cattle points out, she was still "a prisoner of the previous traditions of the Union and under the direction of an all-male executive" and had left by the time the Equal Pay Act was being negotiated (1983: 35).

Under a new agreement following the Act, the Second Schedule proposed four definitions of skill, three for semi-skilled and one for unskilled, in addition to the same categories solely for women doing "women's work". The latter commanded minimum rates of pay less than the new "mixed" classifications.

"Male rates were now skilled between £22. 10s - £26, semi-skilled between £17 and £21, and unskilled £16 per week. Women' rates were, skilled £12.10s, semi-skilled £11 and unskilled £10, with women doing 'men's work' to get equal pay by 1975. For the first time since the 1945

Agreement the Union accepted a clear set of sex-segregated job classifications" (1983: 36).

A meeting called to discuss the amendment of this classification in line with the Equal Pay Act suggested that by upgrading hand and power press operatives to Grades A and B, skilled women could be redefined as semi-skilled 2, semi skilled women redefined in semi-skilled 3 and there could be a unitary unskilled definition for both men and women. This proposal was rejected by the employers, and an agreement came into force in January 1974 in which the old skill definitions were dropped in favour of job grading from 1 to 10, under which women were concentrated in the bottom three grades. A new "supercraftsman" grade was introduced for which five years training and a further five years experience was required (1983: 41). This worked against women, who have greater difficulty in obtaining bench work, as will be shown below.

Despite the flaws in the agreement, Cattle reports that women's membership rose in the 1970's from 72 in 1969 to 196 in 1975, which is still a very low proportion of the female workforce. At the 1975 Conference, women became entitled to pay the same contributions for the same benefits as men (1983: 41). Cattle demonstrates that despite the weakness of the Union numerically in Birmingham, it has been reluctant to accept women on an equal footing in the Union, and indeed has been concerned to maintain the dominant position of male

workers, and in doing so has promoted the sexual division of labour in the industry. In October 1981, the union lost its autonomy and became the Precious Metals Section of A.E.U.W. (T.A.S.S.) At the monthly evening meetings, held in the Quarter, which are attended by about twenty members, only one of these is a woman (1983: 4). The problems with union meetings and women's attendance have been addressed elsewhere (Rennie 1985: 123-224) but the evidence has shown that, apart from the structural nature of the local industry which mediates against union membership, there has been little incentive for women in the Jewellery Quarter to join a union which has brought them so few benefits until recent years. Improvements have occurred as a result of legislation rather than of male trade unionists helping to improve their status as fellow workers. Cockburn (1983, 1986) has illustrated the problems of women obtaining craft work in the printing industry, where women's work in the nineteenth century was "blackened", and she has shown how the union has operated a closure system to retain their control of the craft (1986: 98-100). This process has been incomplete in the Jewellery Quarter, however, due to the continuance of small workshops and family involvement, as will be shown. These factors have weakened the union's control which has never been total.

(vi) A summary of the historical background.

Historically the position of women as productive workers has been shown by Clark, Lewenhak and others to be varied though occupationally segregated pre-industrially. The

onset of industrialisation constrained women's work in some areas, though there are variations in the pace at which this happened, in different regions and occupations, as some occupations died out and others emerged to meet the changing needs of the market. During the nineteenth century women workers were constrained by male workers, critics and craftsmen as they denied or restricted women's opportunities in the diverse or new technologies which developed, through the formation of new unions and apprenticeship restrictions (Boston 1980: 14-15, Cockburn 1983: 24, 31). Women and girls entering the labour market were paid considerably less as a result of these restrictions, justified by the ideology that women and girls were naturally dexterous. Widowhood was an important factor in women's involvement in running businesses but Berg's argument that in small firms knowledge and skill were important is pertinent. As owners, however, Lewenhak has argued that women became part of the male world of price cutting and then wage-cutting. Restrictive practices based on age, gender and training contributed to the erosion of women's independence and the entrenchment of inequality. The consequence for women was their loss of power and control as male-dominated unions accepted "low rates of pay for women members and connived at the non-recognition of their skill in the new technologies that developed from 1750" (Lewenhak 1983: 15).

Both Berg and Callen have shown how women's skills were devalued by being perceived as biologically determined and not associated with formal training, but

Callen has argued that artist-craftswomen were able to receive training and some measure of success despite the lack of support from fellow craftsmen, because of the progressive policies of some art schools, including in Birmingham the Vittoria Street School of Jewellery and Silversmithing and the Central School of Art in Margaret Street. Heward has argued that education and factory legislation affected married women workers but shows how this was overcome in the jewellery and allied trades by the availability of and necessity for, low-paid home work. Cattle stresses the numbers of women engaged in skilled work and shows how protectionism by male workers led to their collusion with employers to maintain women's wages at a lower level. Again the position is contradictory. Cattle argues that the union was ineffective in restricting women totally to non-craft areas, as their entry into the trades in the First World War showed. Despite measures by the unionised male workers against them, the sub-division of the trades and the predominance of small family firms has contributed to the continued presence of women workers in the jewellery and allied trades.

(vii) The post-war years.

Women took advantage of the opportunities to perform skilled work despite the attempts of the union to restrict their entry into the trades which have been discussed. In the years following the Second World War the official perception of women workers was still that they had no place in skilled work. The description of suitable work



for girl school-leavers in a 1952 pamphlet issued by the Jewellery and Silverware Council and compiled with the help of employers and trade unions, is evidence that supports Cattle's argument (1983). He asserts that women's position in the trades was hindered by "formalised and sex-biased training schemes" (1983: 10). The emphasis on female "nimble fingers" which Berg stressed as a feature of women's work, is still present. The pamphlet explained that there were nearly 50 different craft skills in the industry, but for young women the attractions of working in costume jewellery were outlined;

"Here women are in most demand. Men are needed as toolsetters and operatives on heavy machinery, but most of the work is light and can be an attractive job for girls with quick sight and nimble fingers. They are handling gaily coloured materials, and because of changes in fashion, they are not likely to be working on the same design continuously .... in general, this type of work suits people who are not prepared to embark on a long training period". (Are You Clever With Your Hands?. Issued by the Jewellery and Silverware Council 1952)

In contrast, "fine jewellery .... has to be made by very experienced and responsible craftsmen". The pamphlet describes the rewards of job-satisfaction which are gained by mounters, setters and polishers. Mounting and setting

are described as men's jobs, while polishing is performed by women. The accompanying photographs show women soldering jewellery and polishing rings. The post-war woman is thus perceived as being as naturally dexterous as her forbears but with a short attention span, a short-term attitude to work and training, and unlikely to develop into a responsible worker. This attitude to women workers is reflected in other industries in the post-war period (Williams 1957). The presence of skilled women in the trade is not acknowledged, yet Cattle shows that craftswomen were employed by one of the leading silversmithing firms at this time;

"Twelve women silversmiths .... worked in their own workshop, segregated from men. They worked on virtually the same production items, though they were not given the opportunity to do special pieces or large or heavy work. No new women trainees were taken on from this period, although in previous years women had been responsible for teaching other women. These hand-skilled women workers were paid piecework in the line with the N.U.G.S.A.T. and B.J.A. agreement for skilled women which was considerably less than men" (1983: 12).

#### Women's work in the trades.

The stereotyping of women's roles which emerged in the late eighteenth century in the toy trades is still present

to some extent in the Birmingham trades, and sometimes overrides employers' own experience of employing female family members. The myth of the nimble-fingered woman, and of women being inherently good at design but physically weaker, remains. Women have gained work opportunities through the opening of retail units in the Quarter as jobs in selling have emerged but this in itself is an example of the way in which perceptions of women's abilities ensure that women remain concentrated in the low-paid, low-skill and often part-time areas of work. They are engaged in a variety of mass-production processes on stamping machines and presses, and in waxing, polishing and casting operations. In badge production they perform the enamelling process, and are involved in the production of jewellers' sundries - boxes, pads and packaging materials. They are engaged in warehouse work at the Assay Office and perform reception and clerical work in all the firms large enough to employ workers for these functions. Few are currently employed as craftswomen at the bench within firms and two interviewees gave their reasons for this. One long-established firm of ring manufacturers employed a total of sixteen workers. Three of these were women. One was a woman relative who performed the office tasks, and two other middle-aged women were long-established workers. One was a polisher, and the other packaged orders, answered calls at the hatch, made the tea and acted as a messenger. The owner said that he would not employ a woman on the bench, though the firm used to employ a number of women polishers and in

warehouse work:

".... but now, women wouldn't want to work here. One of the reasons is strength. The young ones won't stay. So the women we did employ, and we do employ, tend to be older .... Girls make for an unruly atmosphere". (3)

A jeweller voiced a further criticism of women's own attitudes as a reason for there being few visible in skilled work:

"All women want to be designers. They don't want to get their finger-nails broken or their hands stained". (4)

Casting, which has experienced technological changes, is another area in which women have gained work in the post-war period. There is full-time, part-time and home-work available for women in this process. One casting firm had a dominantly female workforce who enjoyed excellent working conditions which included a fully-fitted bathroom and kitchen for the use of all the workers. Some women wore personal stereos as they worked. The workforce was long-established. Women continued home-working when they left to have children and then had the option of returning to the factory. The owner considered that it was this flexibility which made casting jobs attractive to women rather than the nature of the work, and this may be

one of the reasons for casting being regarded as "women's work". Female members of his own family were actively involved in the firm in clerical and administrative capacities. Like many other members of family firms, they were all able to perform the basic tasks when necessary, as they had to when the firm started or, in the case of younger members, when they joined the firm, and all were involved in the training of new workers. (5)

Polishing is another area of work readily available to women and those who did it in the past were regarded as "rough". It is a very dirty process, and those in the trade are recognisable by the grey dust which covers them. One respondent recalled the women polishers of the inter-war years who worked in his father's factory:

"The women polishers in those days, they were like navvies. When you were young, they got you and stripped you and put polisher's rouge on you .... Dad had them in the office and said that they had done it once, but if they did it again he would sack them". (6)

This comment is an example of the contradictory ideology which still lingers in an industry where women are doing one of the dirtiest jobs and are thus perceived as "rough" and yet were discouraged from participation in initiation rituals which are regarded as all-male preserves. The perception of women who do dirty jobs in a public domain is a notion allied to the dominant male ideology in regard

to women perpetrated in the nineteenth century.

The low capital requirements of certain trades has made it possible for women to become owners of firms. Enamelling has historically been regarded as women's work, requiring artistry and dexterity. Yet further evidence demonstrates the contradictory ideology which exists in the trades. Dayus (1985) has described how in the inter-war years firms prevented women from learning all the processes in an attempt to curtail their independence. Dayus established her own firm after learning all the processes by moving from firm to firm. She eventually rented a cheap room, bought second-hand equipment, and got work from her former employer, for whom she had also done home-work while working full-time, in order to build up capital. The experience of one of the interviewees paralleled that of Dayus. After long experience in the trade with one of the largest badge-making firms, she set up on her own, with her husband working as the polisher and finisher. All her other employees were women members of the family or close friends. Like Dayus, she obtained some of her work from her former employer. She made the point that enamelling, like casting, was a good trade for a woman because they can continue to do home-work when they have a family, as she had done. She believed that an enameller needs to be "artistic" but after years of working in the trade and training "hundreds" she does not subscribe to the view that all women are inherently good enamellers. "I can tell right away from the way that they pick up a brush". (7)

### Current opportunities for women craft-workers.

Even for those women with formal training there are difficulties in obtaining employment, and these require different strategies. Four of the five craftswomen interviewed for this study had trained in Birmingham in the 1970's. Three had become independent workers immediately after qualifying, one of them through sponsorship in the form of workspace and facilities referred to in Chapter 3. One of the women was a non-jewellery trained graduate, and the only one to use a variety of agencies and grant schemes to launch her business. (8) Only one had worked full-time for a firm before becoming independent, while another had taken work in a retail jeweller's where she had formerly had part-time work as a student. For two years she continued to work there while working three days for herself in a shared workshop to build up her business. (9) Two women were sub-letting bench-space and another shared premises with another designer craftswomen. Three were producing work for commission and galleries while the fourth was a free-lance designer who produced ranges of jewellery for a large local manufacturer. (10) Two were involved with an agency in the Quarter which exhibits the work of its members at national and international craft and design fairs. One of the women had previously worked in the Quarter, but she was now a technician in the jewellery and metal-working department in a college while continuing to work on her own part-time. (11)

Two of the interviewees related experiences of work or seeking work in the Quarter. On completion of her City and Guilds course, one had been offered only office work or sorting in the stores:

"At one firm the boss said he'd ask the men if they'd work with me, but they said no because they'd have to watch their language. It was nothing to do with my qualifications - they were fine". (12)

The goldsmith had obtained her first job through the School with a chainmaking firm which had employed other women from the School. This respondent now sub-lets bench-space and commented:

"Sometimes someone comes into the workshop for the first time and says to me 'Helping out, are you?' They don't expect me to be self-employed because I am a woman". (13)

Another respondent who had a City and Guilds qualification went to the B.J.A. offices for job information and was taken on by a jewellery firm of ten workers. She was the first woman to be employed by this firm "on the bench" and she described how the firm's porter "put the word around" and for the first few days people were calling on the firm "to check that it was true that Mr. X. had really taken a woman on the bench". (14)



The experience of some of these women indicates that attitudes to women workers in the local industry have changed little. Yet the women who have achieved their independence said that they had experienced no discrimination from male outworkers to whom they take their work, or in obtaining work. Those who had been employees perceived no experience of discrimination from male colleagues, despite initial curiosity. At the same time, although they have the same training and qualifications as male applicants, and despite the availability of training at the School and the Polytechnic, women working on the bench are still exceptional. Their experience belies the theory that equal training aids women's employment (Beechey 1986: 157; Phillips and Taylor 1986: 55). The following section shows the range of training and the expectations of both staff and students of female employment in the Quarter.

#### Training for women.

At the present time women compete successfully for places on the vocational courses, which gives them bench skills, and the degree course, which is a training in design, at both Vittoria Street and the Polytechnic but their employment chances are still constrained. A breakdown of the prizes awarded at the B.S.J.S. in 1986 shows that over 55% of prize-winners were women students. Male students dominated in silversmithing and most of the special prizes given by firms, including the Victor Ludorum, while women were successful in fashion jewellery, retail jewellery and

gemology. They compete successfully in national and international competition. This success is represented unevenly among the staff at the School. Four of the 17 visiting or part-time lecturers are also working craftswomen and the full-time staff are predominantly male with experience in the industry or as independent craftspeople. (B.J.A. Centenary Prize Giving booklet)

Among the students there exists a variety of attitudes to women and craft employment. Women students like their male counterparts were more optimistic of future employment if they had family or friends in the local industry. They stressed the importance of working in the Quarter rather than working from home as some women (but no men) without family connections, were considering. (15) Two women, but no men, were considering careers on the commercial side of the trade. (16) Of the six BTEC students interviewed, four were women and of these two wanted to work on the bench as craftswomen, which the course qualifies them to do. One of these had family in the trades and the other had progressed through the Youth Training Scheme, and had contacts with a silversmith through her placement which she hoped would be helpful. Of the fourteen City and Guilds students interviewed, eight were women. A final year student gave her perception of women's employment in the Quarter as she tried to sort out her own options:

"I want to go out in the trade but .... I don't want to stay at a machine, doing the same thing

every day. I want to do something more important, like a trainee manager, or a jobbing jeweller, but that's a bit unusual for a woman .... Women workers are in the shops, stamping, soldering, casting, routine. Not women jobbing jewellers. Men are doing the setting, but that's only in the places I've been to. Women are selling jewellery. It's a surprise to see women working at the bench, though women design students do, titanium and plastics, they've got a degree". (17)

Another of this group had been a prize-winner in her first year and was already obtaining small commissions. Her attitude was different:

"I'll get a job first, by asking round the firms. I don't see it as a problem being a girl. It's the work that counts. Then I would go on my own". (18)

A first year woman City and Guilds student had entered the course from the Vith form, and had held a long-term Saturday and holiday job as a trainee repairer in a retail outlet, combined with some one-day courses. She believed knowledge of her as an individual in the Quarter would override the fact that she was a woman. (19)

The H.N.D. course is dominated by women students, who accounted for 13 out of the 15 students in

1986-7 and 4 of these were from the Birmingham area. All but one planned to become independent craftswomen. Two thought they might experience difficulties because they were women and one of these related the experience of a friend, who had qualified in the previous year and who was now working from home, dependent on parental support:

"She had an interview and the other applicant was a bloke on the same course. The bloke was chosen. They (women) get jobs like waxing, casting, tedious. They're left these". (20)

Yet staff at the School are seen as equally supportive of both male and female students, and when jobs are offered will send both men and women students who are suitable. It is at the point of employment that difficulties are experienced.

Young women are under-represented in the Youth Training Scheme which operates in the local industry. The applicants are divided about equally but the proportion taken on in 1987-88 is 5 girls to 28 boys, which the Scheme Manager describes as typical. The Scheme Manager commented:

"When we explain the work, they are put off because it's not design but manufacture to other's design so it can be boring. The five girls this year were all offered positions. There are various companies where I would not

send girls .... I know what particular firms are looking for, so I am looking for who fits into the environment". (21)

This under-representation of women is compounded by the jobs given to girls by some of the firms. (22) Yet several women trainees had pursued City and Guilds courses after their training. (23) This seems to indicate that there is potential among the women trainees which can be exploited to a greater degree.

The perception of women full-time students approaching the end of their course is different from that of men, in that they are less confident of finding employment in the workshops. They have considered a number of options, such as working from home, or entering the commercial or administrative side of the industry which are not considered by the male students. Despite the warning given by tutors that it is advisable for all students to work for five years on the bench after qualifying before becoming independent, it has been shown that this option is not readily available to women, and that they have to use other strategies to gain that experience. Opportunities are seen as circumscribed unless they can offer alternate or additional skills. One tutor explained the employers' attitude to these "natural" skills as an advantage to women in employment terms:

"Girls can help in the shop, do the accounts. They usually have a better sense of design ....

The intake nationally shows that more girls are coming forward. The trade is still reluctant to accept them, yet outside Birmingham there is no tradition so they will take girls. There have always been women on assembling processes, for example, polishers". (24)

This multiplicity of skills which benefit the employer do not command a higher rate of pay, nor would a young man from the School be expected to demonstrate any of these other than the basic workshop skills which are learned as part of the course by all students. Against these constraints women have equal opportunities in most areas of training, and are not wholly confined to the roles of low-skilled and low-paid work. They need no special "male" subjects from school, required by girls entering engineering (Swords-Isherwood 1985: 85). Ironically the perception of girls as inherently "nimble fingered" with an aptitude for design may benefit their application. For those with family connections in the trades the route into the industry is easier.

#### The role of the family.

Clark (1969) showed how the wives, widows and daughters of craftsmen in the sixteenth century participated in the male-dominated craft trades by association, and despite the separation of workshop and home, female family members continue to have a close association with firms in the Jewellery Quarter. Women have become owners and employers

through their families even though they may not have received formal training in the trade (Crisp-Jones 1981: 306). A firm founded in 1945 and which specialises in reproduction antique silver, is run by the founder and his daughter. Another leading silversmiths' in the Quarter, founded in 1902, was continued after the death of the founder by his widow with the help of the works foreman, until her son left the army and joined her (Sutton 1980: 11). On his death in 1981, his daughter, the former company secretary, took over the firm. A former medical professional joined her father's casting firm which she now runs (25) and another woman continues to run a long-established jewellery manufacturing firm. (26)

The characteristics of the Jewellery Quarter as a community have been shown to include a small geographical area, dominated by small businesses in which there is daily contact with others through the nature of the product. It is evident from my observations and the workshop interviews that women are active in the occupational community in a way which has not been reflected in other occupational studies. In these they are presented in passive roles of wives and mothers dependent on their husbands' work to set the pattern of their lives. In the Jewellery Quarter many women present in the firms are relatives of the male owners. They are wives and mothers, daughters and sisters, nieces and cousins or close family friends or neighbours. Those who work in the office, which in small workshops is often part of the workshop, have direct access to callers at the hatch.

Frequently it is the women who are "out in the trades" on the errands essential to the running of the firm described in Chapter 4, such as visits to the Assay Office, the bullion dealers or material suppliers, the other processors where they deliver or collect goods, or on visits to the bank or take-aways. In this way, the women are active in the community and act as carriers and disseminators of information in the same way that men do. On several occasions I was with independent craftswomen (with no family connection in the Quarter) when they were "out in the trade". We met a large number of their acquaintances, both men and women, whom they knew from having shared premises, using their services, called on for help or met at the hatch of other firms. They also related stories of different firms as we passed their premises. This duplicated the experience I had when walking through the Quarter with male respondents. Frequently when conducting workshop interviews the woman or women present in the office contributed to the interview with information or corrections, and several were instrumental in directing me to other possible informants.

This variety of interaction is possible because of the particular characteristics of the local industry, and obtains despite the stereotypical work in which many are engaged. In this industry, the mobility in employment which exists for male workers may be more constrained by employers, but women have been and are able to obtain the skills in the formal institutions and do become



independent owners or craftspeople. In this sense, the pre-industrial workshop system described by Clark, in which women as wives and daughters engaged in male crafts and inherited businesses, still obtains, despite the separation of home and workplace, and as such women play an active role in the occupational community. Beechey (1986) has argued that "further studies (both historical and contemporary) of women's employment and occupational segregation in particular industries" in the labour process itself, are needed to explore this separation, rather than attributing the gendering of work to the sexual division of labour within the family (1986:158). The historical pattern of the Jewellery Quarter shows that women have co-existed in the same industry as men since its beginning, but not merely as unskilled labour as Phillips and Taylor have argued. In the Quarter, the situation is more ambiguous. They have been exploited in terms of performing boring repetitive and low-paid work, but have also received training on an equal basis with male students. The union was slow to accept them and has only worked for them in a positive way in recent years, when its own already limited power has been much diminished. The B.J.A. did not address the training or employment of women specifically in its recent report. yet women are present as owners and directors of firms. However, this chapter has shown that although women are not yet equal in employment opportunities, and are still largely engaged in "women's work" in the Quarter, they are nonetheless actively and visibly present in the

occupational community at work.

Notes.

1. Interview with ring manufacturer, 29.4.87. A jeweller who had employed a craftswoman spoke of this attitude among his own colleagues. "It is difficult for girls. If you have girls mounting or setting, there seems to be a form of resentment if a girl is working at the bench because they feel hampered, the swearing I suppose, but I don't think that's realistic. Though I upset our girl when I referred to her as one of the lads, which I meant as a compliment, not that she was unfeminine, but that she was one of us, but she was ever so huffy about it. And because we wear old clothes here because of the acid stains, she usually wore jeans, and one day she wore a skirt and someone made a comment about her looking feminine, but it didn't mean that she didn't look feminine the rest of the time". Interview 15.8.87.
2. Part One of Schedule 3 1945 reads; "Any worker capable of performing without supervision, any job in their respective section, .... which the custom of the trade would expect them to perform." Birmingham District wanted the following points clarified:
  1. *That the question of extending the scope for women was not discussed during negotiations leading up to the Agreement, consequently the question is not affected by the Agreement at all.*
  2. *Nothing in the Agreement varies, or was intended to vary the "Custom of the Trade" with respect to the classes of work upon which women shall be employed.*

3. That the only function of Schedule 3 to the Agreement is to define the degree of skill necessary to be attained by the individual worker in order to decide whether they should be classified as skilled, semi-skilled, it has no bearing whatever on the nature of the work women shall or shall not be employed in nor does it seek to lay down demarcation as between men's and women's work".

Cattle comments that the Union in principle never protested about men doing "women's work". It did however complain in these circumstances about paying men women's wages. p.40.

3. Interview with ring manufacturer. 29.4.87.
4. Interview with manufacturing jeweller. 22.5.87.
5. Interview with owner of casting firm. 28.8.87.
6. Interview with gilder. 18.6.87.
7. Interview with woman owner of an enamelling firm. 24.6.87.
8. Interview with designer-craftswoman. 19.5.87.
9. Interview with designer-craftswoman. 19.5.87.
10. Interview with designer-craftswoman. 28.5.87.
11. Interview with craftswoman. 8.1.86.
12. Interview with designer-craftswoman. 19.5.87.
13. Interview with designer-craftswoman. 9.10.87.
14. Interview with designer-craftswoman. 8.1.86.
15. Eighteen third year City and Guilds students were interviewed, of whom ten were women. Four of these had family or friends active in the trades.
16. Two female students were considering commercial careers. One was already working part-time and I met her again after she had qualified and when she was working for the agency and continuing her craft. Interviews 19.2.87. and fieldwork notes. 4.8.87.
17. Interview with woman in the third year of the City and Guild course. 19.2.87.

18. Interview with 2nd year woman silversmith. 19.2.87.
19. Interview with 1st year woman City and Guilds student. 12.2.87.
20. Interview with H.N.D. student. 27.8.87.
21. Interview with Y.T.S. Scheme Manager. 7.1.87.
22. One employer had placed a female trainee in the office after her training and another had a trainee as an office assistant who had also learnt rhodium plating on this placement. Interviews 21.5.87. and 20.5.87. One female trainee said that on her first placement she had only been allowed to sweep up and make tea, which did not fulfill the conditions of her placement. It took a term for her placement to be changed. Interview 13.2.87.
23. Interview with tutor, 2.12.86. He had previously been involved in the industry both as a craftsman and in a management capacity.
24. Two women City and Guilds students were former Y.T.S. trainees. Interviews 12.2.87. and 19.2.87.
25. Interview at stamping company. 21.7.87.
26. Interview with jeweller 15.8.87.

## CHAPTER SEVEN.

### METHODOLOGY.

There is little discussion in accounts of occupational communities of the methodology employed in the studies. Information on methods used in some ethnographic accounts have appeared in autobiographical accounts, (Bell and Newby 1977, Burgess 1984) and in re-studies (Warwick 1986). Dennis et. al. (1969) give no details of their methods, and further study casts doubt on the representativeness of their source data (Warwick 1986). Salaman (1974) shows how he obtained his sample of architects but not how he gained access to the railwaymen. Hill (1976) in his study of dockers, and Tunstall (1962) in his fishing study, indicate neither how access was gained, bias avoided, nor how their samples were selected. The studies therefore do not act as a guide on how to research an occupational community. My own methodology derived from an undergraduate research methods course and post-graduate experience in two research posts. I used mixed strategies, which included archive research, mapping of the area, enquiries, a questionnaire and interviews at formal institutions associated with the jewellery and allied trades in the local industry and unstructured workshop interviews in the Quarter. In this chapter details will be given of these research methods and the relationship of these to the nature of the study will be shown. The methods were adapted to the nature of the

problem which required the study of more informal relations within the community. It will be argued that the organisational structure, work routines, and culture of the local industry are largely inaccessible through formal methods of research, such as postal or structured questionnaires. Although the methods used are separated out for discussion, in reality they often overlapped and informed each other, and were not discrete stages.

#### The mapping exercise.

A key feature of jewellery production in Birmingham is its concentration in a spatially defined area of the city. Demonstrating this localisation involved technical problems. Moore (1977) writes of his study in Sparkbrook:

"I knew what was meant by Sparkbrook, but it seemed important at an early stage to define the locality quite specifically, if only to provide an arbitrary cut-off for where I should visit people, go to church and visit pubs" (1977: 94).

In the Jewellery Quarter there was no question of arbitrary cut-offs, as maps of the area are featured in local histories (Skipp 1983, Zuckermann and Eley 1979) and other sources (Wise 1951). The area is sign-posted by the City Council, and its spatial definition therefore seems clearly defined. I wanted to check the validity of these parameters in terms of the number of firms associated with the jewellery and allied trades in the defined area as

this was currently unknown to me. Using these maps as a guide, I listed 47 streets which were deemed to comprise the Jewellery Quarter, and in a number of visits spread out over a period of time, walked through these streets recording the names and nature of the businesses. In this way I discovered which streets still contained firms in the jewellery and allied trades and could therefore be said to comprise the Jewellery Quarter currently.

This direct method was the only way to locate firms in the area. Business and telephone directories could not be used as I did not then know which firms and businesses were situated there. In an earlier thesis Gilbert (1973) reported the omissions from Kelly's Directory of Manufacturers and Shippers and their Annual Directory of Birmingham and the West Midlands, as well as the absence of small firms from the telephone directory and the "grossly inaccurate" Factory Inspectorate report (1973: 8.29). He used the advertisements of firms in "British Jeweller" and the Chamber of Commerce journal as checks. I found that current editions of these listed only their members, and the Factory Inspectorate reports only on firms with over 25, which would exclude many of the jewellery and allied trade firms. The mapping exercise compensated for this. It revealed not only firms in the industry, but the public houses and cafes which serve the workers in the area, and the businesses not allied to the trades but sharing the area in the way that the button and brass trades did in the past. Even so, the personal search and recording could not reveal all the firms in operation;

premises are shared and sub-let, others retain name-plates of former tenants or owners who may have moved elsewhere in the Quarter, which is a frequent occurrence (1973:7.9). Due to the age of some of the buildings, firms are hidden in courtyards and alleys. The mapping exercise was spread over a period of time, during which there may have been changes which went unrecorded, and there was no available mechanism to counteract this. Nonetheless I believe that this method yielded a more accurate picture than could have been obtained by using only written sources. In addition it had other implications for the study. Using copies of maps of Birmingham dating from the sixteenth century I was able to chart the geographical development of the city. I used this information in conjunction with directories from the eighteenth century to construct a series of spreadsheets from which graphs were produced and used to compare patterns of movement of the trades and to demonstrate the development of the Quarter as a distinct area. Patterns of clustering of certain trades emerged together with the increase in some skills and processes and diminution of others at particular periods. *This gave an indication of the adaptability of the local industry, contextualised change historically and confirmed the historical data in the texts.* Again their absolute accuracy in terms of exact numbers cannot be confirmed for the reasons outlined above, but trends in movement and occupation of the area were clarified. In addition, the mapping exercise proved a useful source of data in terms of observation as I was able to record the activity in the



streets. This included observing informal meetings and exchanges, weekend work patterns, the carrying of goods. At the end of this exercise I had redefined the Quarter in terms of the presence of the jewellery and allied trades in certain streets and had established that the printed sources available were outdated. The mapping exercise was able to counter in part the weaknesses of these sources and contributed to data collection. It also facilitated the definition of the Quarter in geographical terms. It still left the conceptual rather than the technical problem of defining the Quarter in sociological terms, as a community. I will return to this issue by way of conclusion to this chapter.

#### Archive research.

One of the deficiencies of occupational studies has been an ahistorical approach which considers the occupation only at a particular point in time. The amount of historical data given to show how events in the past, at local or national level, have shaped the development or direction of the occupations is often limited to recent events if it features at all. The historical development of occupational communities is shown in specifically historical studies (Lummis 1985). A broader definition of archive research was used to incorporate not only recent events, but to confirm the historical context.

The Local Studies Department at the Birmingham Reference Library holds a variety of material on the Jewellery Quarter including newspaper and magazine

cuttings, short histories of local firms and the proposals of the Victorian Society for the conservation of the area. There are also a number of histories which I used for the industrial background and a thesis on the structure of the industry sponsored by a watch-making company in the inter-war years (Roche 1927). I used the Inter-library Loan Service and the Modern Records Office at Warwick University, in addition to the normal University stock in which I discovered autobiographical accounts of life and work in the Jewellery Quarter from the First World War onwards.

Habenstein (1970) has described professional journals as a useful source of data (1970: 118). I subscribed to the B.J.A's journal, *British Jeweller* for two and a half years of the research. This gave me information on the current activities of the B.J.A. and the industry at a national level. It included a useful yearbook which yielded the information from which local membership figures in different branches of the industry could be drawn. Part of the fieldwork year coincided with *British Jewellery Year* for which a history of the B.J.A. was published and which proved useful. The *Birmingham Mail*, the local daily paper, is not indexed and stored in subject matter and it was necessary to make an appointment and stipulate which copies of the paper were to be consulted. This was an unworkable situation, as I did not have particular dates to work to, but had at this stage a more general interest, so this avenue was not pursued. It later became clear that press releases covered in the

newspaper usually featured more fully in *British Jeweller*, which became an invaluable contemporary source, and were also in the Local Studies collection.

An area which has been neglected in research methodology in relation to archive research is the unsolicited written material which may come from interviewees or to which the researcher is alerted by the interviewees. The researcher has no prior knowledge of this material and so cannot request it. Prior to the experience of being given material I had not considered interviewees as a source of written material other than that which I might instigate myself such as diaries or completed questionnaires. During interviews at both formal institutions and in the workshops, however, I was given or told of material pertaining to the Quarter, of which I would otherwise have been unaware. I was alerted to the trades' own survey by the Youth Training Scheme management team. A meeting with the editor of *British Jeweller* resulted in my being given access to all the copies of the magazine from its inception in 1933. Other material obtained in this way included the history of one of the firms, a thesis written by the daughter of one of the interviewees, out-of-print exhibition catalogues, and material relating to the formal institutions. A staff member at the B.S.J.S. showed me a free monthly publication distributed to all the local firms which included short articles of current and historical local interest, and is published by the daughter of a former jewellery worker who now runs a business services agency.

I obtained a set of back issues and collected copies during the field work period. This aspect of the research indicates that it is not possible at the planning stage to predict all the sources that are available before the fieldwork starts. At the same time, this sharing of material with me was in itself useful data, as the willingness of respondents to inform me of this material showed both their own interest in the continuity of the Quarter and was an example of the nature of the occupational community. Moreover my access to this material resulted from the method of data collection which I selected, which was that of personal interviewing rather than by formal letters of request for information or postal questionnaires. This point will be returned to later in the chapter.

#### Formal institutions.

At the beginning of the field-work year I devised a diagrammatic model of the Quarter which linked the structure of the industry with formal and informal institutions. A list of these was then drawn up to be used as possible sources of useful data. Habenstein in his work on occupational communities of professionals, argues that one of the first acts should be to locate the associations (1970: 109). I thus began with the formal institutions in order to familiarise myself with the current structure of the industry, first visiting the local Chamber of Trade and Commerce. The Chamber had been involved with the Economic Development Unit when the area was designated as

an Industrial Improvement Area. Two of its members had been seconded to assist in interviewing firms in the Quarter, and through the Birmingham Chamber I was able to contact one of the interviewers. (1) The City Planning Office provided literature on the conservation plans and a large map of the I.I.A. and the names of useful contacts at the Birmingham Reference Library and the Museum. It was through interviewing at the formal institutions that I experienced this "snowballing" of contacts. Respondents provided the names of current office-holders or officials which are not always readily available from written sources, not least because of personnel and departmental changes.

At the beginning of the fieldwork period I visited the B.J.A. office to explain my research. I was given information of the B.J.A.'s magazine, to which I subscribed for two years, and other publications. The Executive Secretary provided information and literature on the current activities of the B.J.A. and background information on the operation of the local industry. At this interview there was a development which was crucial for the thesis, when I was shown a photographic study of the Quarter which included studies of women workers. Contrary to my expectations it was evident that there were independent craftswomen in the Quarter, as well as in their historically-defined roles in the factories. Again, possible interviewees were suggested and later contacted for interview which enabled me to show the broader role of women in the industry and the local community.

The other formal institution directly linked to the local industry was the B.S.J.S. where I wanted to interview both staff and students about the role of the School in the community, and understand its current relationship to the industry. I used the occasion of one of the mapping trips to obtain permission from the acting headmaster to interview. I was given an informal tour of the workshops and made appointments to interview several students at a later date. Unfortunately when I returned two of the students had left and the letters I had written had not been forwarded. The acting headmaster had retired and departments were being run autonomously. I was advised to renegotiate entry through formal application to each head of department separately and the suggestion was made that the tutors would nominate a student representative from each year to be interviewed. An invitation to the School's Open Fortnight resulted, during which I could interview freely among a wider group of students, and without causing disruption to examination work. Prior to the interviews I visited the annual exhibition of their work held in the City Museum and Art Gallery in order to gain an insight into the work produced on different courses and at different stages of students' careers at the School. The School interviews were held in the workshops while they worked. No announcement was made by the course tutor and I explained my purpose to each student and assured them that they were under no pressure from either the School or myself to participate. Two students left one of the workshops during my visit, but

the others cooperated and were frank and friendly in their responses. Staff members were interviewed in the staff common-room and during the tea-breaks I was able to talk informally with other members of staff.

The Youth Training Scheme Management team was based in the B.J.A. offices. At the end of the interviews with them, my request to interview trainees led to my being taken directly to the School as my visit had coincided with one of the two days when they were doing coursework. I was introduced to the staff member and given permission to interview the trainees in a side office where the noise of the silversmithing class in progress was less. Again the purpose of the interviewees was explained to the trainees individually and I received their full cooperation. I did not complete them that day, however, and subsequent interview sessions had to be negotiated with different tutors.

A visit to the Polytechnic for their prospectus led to a brief meeting with the Head of Jewellery who gave permission for interviews with jewellery design undergraduates that afternoon. As with other undergraduates, there is no particular day on which a full complement of students can be expected to be present in the workshops, so I interviewed those who were present. These represented about twenty-five per cent of the second and third year students. Their responses indicated that the Jewellery Quarter, in terms of future employment or as part of their training, was of minimal importance to this group, and general conversation gave me no reason to

believe that they were untypical, so this sample was deemed sufficient. Further written enquiries to the Department in regard to student numbers, graduate employment and the male/female proportion remained unanswered. (2)

It was stated earlier that part of my fieldwork period coincided with British Jewellery Year, and it was through the Scheme Manager of the Youth Training Scheme that I heard of the revival of the annual conference as part of the celebrations. The manager arranged with the B.J.A. for me to attend as their guest and I received a useful package of literature which included the industry's own training survey. I used the opportunity to arrange other interviews, including one with one of the speakers who had been involved with the reorganisation of the Youth Training Scheme, and the editor of "British Jeweller" who later arranged for my access to back copies of the magazine and office space in which to work.

My introduction to the Union came through another researcher on a contemporary issue in the Quarter (3) who alerted me to the availability of material at the Economic Development Unit in relation to the Jewellery Quarter. The Assay Office arranged an interview with the ex-Assay Master who provided the literature referred to earlier.

These interviews at the formal institutions described above, and the collection of written material allowed me to build a broad picture of the industry both historically and currently and to plan the next stage of the fieldwork. A range of different perspectives on the research problem



were presented, and I had established contacts as well as sources during this time. One possibility for establishing an interview sample would have been from the membership of those institutions which had the closest links with the industry. This was rejected because it would have resulted in a bias to those who were members of the B.J.A. or who had trained at the School, both of which, it could be argued, might predispose them to be members of a sub-culture through membership. As membership of both the B.J.A. and the Union is relatively low among local firms with membership composed of particular groups of workers, this might have resulted in a skewed view of the occupational community. In the event the sample included members and non-members of these institutions, and some who had connections with the B.S.J.S. and those who did not, a situation more representative of the broader occupational community. The problem of obtaining entry into the workshops was therefore not solved through the formal institutions. This method would have made access to workshops simpler, but might have been restrictive in terms of the *research being perceived as sponsored by the formal institutions.*

#### The workshop interviews.

Four main problems surrounding the issue of the workshop interviews, which were to be the main source of material for the study. The interviews with the formal institutions revealed that neither the B.J.A. nor the Union involved significant numbers of firms or workers in the Jewellery

Quarter. It was therefore in the workshops that I hoped to find the nature of the communal aspects of the Quarter. My fieldwork problems centred around the crucial question of entry, of the type of questionnaire to be used, the choice of interview site and the mode of recording the interviews. In this section I want to discuss the reasons for the decisions taken in each of these areas.

i) Entry into a community.

There is little information in the studies of occupational communities to advise the researcher on how entry is gained into the community under study. Salaman explained how his biography gave him an interest in the two groups he selected, and showed how he obtained his sample from a branch of the professional association in the case of the architects (1974:64). The problems with this approach have been addressed. He did not explain how he contacted the railwaymen. Neither Dennis et al nor Hill indicate how they obtained their interviews, though the involvement of the respective unions is implicit. Bell and Newby (1971) argue that how entry is effected may give more insight into a community than a number of interviews, (1971:70) and although this was in relation to studies of residential communities rather than occupational communities, it will be shown that the decision made in regard to entry was a key factor in discovering the nature of the Jewellery Quarter community.

From the information gathered in the formal interviews it seemed that the structure of the industry would itself involve difficulties for the interviewer. I was conscious

that the area had been the focus for a number of surveys, which included interviews with firms, over a long period. These research projects were concerned with the I.I.A. programme and centred around physical improvement, refurbishment and more recently, tourism. I was therefore unsure of the response to requests for further interviews. A further consideration was that each firm would require individual negotiation, unlike entry into a single large organisation or factory. To the smaller firms their time was money in the very real sense that while being interviewed, their work was neglected. The working day in smaller firms is not strictly regulated by breaks but governed by the current work load, so for example, interviews could not be scheduled to coincide with lunchtime. Interviewees might be owners, but in the tradition of the Quarter the majority of them would be working owners rather than managers. According to the nature of the particular trade, the work is noisy, dangerous or delicate and not all interviewees could be expected to talk as they worked. There was the problem of the trade still being cyclical, which meant that, as with the academic year of the School, the interviews would have to take place in a certain time span. Security in the firms presented difficulties in terms of making "cold" calls because of the entry-phone system which many operate. These were the difficulties I could anticipate.

I decided that in the circumstances it would be preferable for my entry to be "sponsored", at least in the initial stages. In the early stages of the research I had

made contacts unconnected with the formal institutions who were possible key informants, and who could provide me with information on the protocol of the community, and with contacts. One was encountered during a research project I was employed on, and was an ex-student and former employee in the Quarter. Another was the photographer whose work I had seen at the B.J.A. office. Both were familiar with the workings of the firms in the Quarter and allayed some of my fears. They agreed to supply names of possible useful contacts, and I then drew up a short list of processors and producers of different classes of goods who were contacted by letter or telephone. I added others from friends with contacts in the trade as customers. From these initial interviews, the numbers began to expand as a result of the interviewees themselves suggesting firms to visit. As a result of an interview with a badgemaker, for example, I was able to meet the outworkers who performed the different processes on his work. He made the appointments for me and took me round to the firms to introduce me. He also made an appointment for me with one of his acquaintances in the Quarter. (4) A polisher was contacted through a mail order company who used him as an outworker, and in turn he sent me to other customers. Others telephoned around while I was in the workshops and arranged interviews. There are several pubs in the Quarter which it is not usual for women to go into alone. This problem was overcome when an interviewee invited me to join his friends at lunch-time. Here I met a number of people informally, which enabled me

to call in on other occasions.

Bell and Newby warn of the danger of being "captured" by key informants (1971: 69) and I was anxious to avoid the problem of bias which might arise from the informants' own contacts. The informants chose those whom they thought would be friendly, helpful and interested in the study. To avoid the bias which might result through my being directed by interviewees, I also approached those of whom I had read in the magazine, in newspaper cuttings, and the free magazine, and contacts given me by other individuals outside the Quarter. By this method I covered a sample of all the trades and processes present in the Jewellery Quarter to the best of my knowledge. The result was a sample dominated by the small workshops, which is representative of an industry dominated by these as was shown by the tables in Chapter Three. This is not simply because the small firms are producing components for a few major manufacturers as in the car industry for example, but rather that there are a number of small manufacturers who are served by small processors. Further, I was not seeking to study a particular firm or the industry as such, but the Jewellery Quarter as an occupational community. Thus the dominance of the small firm in the sample is justified by being representative.

ii) The interview site.

The site of the interviews was thought to be problematic due to the difficulty of workshop noise which would affect the quality of tape-recording. The possibility of

interviewing people in their homes, or at a location in the Quarter, possibly at the B.J.A. offices, was considered in the earlier stages. Conversation with the key informants led to the abandonment of both of these suggestions. The grounds for this were that interviewees would be more comfortable in their workshops on their own territory and that those from smaller firms would be reluctant and in some cases unable, to leave their workshops for this kind of non-work activity. To counteract the problem of workshop noise, notebooks were used, and notes taken in the personal shorthand which I developed as an undergraduate. The informants thought that, in addition to the practical difficulties of tape-recording, interviewees might be more comfortable with a notebook than with a tape recorder, but I have no personal evidence for this. Bulmer, (1988) commenting on tape-recording, argues that more attention should be given to tape-recording as influencing the course and outcome of the interview. He observes that more interesting material is revealed when the machine is switched off, (1988: 154) but this also applies to the use of notebooks. Often people were moving round the workshop explaining different processes to me as they talked, which would have presented another difficulty. Further, the use of a tape recorder presents a problem in the workshop because of the number of callers. The dilemma would have been whether or not to ask permission to continue the recording (Brown, de Monthoux, Guillet and McCullough 1976: 57). When these calls occurred I noted the call and added details later,

recording the nature of the call and content insofar as it pertained to communal activity, while omitting sensitive business information.

The decision regarding the interview site proved crucial to the study, as it was by observing the activity in the workshops during the interviews that the nature of the informal interaction which existed between firms could be located. Together with the activity observed during the mapping exercise, and through being "out in the trade" with some of the interviewees this proved to be a key component in the research process. The workshop interviews also led to the contacts which were described in the last section. During the interviews the day-to-day activity of the workshop went on as there was rarely room for separate space for the interviews. Callers, other workers, and office staff where these were present, often contributed to the interview. I was able to observe the roles of women in the workshops, where they were not independent workers, and understand how their roles allowed them access to the occupational community. Thus the interview site was in itself useful data. On completion of the interview I was usually invited to look round and see the work in progress, and I was able to talk informally to other workers present. Four interviews were held in management offices but these too were interrupted and the interruptions themselves again provided data. In the case of three interviews held at my home or office at the request of the interviewees, those concerned were officials of formal institutions which differentiated them

from the others.

After each of the workshop interviews I recorded my impressions of the interview and anything which had occurred after the notebook was closed and checked their legibility in one of the cafes in the Quarter (Moore 1977:98). After each interview, a letter of thanks was sent to the interviewee both as a matter of courtesy and to maintain the contact, and to protect my reputation as a researcher. Almost all interviewees told me to get in touch again if I needed more help, or to call in when I was next in the Quarter. Additional informal calls were made and I was received at the hatch and told the latest "news" as other callers were. These calls provided more data again recorded in the cafes afterwards, as I did not use my notebook in these circumstances. The informal visits and my connection with the Quarter ended at the beginning of autumn 1987, when it became necessary to begin writing the first draft of the thesis. This coincided with the onset of the busy pre-Christmas work period in the trades.

### iii) The interview schedule.

The type of questionnaire to be used was influenced by experience of structured interviewing and postal questionnaires. The suitability of this method for researching the Jewellery Quarter and the results of their adoption by other researchers led to the abandonment of these methods. The decision to use unstructured interviews was taken because it was more suited to the nature of the



research problem.

In the first year of the study I held two research assistant posts. The first involved interviewing using a tightly structured schedule designed to collect work histories with few open-ended questions. The other research used postal questionnaires. The latter survey achieved a high return but was directed to graduates with experience of analytical writing. The replies ranged from frivolity to extreme elaboration, and respondents modified the questions which made it difficult to extract the information required for coding. Because the topic of the research was the occupational community, it was decided that unstructured interviews would be the most suitable for eliciting the depth of qualitative material I would need, but that this should be structured under specific headings so that the same topics were covered at each interview. This "semi-structured" method gave the interviewee the opportunity to contribute in more depth, and to include past experiences or stories, although this will sometimes involve the collection of material which might not be *immediately pertinent*.

Postal questionnaires could have been used to supplement the data, but the type of information which the above method had revealed did not suggest that this would be satisfactory. The experience of others researching the Jewellery Quarter was pertinent. In 1970 Gilbert had achieved a 50% return to his postal questionnaire, (25) but in the period since redevelopment the local authority and other agencies had conducted a number of structured

surveys. The response to the industry's own survey, which had approached its national membership of 800, had resulted in only 86 firms agreeing to take part. Another researcher from a locally-funded agency had sent out 200 questionnaires to firms and drawn attention to the survey by fly-posting and advertisements in the free local magazine, but at the end of three months she had received only 22 replies. This method had weaknesses for my study, as the nature of the occupational community is such that the small firms are not interested in filling in forms which are not directly relevant to their business. Most of their dealings are based on a handshake and trust. This was recognised by the council. When conducting the grant information exercise, the Economic Development Unit had recognised the difficulties of getting responses from small firms with a variety of problems and operating in different circumstances, and often with no mechanism for dealing with additional paperwork, and undertook personal visits to combat this. When questionnaires are sent to any firm or institution there is the question of whose responsibility it would be to complete the questionnaire. The value of the responses might depend on this, and presents a problem beyond the control of the researcher. Brown et. al. (1976) have noted the difficulties of getting postal questionnaires in, particularly when there is a time limit, of the "badgering" of the firm and eventual necessity of going in and helping someone to fill in the questionnaire (1976: 114). In relation to this study, the questionnaire may have supplied supplementary

information but not the richness of data which arose from the opportunities for observation during the workshop interviews. Vidich (1971) comments on such questionnaire and survey methods;

"Theoretically a sufficient accumulation of such responses, when recombined, should add up to a total portrait of reality. In actual fact, the reality is not reconstitutable because it was from the very beginning a reality evoked in response to the research instrument". (Vidich, Bensman and Stein 1971: xi)

The use of postal questionnaires to gain more examples to add to the personal workshop interviews was believed, from my experience and that of others in the Quarter, to be inappropriate to discovering the nature of the occupational community, and was abandoned.

Respondents were not asked to keep diaries, again because of the attitude to paper-work in the firms which would make it an imposition. As with the questionnaires, there is the problem of time and whose responsibility it is to record the data. Another problem is the physical proximity of firms which are also competitive, and who might therefore be reluctant to complete such details as the volume of business conducted over a period of time or to be specific about customers in writing. The presence of an interviewer or observer does not seem to have this inhibiting effect.

The interview schedules were devised with questions

under specific headings which included work histories, training, attitudes to the B.J.A. and the union, family connections with the industry, and the site and occasion of social contact in the Quarter.

"If....you ask to speak to someone you have learned is likely to be a key informant and your contact discovers that this informant can give you half an hour of his time immediately you cannot reply 'Sorry but I need a month to review the literature and pilot my questionnaire'. One strategy for dealing with the 'instant ' interview .... you can design your interview schedule while the respondent gets you a cup of coffee, and worry later about the epistemological issues which this may raise". (Bryman 1988: 55)

My experience of this situation was related earlier. I had been in the habit of taking notebooks containing the interview headings since the mapping exercise. I thus avoided this difficulty, and was able to exploit the opportunities for observation or interview that presented themselves.

### Conclusions

The research took place in a specific geographical area, the limits of which were specifically defined by the mapping exercise. The methodological problem was gaining access to the working community and discovering the nature

of the occupational community. Approaches to the formal institutions and archive research provided the historical background and information on the structure of the local industry. The informal community was inaccessible by more formal methods of investigation used by other researchers in the Jewellery Quarter and this led to decisions in regard to the interview site and the form of the questionnaire. My former experience and that of other researchers led to the decisions taken on questionnaire design. A range of trades and processes were represented in the interviews and the bulk of these were small firms because of the prevalence of these in the industry. Entry was gained initially through informants with experience of the Jewellery Quarter who advised on workshop protocol and supplied names of possible contacts. The ability to claim acquaintanceship with an employee or a former researcher who had enjoyed good relations in the community was an advantage when requesting an interview by letter or telephone. Interviewees themselves acted as sponsors to other firms. These strategies resulted in an easier entry into the workshops than might have been obtained by a letter or telephone call from an outsider. To counteract bias "sponsored" contacts were complemented with those from other sources.

The detailed description of my research methods shows the close relationship which existed between the methodology and the aims of the study. While guidance for the researcher can be found in community studies the parallels cannot be taken too far when the researcher is

limited to visiting an area rather than residing or working in it. A further problem confronts individual researchers who associate themselves with specific institutions, such as the trade union, in order to gain access, or of obtaining work within the working community of the study. The problems include bias which must be both recognised and compensated for by other strategies. In terms of one's role as researcher, Habenstein argues that without a particular expertise in the particular field in which one is researching, the observer role is the most appropriate, and sustained interaction will compose the bulk of the field data. (1970: 119)

I have been critical of Salaman for the rigidity of his model which neglected the impact of historical events in shaping occupational communities. Although I was not aware of the nature of this particular occupational community until I began the fieldwork stage, the categories selected to form the questionnaire base allowed for data collection under broad headings, as proposed by Bulmer (1975: 84). In this instance, however, the headings were specifically related to the experience of working in the industry, and the interaction which took place there. The analysis of this interview material in conjunction with fieldwork notes of my own observations and experiences, and the broad base of archive material, revealed patterns which led to discovery of the nature of occupational community in the Jewellery Quarter. Thus the research practice and the research problem were closely related, in that the conceptual approach which was adopted

as a research tool allowed the discovery of the occupational community. The only way to establish that an occupational community existed was to find it, but there are no specific guidelines on how to go about this. At the time a research proposal of this nature is first planned the hypothesis and methodology can only be outlined in general terms. The reality has yet to be experienced, and Vidich argues that;

"During the research and his [sic] personal experience of it, the investigator is led into interests and problems that were initially outside the scope of his imagination, so that only with the passage of time does his own work become sharply defined. To the extent that the community sociologist responds to his own personal experience, he develops the techniques, methods and theories necessary to comprehending his particular data". (1971: vii)

This argument closely follows Blumer's plea for sensitising concepts referred to in Chapter One, and reflects my own experience in researching an occupational community. In retrospect the key decisions in the research design were those regarding the interview site and the unstructured interviews, together with the decision to conduct a mapping exercise. Bell and Newby have rightly described the community study as both a tool of social science and a research process (1971: 79). In the study of the Jewellery Quarter this has meant discovering what

occupational community meant in this particular instance as the fieldwork progressed. It was not self-defining in the sense that other organisations, such banks, hospitals, schools or factories might be. There was no formal bureaucracy or hierarchy to tap, and rather than a blanket permission from a manager, entry had to be negotiated with a number of different firms.

However much preparation is done, there are still events and incidents which cannot be anticipated. The instances of the co-operation of the interviewees in providing written sources and voluntarily expanding the list of possible interviewees could not have been predicted. In themselves these were evidence of the sense and experience of community which exists in the Quarter. The hypothesis thus developed during the fieldwork year was a result of my observations and of information gained at the interviews. This detailed description and analysis of my own research methods has included the fortuitous encounters in the research process in addition to the more formal methodology adopted, in order to show the significance of these in the research process. An important part of the research has included the recognition of these opportunities and a sensitivity to the informal protocol gained by careful questioning and discussion with the key informants. This resulted in the respondents' own acceptance of the study, and the informal and temporary inclusion of me as researcher into the occupational community.



## Notes.

1. Two businessmen had interviewed for the grants scheme, but one had since died.
2. Letters were sent to three different departments of the Polytechnic, with requests for information but despite follow-up letters and calls there was no response.
3. I had read a paper on unionisation in small firms and wrote to the author at the research unit to which he was attached, explaining my own work and requesting information on their work, which I received. This contact led to information on my work being passed to a former colleague of the author's who was working for an agency investigating low pay in the Jewellery Quarter.
4. The badgemaker had become friendly with a jeweller during visits to the bank. He was often invited to the workshop when the jeweller was working on something unusual. The badgemaker told him about the study, which resulted in my gaining a useful interview.

## CHAPTER EIGHT.

### CONCLUSIONS.

This study originated with the premise that the external features presented by the Jewellery Quarter in Birmingham suggested that the concept of occupational community would be an appropriate method of analysis to use in a study of the local industry. A review of studies of particular occupations indicated a wide variation in the factors which contributed to the communal aspect of work. Salaman (1974) attempted to synthesise these factors into a model which could be used to identify the presence of an occupational community in differing occupations and professions. Dissatisfaction was expressed with this model on a number of points. The most important of these was the fixed nature of the model which ignored the historical conditions which generated and continue to influence occupational communities. Factors which allow for the discussion of the role of women or ethnic groups, or the tensions within an occupation which can act in a variety of ways to shape or change a community were not incorporated. A key to a more flexible approach was offered by Blumer's (1954) paper advocating a sensitising use of theory to provide a wider set of references. Bulmer (1975) offered another set of characteristics which were appropriate to his study of mining communities, but rather than positing these as a narrowing checklist, he suggested that its value lay in the breadth of the factors, which

allowed for variation resulting from economic and political change. Using these guidelines, this study of the Jewellery Quarter encompassed a broad perspective, and used occupational community as a sensitising concept to explore the structure of the local industry and the pattern of social relations existing within it. The inclusion of historical material is not merely contextual, but is presented as an integral part of the thesis, relevant to the continuing presence of the jewellery and allied trades in Birmingham.

Using this historical material, the factors which led to the evolution of the jewellery industry in Birmingham and its localisation, were traced in Chapter One. The first of these is adaptability. The origins of the local industry lay in the differentiation of jewellery production from other metal working trades, itself a response to a growing market demand. This is the first example of what was to become the continuing adaptability of the local industry which had formerly served a predominantly agricultural community. Innovations in metal-working techniques and processes gave rise to an increase in the numbers of those involved in the toy trades. Birmingham became the focus for a skilled labour force unhindered by guild tradition, which was able to take advantage of changing demand resulting from the Restoration and the cessation of the wars with France. By the early decades of the nineteenth century, demand was sufficient for jewellers in Birmingham to be recognised as a separate trade. The ability to adapt to changing

markets, materials and fashion was constantly challenged throughout the nineteenth century, and increased foreign competition raised increasing problems by the end of the nineteenth century, but by this time the local industry had become consolidated.

The organisation of the trades is the second key factor in the Jewellery Quarter community. The capital cost of setting up in the trades was minimal, while the cost of raw materials was relatively high, and the trades were sub-divided from the outset, with an increasing number of workshops offering processes and services involved in the production of toys, silverware and eventually, jewellery. These outworking trades cannot be described as ancillary, but were integral to the whole production process. The tables in Appendix A give an indication of the adaptability of trades. Although some mass-production factories existed, they were by no means dominant and were also customers of the small processors. Thus sub-division was an original feature of the trades, and not a result of mass-production and the consequent de-skilling process as in other industries. Rather the industry demanded new processes and the adaptation of old skills, together with the incorporation of new technology. Sub-division meant that firms operated in an interdependent network, which was fostered by a further factor, that of the localisation of the trades.

Localisation in this context meant not only that the trades were active in Birmingham, but that over a period of time they became concentrated into a particular

area of Birmingham. An early concentration is apparent, on a smaller scale, in the 1860's, which became denser when the trades moved to their final location in which there was an abundance of accomodation for numerous small units of production. With the move to the Vyse estate we see the clustering of the trades into particular streets, with a core area housing small manufacturing jewellers and their supporting trades, and the move of the Assay Office into the area.

The consolidation of the trades in the area and the greater availability of materials and markets led to a growing confidence in the industry coupled with a concern for the training of skilled workers to meet the demand of the later years of the nineteenth century. With no guild tradition on which to build, employers in the area established their own Association to protect the interests of the trades, and provide a training facility for the renewal of the skilled workforce. The establishment of these local institutions by local employers is an indication of the confidence in the industry by the late 1880's.

The jewellery industry experienced slumps as well as booms, and at these times redundant workers were able to set up independently. The small amount of capital necessary, the limited space required for most trades, thus allowing the sub-letting of bench space and intensive use of accomodation, allowed many small firms to co-exist. Customers and services worked close to each other, because of the necessity for regular, sometimes daily contact.

With its base in small workshop production and craft skills, a geographically distinct area in which it was the dominant industry by the last decades of the nineteenth century, and the establishment of its local institutions, the industry was establishing the pattern of working practices which it would maintain with little variation over the next hundred years. This pattern incorporated the characteristics which could define it as an occupational community.

The disruption caused by the First World War and the slump of the depression years, coupled with wider opportunities for skilled workers in engineering enterprises in and near Birmingham, and changing markets, led to periods of contraction in the industry. The decades after the Second World War were marked by challenges to the physical environment with implications for working practices. Improvements in the area were regarded by the industry as crucial to the recruitment of young workers. Financial support for the B.J.A.'s own "industry-in-one-block" model could not feasibly be raised by the B.J.A. itself, but the City was primarily concerned with post-war housing and redevelopment of the city centre. Later plans put forward by the local authority were not specifically designed for the needs of the jewellery and allied trades, other than that they provided single units, but were regarded by the City as in keeping with the rest of their plan for Birmingham. There were long delays before these plans materialised, with resulting moves and closures. The Hockley Centre tower

block, with its high rents, was perceived by many small firms as alien to the Quarter. The conservation orders and the Industrial Improvement scheme of the late 1970's attempted to halt further decline through the eventual provision of small units at affordable rents as a more sympathetic solution to improved working conditions, but these have been colonised by a mix of non-trade firms, and the introduction of retail units into the area has proved a further challenge to which the industry had to adapt.

This period of disruption was followed by the recent recession which led to the demise of more firms, but some workers took the opportunity to set up independently, echoing the pattern of independence of the eighteenth and nineteenth centuries which the structure of the industry allows through sub-division. The tables indicate that although employment figures dropped, the number of small firms in the industry increased. In the Quarter, partly as a result of redevelopment and partly as a result of the national decline, the firms are now even more concentrated around the core streets established in the 1870's. In these streets, about a third of the national production of jewellery takes place. The local industry continues to survive and adapt, while retaining the organisational structure of the trades established in the previous century. It has survived the changes in markets, and the more recent changes in its physical environment, albeit there has been some contraction in its location and the industry nationally.

The analysis of the structure of the industry

showed how the organisation of work and the subsequent movement of goods around the Quarter provide opportunities for a number of different workers to engage in work-related social relations during the course of the working day. These contacts usually have an element of shared biography, arising from shared longevity in the Quarter, shared education or residence for some of the older workers, common training in firms or at the School, or through a variety of family contacts. These categories of contact are not mutually exclusive but frequently overlap. Work-related social contact is regular and occurs on a face-to-face basis at a number of locations "out in the trade", or at the workshop hatch. This element of regular contact in which a variety of workers participate, overrides skill, age and gender differences. Deriving as it does from long-established work practices, it is the basis for the argument that an occupational community in work can exist in an area in which there is not one dominant employer, but a variety of interrelated and often competitive trades, located in autonomous firms.

The factors identified in other monographs of occupational community were discussed in relation to the Jewellery Quarter. It was found that, while geographical proximity of work and residence had proved an important factor in mining and fishing, this link was weaker in the jewellery trades. Danger and insecurity were inappropriate to the nature of the work. The structure of the industry does not involve teamwork. Women workers were hidden in other studies, but this study incorporates women who have



historically been present in a wide variety of ownership, skilled and non-skilled roles and are active in the occupational community. Finally, whereas the other studies had shown that strength of union membership was an important factor in occupational community, in the jewellery trades, the hierarchical management structure which typifies other industries, is not the dominant model. Small unit production in which the "master-man" works alongside employees on the bench, is the norm and militates against union involvement. Despite these departures from other models, it was argued that a particular kind of occupational community at work was present in the Jewellery Quarter, and the concept of "leisure-in-work" was used as a starting point to identify its nature. Parallels with the shipyard were apparent in the legitimised movement of people around the Quarter, which derives from the communal organisation of work. It was argued that this movement and its resulting social relationships within the Quarter, together with the geographical proximity of the trades and the continued dependence on craft skills, were significant factors in promoting communality. Underlying these factors was the Durkheimian concept of non-contractual relations which have developed in the Quarter over a period of time. The flexibility of this pattern of social relations, and the exchange of information which takes place within them, were shown to be rooted in a work structure which allows participation in the occupational community across skill, age and gender boundaries.

The area of recruitment to the trades was covered in a separate chapter because it was regarded as crucial to understand how the trades reproduce themselves, an element insufficiently explained in Salaman's model or other monograph studies. In areas where a single industry dominates, it is assumed that sooner or later sons will follow fathers and other male relatives into the occupation, and instrumentality has been shown to be an important factor. It has been stressed throughout, however, that because of Birmingham's developing importance as a manufacturing and commercial centre, a variety of options in employment has always existed. Employers originally established the School but the use of this provision is not straightforward, partly because the School is subject to changes in state policy. Employers made it apparent that a small-firm industry experiences problems in terms of training, but the School is not perceived as fulfilling all their needs. The tendency therefore is to use the formal training provision selectively. Informal contacts through family and friends who are already in the industry provide a route into the industry where biography is important. This is possible for a variety of workers because of the nature of the occupational community and the informal social relations which are its base, which allows for the exchange of information about available work and workers.

Women workers have been invisible in studies of occupational communities, but it was found that in the Jewellery Quarter they have historically been a part of

the industry as owners, skilled workers and in their historic roles as low-paid workers in unskilled work. Their position in the jewellery and allied trades has been ambiguous. They have secured work because of their supposed biological ability for performing painstaking tasks requiring "nimble fingers", yet have found themselves to be victims of men's dominance in craft skills. The Union in the Quarter has been found culpable of aligning itself with employers and restricting women's opportunities in the skilled trades, and ensuring that, where they were able to enter these trades, their rewards were less. Opportunities for women have been generated by family connection and the establishment of the School, where women have been students from its earliest days. Locally, however, they continue to experience discrimination in employment as craft workers, and thus the community connection, through training or family is seen to be important for them. Historically, however, women have been owners and independent workers in the Quarter and are not consistently confined to "women's" trades. The varied capacities in which women are employed, and their roles as craftworkers and owners, enables them to be active participants in the occupational community. Thus women are not equal in terms of work in the Quarter, and occupy an ambiguous position in a trade which is craft-based and where the ideology of women evolved in the nineteenth century persists, and continues to influence their job opportunities. Nonetheless their presence enables their participation in the social relations within

the occupational community.

The problems of researching an occupational community were described in the methodology chapter. This indicated the close relationship which existed between the substance of the research and the methodology. Thus there was the initial technical problem of defining and checking the geographical area of the Quarter, to which the mapping exercise was a response. The discovery of the nature of the community itself was more problematic. The formal institutions of the B.J.A. and the Union were not dominant focal points for interviewees. However, the broad concept of occupational community which was employed overcame the problem, in conjunction with the selection of the research methods. Archive research used historical and contemporary material which covered a range of issues in Birmingham and the local industry. Interviews were conducted in workshops in the Quarter, in preference to the use of postal questionnaires, and these provided a range of data beyond that obtained by the interview itself. The interviews ranged over a broad range of issues, which included work histories, and it is argued that this method gave an insight into the way in which the occupational community worked at a level other than that of the market. Key informants provided background information on the protocol of the Quarter which determined the type, timing and site of interviews. The availability of material from respondents was an unexpected source of data. It is argued that the open-ended approach which was adopted provided a richness of data, unobtainable by more formal methods,

which supported the claim that the Jewellery Quarter is an occupational community.

#### Theories of small firms and flexible specialisation.

The Jewellery Quarter has existed as a working community for over a hundred years. It is an industry which has maintained a particular form of production characterised by being small-scale, localised and based on hand craft skills and with a particular division of labour. A key feature of the local industry is that a "Fordist" organisation of production, defined as large-scale mechanised manufacture, has not been adopted to any extent in the local industry. In order to explain why the industry has followed this path rather than the route of industrial development characteristic of many other industries, it is proposed to examine three theories which attempt to explain the long-term survival of small firms in industrial capitalism, and to analyse the degree to which these theories explain the survival of the Jewellery Quarter. Bechhofer and Elliott (1981) offer a theory of the petit bourgeoisie which includes small manufacturing firms. They stress the dependancy of such firms on large business and the social marginality of their owners. Curran's (1986) theory of the survival of small firms shares many features with that of Bechhoffer and Elliott but the emphasis is shifted from dependancy to the interrelation of small and large business. Piore and Sabel (1984) see a particular kind of small firm as one alternative to Fordism. Their emphasis lies in the

"flexible specialist" firm within socially organised industrial regions. In each case these three theories seem at first sight to be applicable to the Birmingham Jewellery Quarter. However, closer inspection reveals that none of them satisfactorily explains the survival of the Quarter and its characteristic form of industrial organisation from the 1860's to the present.

Bechhofer and Elliott (1981) are concerned with small firm owners as members of the petite bourgeoisie and the political significance of this stratum. The focus upon the petite bourgeoisie in the national class and political system goes beyond the limits of this study, but the authors do make claims in regard to the survival of this diverse group of small owners. The defining features of the petite bourgeoisie should first be noted. To Bechhofer and Elliott the main characteristic which they identify is the ownership of petty property;

"....it is property which they work themselves. It is their labour and very frequently that of their families and kin, that they mix with this property and though a good many also become the employers of hired labour, the scale of that exploitation is typically very small and is an extension of, rather than a substitute for, their own labour " (1981: 183).

They describe the social relations which typically exist in small firms, emphasising the role of family which in

large-scale industries is "sharply segregated." Because of the involvement of family there are few employees, and work relationships are "highly personalised" as these workers are often friends or neighbours and thus "there are non-contractual elements in the relationship" (1981: 194). This enables negotiation to be individualised rather than a union acting as an intermediary. This can result in low pay, but Bechhofer and Elliott argue that workers often choose to work in these small enterprises. The "long hours, exiguous rewards and poor conditions" which typify many small firms are tolerated by the workers who hope to achieve eventual independence (1981: 195-196). Among the groups such as small retailers, farmers, restaurant and hotel owners, who can be described as members of the petite bourgeoisie, Bechhofer and Elliott include the owners of small workshops, and it can be seen that the characteristics which they describe are appropriate to the jewellery manufacturers and processors. If this is so, then the rest of their theory accounting for the survival of the stratum should explain the persistence of the industry and its specific features.

The authors give two broad reasons for the survival of this stratum, The first relates to the place of the stratum in the national economy and politics, the second to the kind of individual entering small business. To Bechhofer and Elliott the small firm sector as a sector is characterised by its adaptability to change. They describe the stratum as a chameleon, in that the nature of small businesses is continually varying. The

stratum survives but its component units change over time. The reason for this is that the stratum is dependant upon large scale economic enterprises, with the small firm sector filling in where large business does not care to operate. Thus small firms are seen as dependant and supplementary to the wider economy (1981: 185). Politically they are also a dependant group, manipulated by politicians who can encourage them to retract or expand according to the wider needs of the economy and employment goals (1981: 188). Politicians also use the petite bourgeoisie as a vehicle for political rhetoric. The second reason for the survival of the petite bourgeoisie relates to those who enter the stratum whom they describe as "the dispossessed." These include those from both the rural and working class seeking to escape disadvantaged backgrounds, and victims of economic depressions, technological change and the machinations of big business (1981: 186).

The explanation of the small firm as adapting to an economic agenda established by larger industry is not applicable to small firms in the Jewellery Quarter. The jewellery industry in Birmingham has not been chameleon-like, matching itself to large-scale industries. Rather it has specialised in jewellery production since the mid-nineteenth century, and while the range of product has been adapted to the market, the production of jewellery and allied products has remained constant. Further, it is not the case that small firm jewellery production has operated at the low profit margins of large



scale economic enterprises. There have been and still are (relatively) large scale enterprises involved in jewellery production and distribution. But the reason why small scale manufacture has remained relates to the particular nature of the product, not to the marginality of the small firm, dependant upon the crumbs left by big business.

The survival of the small firm stratum via political dependancy again does not apply to the Jewellery Quarter. It is noticeable that Bechhofer and Elliott's example of governmental material support are drawn from non-British sources such as Canada and Poland. Chapter Three above described the inappropriateness of state planning to the Jewellery Quarter. Bechhofer and Elliott's main reference to Britain relates to the political fashionability of small business in the last ten to fifteen years. The key point here is that the Birmingham Jewellery Quarter industry has continued on a small firm basis since the 1870's and can hardly be explained by a relatively recent strand of political ideology.

Entry into small firms as described by the authors is also a contentious issue in relation to the Jewellery Quarter. It has been shown that those who are self-employed or small employers in the trade do not enter from other industries. Redundancies and gratuities have played their part in self-employment in the decision of some to enter this stratum, but all have received their training within the industry and training is crucial to the small firm. Neither can the group be identified as

being drawn from those who are discriminated against on grounds of race or ethnicity. Thus, although the firms in the Jewellery Quarter share many of the characteristics of the stratum of the petite bourgeoisie as described by Bechhofer and Elliott, the reasons for their survival and persistence are not explained by their theory.

Curran (1986) has continued the debate on the survival of the small firm, modifying some of Bechhofer and Elliott's arguments. He amends the characteristics outlined by Bechhofer and Elliott to include the use of technology, in which Bechhofer and Elliott tend to assume small firms are backward. He also allows a rather greater role for bureaucratic rather than personalised organisation because of "external forces such as credit agencies (banks), the state or powerful organisations such as suppliers and customers" (1986: 212). But these definitional modifications are marginal and again his definition of the small firm is applicable to the firms in the Jewellery Quarter.

Curran's account of the reproduction of the small firm is cast in terms of economic, political and social and cultural forces. Economically, unlike Bechhofer and Elliott, he does not regard the small firm sector as marginal, or competitive with larger firms, but integrated into a wider economy through acting as sub-contractors and innovators for larger firms (1986: 215-216). Economically the small business exists and reproduces itself as a result of mass production. Politically a fragmented group, Curran argues that the small business sector has been

aided indirectly by government measures which result in opportunities for small businesses. While these are structured by the state in other countries, Curran argues that positive policies are now being developed for Britain. Curran argues that the lower middle and skilled working classes have entered the small business sector as a legitimate escape from punitive taxation (1986: 219).

Curran's social reasons for the survival of the small firms echo Bechhofer and Elliott's characterisation of entrants to the stratum. The sector reproduces itself, according to Curran, partly through family inheritance, including the inheritance of aspiration, but mainly through membership of socially marginalised groups who lack education or are discriminated against because of race, ethnicity or gender. Others enter as a result of the introduction of new technology, and the resulting de-skilling (1986: 222-223).

It has been agreed that the descriptive characteristics of the small business as described by Curran fit the small firms in the Jewellery Quarter. Once again, however, his explanation of how small firms survive does not apply. Economically, the small firms of the Quarter are interrelated with each other, and are not sub-contractors to large firms, or innovators routinely swallowed up by large firms, or offshoots of large controlling organisations. Neither do they exist simply at the quality end of a mainly mass produced market. Politically, there has been little or no help for small

business which the firms in the Quarter have benefitted from. Rather, the imposition of VAT for example, has been detrimental to their business, and one is reminded of their fruitless lobbying of the post-war government against purchase tax which was burdensome to many of the small firms. Just as in the case of Bechhofer and Elliott, recent political trends highlighted by Curran do not explain the survival of the Quarter for almost a hundred and fifty years. Finally, the perpetuation of the industry through family and inheritance is applicable, but it still more complex than Curran allows. The industry is dependant on a large number of skilled trained workers, and the family, as has been shown, combines training within the firm with the training available at the School in many of the skills and processes. Neither race, ethnicity nor gender discrimination contribute to the survival of the firms by allowing these groups to enter into the industry by virtue of their displaying these features. The arguments against Bechhofer and Elliott apply here to Curran. Jewellery manufacture and the allied trades cannot be entered as a result of redundancy unless there has been specific training.

Neither Curran nor Bechhofer and Elliott examine the industrial organisation of small businesses. They discuss labour organisation, in their description of the particularistic social relations which exist in small businesses. What they do not consider is the particular form of organisation, peculiar to certain industries, which makes them viable over time. By using the theory of

occupational community to look at working practice in the Jewellery Quarter it has been clear that the organisation of production of the industry and the social relations which result from this, are a key factor in the survival of the firms and the persistence of the industry in Birmingham. The organisation of production is discussed by Piore and Sabel (1984) in their historical examination of craft production versus mass production in Europe, Japan and the United States, and it is to their work that we now turn.

Piore and Sabel have identified a resurgence of small firm production as a possible hope for the future in advanced industrial countries. They argue that the persistence of small firms and short production runs challenge the inevitability of the form industrialisation has taken, and use examples of craft systems in Western Europe to argue that mass-production was not an inevitable result of technological advance. They demonstrate that these industrial districts were economically independent of mass-production and were innovative in their use of craft and technology in response to rapidly growing and changing markets (1984: 5) Piore and Sabel argue that the global market crisis is an "industrial divide", a point at which there is a choice in the way technology and production are used and organised. The first of these occurred in the Industrial Revolution, when the new technology resulted in mass production which originated in Britain, was taken up by the United States. This supplanted the "less rigid" regional craft systems of

Western Europe, characterised by cooperation and competition which produced goods for a constantly growing and changing market and introduced new products, adapting technology to particular tasks. Both craft and mass production systems developed institutional support systems to stabilise production and consumption, described as macroregulatory and microregulatory, which have experienced crises of destabilisation. The first was associated with the rise of large corporations in the late nineteenth century, and the second the crisis of the Keynesian welfare state (1984: 5). They discuss the crises associated with mass production and its regulatory system, including the role played by the state, in France, Germany, Italy, Japan and the United States. They suggest that an alternative to the strategy of multi-national corporations dispersing production to Third World countries is flexible specialisation. These are described as "networks of technologically sophisticated, highly flexible manufacture" in which there is "a strategy of permanent innovation; accomodation to ceaseless change rather than an effort to control it". At the base of flexible specialisation in central and north-west Italy, for example, they find:

"flexible multi-use equipment, skilled workers and the creation through politics of an industrial community that restricts forms of cooperation to those favouring innovation. For these reasons the spread of flexible

specialization amounts to a revival of craft forms that were emarginalised at the first industrial divide" (1984: 17). 7

It is not proposed to offer a critique of Piore and Sabel's general theory which has been addressed elsewhere (Murray 1987, Rose 1987 Pollert 1988), but to describe the characteristics of flexible firms and microregulatory systems in relation to the Quarter as an attempt to explain its survival as a viable industry.

Piore and Sabel identify three forms of microregulation. The first of these was municipalism, which supported silk production in Lyons, ribbon, hardware and bicycle production in St. Etienne, and edge tool production in Remscheid. In these areas the municipality protected the small firms against market changes, provided access to skill and knowledge and ensured fair competition. In Lyons, for example, loan banks were created for silk weavers, in St. Etienne funds for unemployment insurance were raised through local taxes, and in Remscheid, Solingen and St. Etienne the municipality provided vocational schools to renew the workforce (1984: 31-33). The second form of micro-regulation was welfare capitalism or paternalism which operated in large firms formed from groups of skilled workers grouped under one roof. Here they shared expensive equipment which could not be afforded individually, but were not engaged in mass-production. Examples of this form of organisation were the speciality

steel factories of St. Etienne, the cutlery industry of Solingen and silk production in Lyons. These groups of small firms provided many of the advantages which existed under municipalism, as in the example of the calico printing firms of Mulhouse who founded their own research laboratory and chemistry courses (1984: 34). The third example of the flexible use of local resources was the family system, developed by Motte in textile production in Roubaix. This was a system of family firms, each run by a family member together with a trained technician. The family provided capital and maintained "a system of common financial reserves, markets and purchasing." Each factory specialised in different phases of production, was innovative and expanded its own markets (1984: 34). Some of these systems of microregulation survived until the Second World War and after, the Lyons example continuing up to the introduction of the French economic modernisation programme of the 1960's.

Piore and Sabel develop a model of a modern form of flexible specialisation which similarly depends on the creation of systems of microeconomic regulation. The function of these is to solve problems of gaining and deploying capital in new ways which require cooperation for stability over the medium term. They identify four flexible specialisation systems from past and present models. The first of these, and the one which is most appropriate in relation to the Jewellery Quarter, is the example of regional conglomerations of small independent enterprises. The second form is that of federations of



large, loosely allied enterprises functioning like the Motte system, and federated Japanese firms, which depend on family or family-like relations within firms sharing financial and marketing facilities. The third and fourth systems are "solar" firms of larger corporations, and workshop firms such as those in the past models of the steel plants of St. Etienne, and the calico producers in Mulhouse (1984: 267).

Piore and Sabel describe the characteristics of the regional conglomerations:

"Each of these industrial districts is, or was, composed of a core of more-or-less equal small enterprises bound in a complex web of competition and cooperation " (1984: 265).

The industries in these areas are based on short-term contracts, with a mix of supportive institutions. Piore and Sabel argue that the community relationship is based on strong ethnic, political or religious ties. Their examples of regional conglomerations are the New York garment industry and firms in the Third Italy.

These examples are not easily paralleled within the Jewellery Quarter. There the current supportive institutions have been identified as the B.J.A., the School, the Union and, more recently, the City. The extent of their involvement shows marked differences with that experienced in the example given by Piore and Sabel in the Third Italy. The B.J.A. has continued to fulfil its

lobbying role and promotes the industry's products through national and international fairs. It provides benefits for its membership which typify any professional association, with additional trade-specific services. It retains its connections with the School and negotiates voluntary wage agreements with the Union. As in the past, however, it does not operate as an active force in the local community in terms of promoting cooperation, as a source of financial support or as a forum for research and development, and its membership is used instrumentally by some. The union has experienced difficulty in obtaining support from workers in the small firms which it has not succeeded in overcoming. The localised nature of the firms, which offers other opportunities for dissatisfied workers, and in which self-employment is an option because of low capital requirement, and the structure of the industry are factors which militate against union involvement. The wage agreements remain voluntary, and it was absorbed by TASS in 1981, so there is little likelihood that its future role would parallel that of unions in the garment industry in New York and the Third Italy.

The Jewellery Quarter has been of concern to the City in terms of its physical regeneration as part of the overall plan for the City, though plans discussed in the 1940's in conjunction with the industry were attempting to link the improvement of working conditions with recruitment to the industry. The jewellery and allied trades as an industry, however, have not been given

priority in the leasing of the City-owned low-rent small workshop units. Currently the City is using the historic tradition of the Quarter in the promotion of the City as an attractive tourist and conference venue, but it cannot be argued that there is a positive local input to the survival or direct promotion of the industry as a working entity on a regional or municipal basis.

The formal institutions, therefore, do not parallel the examples which are given by Piore and Sabel in either the New York garment industry or the Third Italy engineering examples. It is the community within the industry which has provided informal support, in the grouping of those in a particular trade to prevent undercutting, for example, or to provide workshop space or employment for individuals. Piore and Sabel go on to argue that:

".... it is doubtful whether regional conglomerations can survive without community ties, be they ethnic, political, or religious" (1984: 266).

This has demonstrably not been the case in the Jewellery Quarter. Rather the localised nature of the industry has worked in conjunction with the interdependence of the trades to promote a particular form of supportive relations, where the tie is participation in the localised industry. This has led to informal agreements among groups of craftworkers and firms to arrive at some accomodation

in areas of common concern.

The family is another support system which has been identified by Piore and Sabel as both socialising and training new members of craft communities which sustain flexible systems, and also as an innovatory force in the second generation of a family firm (1984: 274). The evidence from the Jewellery Quarter supports this argument up to a point. The family has been an important factor in sustaining the industry, but as with other employers, the family use the School selectively to support the training of family members. The second point, that successive generations introduce innovation, is too generalised. In Jewellery Quarter firms, this has been the case, but it is also true that there are variations. Some founders refuse to grant a valid role to successive generations, or confine them to general managerial roles. Often first-generation firms are themselves innovative as a result of experience as employees, while in very small firms, innovation might be inappropriate. The problems of the second generation being "educated out" of the trades altogether, or of the lack of "heirs" to the business, is not addressed by Sabel and Piore, but is the experience of many small firms. Currently, families are smaller than in the early years of the Quarter, and education opportunities as well as job opportunities are wider than in previous generations. So the mix of family and School-trained craftworkers continues to provide the workforce, and innovation is not always a necessary component of the process.

The Jewellery Quarter of the nineteenth century exhibited many of the features of Piore and Sabel's industrial region model. Its adaptability to constantly changing markets was described in Chapter Two. Within the industry, however, the labour process remained mainly specialised and the processes sub-divided, carried out in small, individually owned workshops in which small batch short contract production was carried out. Industrial change in the nineteenth century, while it brought a degree of technology into the industry, did not convert the organisation of production in the trades to mass-production, nor did large parts of the industry adopt Fordist methods. Rather, it allowed the development of small workshops and enabled craftworkers to adapt their hand skills. This model has remained at the core of the industry. Piore and Sabel argue that flexibility is the ability "continually to reshape the productive process through the rearrangements of its components", while they are specialised in that "the set of possible arrangements is bounded and the aim of redeployment limited" (1984: 268-9). The Jewellery Quarter demonstrates that this flexibility is not confined within firms, but exists between firms in a localised context, and that this system of sub-division is functional to an industry in which the raw materials of the product are a high part of the costs.

Computer technology has not made great inroads in the present period, though it has been introduced in those areas where it is cost effective and in which relatively large batches can be processed, such as

casting, plating and stamping. However, only 8% of firms interviewed for the trades' own survey were using computer-aided machinery (The Goldsmiths' Company and British Jewellers' Association Survey 1986: 8). Piore and Sabel admit the limitations of computer technology in relation to the cost of a craftworker with tools which do not need modification, but argue that developments have improved this facility, giving examples of their use in small flexible factories in Japan and Italy (1984: 260). But this is not appropriate to the structure of the jewellery industry, comprised as it is of mainly very small firms, in which the cost of technology would not be effective. Moreover the product itself is both ornamental and an investment at the medium and high class end of the range, with an intrinsic value of its own. In this context, the handmade element is part of its value to the customer. So the use of technology is, as it has always been, selective, rather than flexible in the sense that Piore and Sabel advocate. Piore and Sabel further advocate the advantages of a multi-skilled workforce, but the skills in the Jewellery Quarter are specialised to the product. They can be transferred to other manufacture - precision tool and instrument manufacture for example, but the worker would not then be a jeweller, silversmith or engraver. The flexibility of the specialism is thus in the worker, and can be diversified up to a point within the industry, but only if the nature of the industry changes can the skills be flexible as defined by Piore and Sabel. The industry remains dependent on its specialists, rather

than on a multi-skilled workforce, which makes for a serious departure from their model.

A closer examination of Piore and Sabel's theory, which at first seemed applicable to the Jewellery Quarter, is shown to have some ambiguity for the jewellery industry in terms of flexible organisation of production, of a flexible workforce and in the introduction of flexible technology, raising questions about their definitions. The Jewellery Quarter is based on craftworkers who retain many of their handskills, and an historically established division of labour, in which specialisations rather than flexibility continue to be important because of the nature of the product. It has not remained in a nineteenth century time warp, however, but has demonstrated a constant history of adaptability in its response to markets and the use of new technology and fashion changes. This occurred, not through the provision of a multi-skilled workforce, but through a form of work organisation which remains sub-divided, specialist and interdependent, and for whom adaptation and limited innovation has resulted in a widening of specialisms. The support of formal institutions particular to the industry, and local government plans for the area, have varied in the degree of significance at different historical periods but have not provided the type of protective infrastructure envisaged by Piore and Sabel. The nature of cohesion lies outside the economic, cultural or ethnic model. The key support system in the Jewellery Quarter is informal, and based on those social relations which derive

from the interdependence of the sub-divided firms, and which have been reproduced over time.

Each of the above theories presented aspects of small firms and their survival which appeared to relate to the Jewellery Quarter. None have satisfactorily answered the question of the survival of the industry. Piore and Sabel's work has gone further than the others, broadening the economic model and using an historical perspective to examine social relations and characteristics of small craft firms to explain how they work, and in this respect, this thesis is in agreement with their approach. A further development would include an analysis of the constituents of the communal links between firms, and the nature of the support in these, beyond formal institutions and formal social ties. An analysis of the link between product, production and producer in a particular industry like jewellery reveals the limits and ambiguities of the model as they define it. The petite bourgeoisie and small business theories have argued that small firm persistence as a sector of the economy is due to cultural or economic marginalisation. Neither of these models can be generalised to all small firms and the application of the theories to the Jewellery Quarter model has highlighted the different factors which are at play in one particular industry. The concept of occupational community applied to this sector indicates that there are factors other than economic, ethnic, educational, political or religious marginalisation, and that among autonomous firms there is a non-contractual relationship which develops from their



interdependence. Such a system appears to operate between small builders, for example, and was a feature of the Sheffield cutlery trade (Pollard 1959) but currently there is little work in this area with which to compare the jewellery industry.

This study has applied the theory of occupational community as a conceptual tool to a localised industry made up of many autonomous firms linked to a single industry which produces a range of goods within one product type. The theory has been used broadly to find a way forward from a fixed model of characteristics and variants. This approach has allowed the historical conditions which generate occupational community to be explored, and shown that the historical pattern continues to exert an influence on the occupational community. The concept has allowed a more detailed analysis of the way in which occupational communities reproduce themselves both formally and informally over time, and has revealed the ways in which women, previously hidden in occupational studies, are present in the occupational community in work. The application of the concept to a localised industry of interdependent small firms, rather than a large single-industry occupation has been neglected, but I would suggest that this is a rich area of research which adds to our understanding of the development of social relations between small enterprises which enable their survival. Therefore it is argued that this use of the concept of occupational community has a contribution to make to the theory of small business survival which is

being regarded increasingly by policymakers and economists alike as an area of growth.

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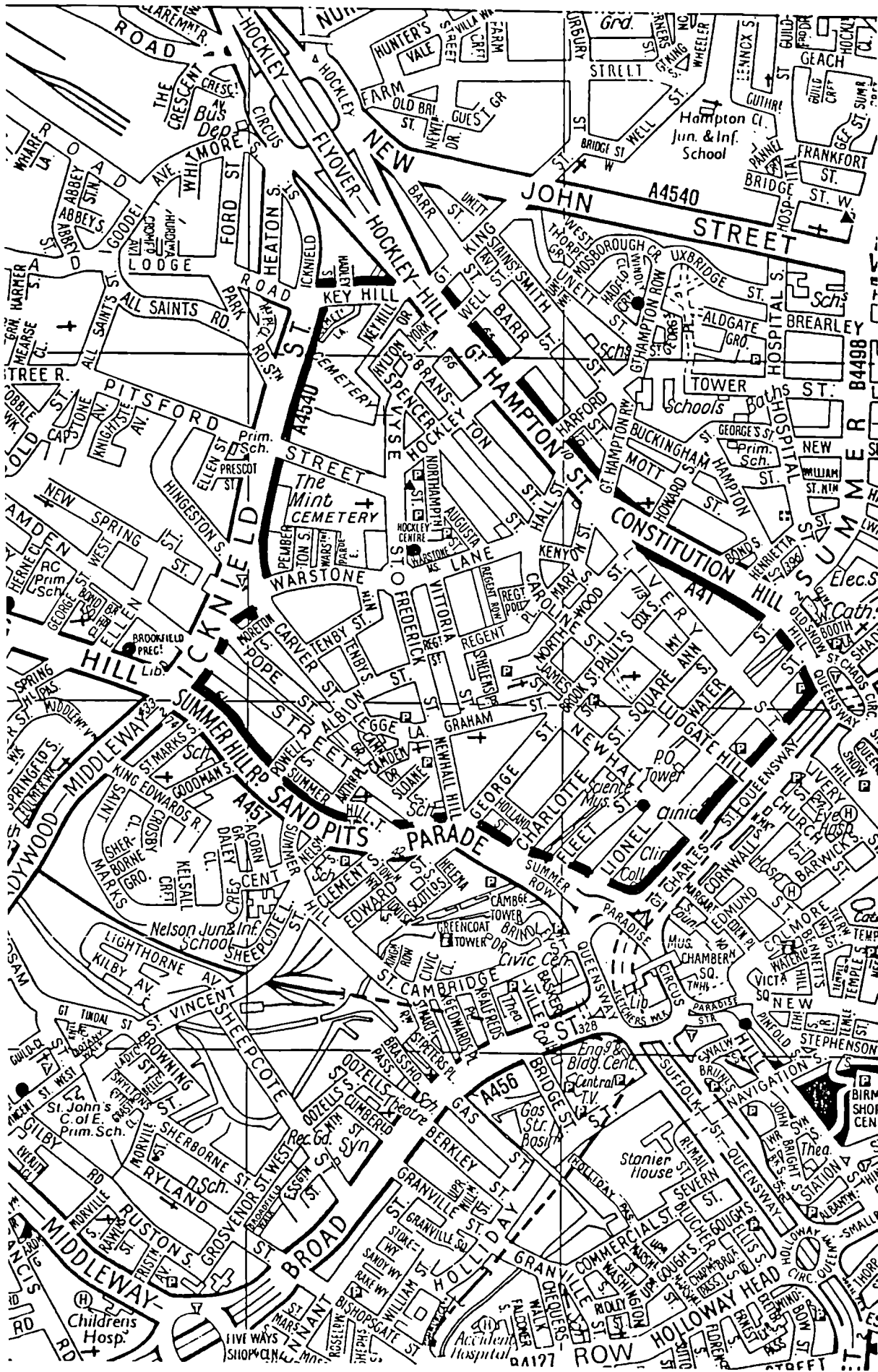
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## APPENDIX A.

Appendix A consists of a series of tables which quantify the numbers of jewellery, silverware and allied trades establishments by street in the Birmingham Jewellery Quarter, and the numbers involved by main trade practiced.

The period covered is from 1850 to 1987.



Map - Birmingham Jewellery Quarter 1987 - (Scale 4" - 1 Mile).

TABLE 1.

Numbers of firms associated with metal working, jewellery  
and toy manufacture recorded in Birmingham 1770.

Trade	Number
Button makers	93
Gun part makers	53
Toy makers	50
Buckle makers	42
Platers	40
Die-sinkers and engravers	28
Jewellers	26
Watch makers	19
Smiths (unspecified)	17
Sword makers and Cutlers	13
Lapidaries	9
Wire workers	8
Gilders	8
Stampers	2
Metal refiners	2
Total	410

Source: "The Streets and Inhabitants of Birmingham in 1770."  
Reprinted from Sketchley's and Adams's Tradesman's True Guide and  
Universal Directory. MDCCCLXXXVI.

TABLE 2.

Distribution of jewellery firms in Birmingham - 1850.

Street	Quarter firms (1)	Peripheral firms (2)	Rest of Bham firms (3)
Gt. Hampton Street	33		
Spencer Street	17		
Northampton Street	1		
Vyse Street	10		
Caroline Street	25		
Regent Place	11		
Unett Street		9	
Mott Street		9	
Gt. King Street		5	
Hockley	7		
Regent Parade	5		
Howard Street		11	
Brearley Street West		7	
St. Paul's Square	17		
Upper Hockley Street	2		
Gt. Charles Street	11		
Richard Street		3	
Hockley Street	5		
Smith Street		5	
New Street			6
Barr Street		2	
Kenion Street	2		
Newhall Street	13		
Key Hill	1		
Branston Street	2		
Frederick Street	1		
Bristol Street			2
Smallbrook Street			4
Ann Street			2
Constitution Hill	10		
Brook Street	3		
Well Street		2	
Hospital Street		6	
Essex Street			6
Summer Lane		6	
Mary Ann Street	6		
Grosvenor Street West		2	
High Street			2
Bull Street			2
Gough Street			2
Horsefair			2
Cox Street			5
Hampton Street	10		
Edgbaston Street			2
Newhall Hill	4		
Parade	2		
Lionel Street	4		
Buckingham Street			7
Sub-total C/F	202	67	42



Table 2 (continued).

Street	Quarter firms (1)	Peripheral firms (2)	Rest of Bham firms (3)
Sub-total B/F	202	67	42
New John Street		6	
Upper Tower Street		5	
Hall Street	6		
Ludgate Hill	7		
Pope Street	1		
Mary Street	2		
Camden Street	3		
James Street	2		
Livery Street	1		
Weaman Street			7
Little Charles Street		2	
Mount Street			7
Total	224	80	56

Source: Derived from Francis White and Co. History, Gazetteer and Directory of Warwickshire, 1850. Sheffield, John Bolton.

Notes;

1. The first category tabulated, "Quarter firms", enumerates jewellery related firms in those streets defined as representing the Jewellery Quarter by Wise (1951).
2. The second category, "Peripheral Firms", enumerates jewellery related firms in those streets adjacent (within 800 yards) to the Jewellery Quarter.
3. The third category, "Rest of B'ham Firms", enumerates jewellery related firms in the remaining streets of Birmingham.
4. Of the 360 firms registered in Birmingham in 1850, 62% were within the defined Jewellery Quarter, 22% adjacent to the Quarter mainly to the east of Great Hampton Street, and 16% scattered over the remaining area of Birmingham.
5. The Jewellery Quarter defined by Wise is that area;  
South-west of Gt. Hampton Street,  
South-east of Icknield Street,  
North-west of Great Charles Street, and  
North-east of Summer Row.

This area is marked on the map at the beginning of this appendix.

TABLE 3.

Numbers of firms associated with jewellery manufacture  
in Birmingham in 1850.

Trade	Number of firms
Jewellers and Goldsmiths	181
Jewellery stampers	4
Lapidaries	17
Medallists	3
Precious stone dealers	7
Silversmiths and fancy toy makers	28
Gilders	8
Gilt toy makers	23
Gold beaters	6
Jet & black ornament makers	14
Gold cutters	5
Electro-platers	1
British plate / German silver makers	17
Engravers and enamellers	46
 Total	 360

Source: Derived from Francis White and Co. History, Gazetteer and Directory of Warwickshire, 1850. Sheffield, John Bolton.

TABLE 4.

Distribution of Jewellery firms in Birmingham - 1861.

Street	Quarter firms (1)	Peripheral firms (2)	Rest of Bham firms (3)
Gt. Hampton Street	51		
Spencer Street	40		
Northampton Street	30		
Vyse Street	27		
Caroline Street	34		
Augusta Street	19		
Regent Place	19		
Unett Street		22	
Warstone Lane	20		
Mott Street		13	
Gt. King Street		18	
Hockley	10		
Regent Parade	9		
Howard Street		14	
Snape Street			8
Brearley Street West		8	
St. Paul's Square	9		
Bull Street			6
Upper Hockley Street	10		
Gt. Charles Street	11		
Richard Street		5	
Barr Street West		5	
Hockley Street	10		
Smith Street		7	
St. George's Place		4	
New Street			4
Carver Street	4		
Barr Street		11	
Kenion Street	5		
Newhall Street	10		
Gt. Colmore Street		6	
Vittoria Street	7		
Key Hill	4		
Branston Street	10		
Bath Row			3
Hylton Street	5		
Frederick Street	6		
Harford Street		2	
Bristol Street			2
Smallbrook Street			2
Farm Street		2	
Ann Street			3
Regent Street	2		
Northwood Street	5		
Constitution Hill	9		
Brook Street	3		
Worcester Street			2
Sub-total C/F	369	117	30

Table 4 (continued).

Street	Quarter firms (1)	Peripheral firms (2)	Rest of Bham firms (3)
Sub-total B/F	369	117	30
Ward Street		2	
St. George's Crescent		2	
New John Street		4	
Nelson Street West			2
Union Passage			1
Upper Tower Street		3	
Dale End			2
Cross Street			1
Bath Passage			1
Icknield Street	3		
Hall Street	4		
Ludgate Hill	6		
Broad Street			1
Newtown Row		1	
Pope Street	1		
Snow Hill		1	
Mary Street	2		
Guest Street		1	
<b>Total</b>	<b>385</b>	<b>131</b>	<b>38</b>

Source: Birmingham Corporation General and Trades Directory of Birmingham. William Cornish 1861.

Notes;

1. The first category tabulated, "Quarter firms", enumerates jewellery related firms in those streets defined as representing the Jewellery Quarter by Wise (1951).
2. The second category, "Peripheral Firms", enumerates jewellery related firms in those streets adjacent (within 800 yards) to the Jewellery Quarter.
3. The third category, "Rest of B'ham Firms", enumerates jewellery related firms in the remaining streets of Birmingham.
4. Of the 554 firms registered in Birmingham in 1861, 69% were within the defined Jewellery Quarter, 24% adjacent to the Quarter mainly to the east of Great Hampton Street, and 7% scattered over the remaining area of Birmingham.
5. The Jewellery Quarter defined by Wise is that area;
  - South-west of Gt. Hampton Street,
  - South-east of Icknield Street,
  - North-west of Great Charles Street, and
  - North-east of Summer Row.

This area is marked on the map at the beginning of this appendix.

TABLE 5.

Numbers of firms associated with jewellery manufacture  
in Birmingham in 1861.

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Jewellers and goldsmiths	342
Jewellery stampers	7
Enamellers	4
Chasers and embossers	46
Black ornament makers	17
Die-sinkers and seal engravers	33
Dippers and silverers	3
Engravers	60
Gilders, platers, and wire-drawers	5
Silversmiths and fancy article makers	37
 Total	 554

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Source: Derived from Birmingham Corporation General and Trades Directory of Birmingham. William Cornish 1861.

TABLE 6.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1876.

Street	Jewellery firms	Other firms	Total
Vyse Street	100	36	136
Great Hampton Street	87	109	196
Caroline Street	75	42	117
Warstone Lane	71	76	147
Northampton Street	65	12	77
Spencer Street	64	26	90
Augusta Street	45	10	55
Branston Street	35	61	96
Vittoria Street	34	41	75
Hockley Hill	32	137	169
Hylton Street	32	7	39
Frederick Street	26	43	69
Tenby Street	24	12	36
St. Paul's Square	23	35	58
Newhall Street	21	126	147
Regent Place	21	21	42
Albion Street	19	24	43
Mary Street	19	13	32
Regent Parade	19	16	35
Tenby Street North	16	20	36
Hockley Street	15	30	45
Hall Street	12	30	42
Northwood Street	12	48	60
Kenyon Street	11	28	39
Lionel Street	11	70	81
Graham Street	10	49	59
Key Hill	10	30	40
Camden Street	9	122	131
Charlotte Street	9	56	65
George Street	8	44	52
Mary Ann Street	8	24	32
Pitsford Street	8	6	14
Carver Street	8	58	66
Brook Street	7	11	18
Parade East	7	4	11
Legge Lane	4	8	12
Powell Street	4	4	8
James Street	3	8	11
Keyhill Drive	3	7	10
Regent Street	3	1	4
Newhall Hill	1	38	39
<b>Total</b>	<b>991</b>	<b>1543</b>	<b>2534</b>

Source: Derived from Hulley's Birmingham Directory 1876-7. John Hulley Birmingham.

TABLE 7.

Numbers of firms associated with jewellery, silverware  
and allied trades in the  
Birmingham Jewellery Quarter in 1876.

Trade	Number of firms
Stampers and piercers	24
Manufacturing jewellers	324
Setters	12
Engravers	84
Die-sinkers	33
Jewellery designers	-
Polishers & finishers	6
Solderers	4
Embossers and goldcutters	25
Badge makers (see Medallists)	-
Spinners and wiredrawers	11
Casters	5
Photo-lithographers	-
Silversmiths and goldsmiths	24
Lapidaries / stone dealers	43
Trophy makers	-
Pearl workers & stringers	8
Horologists & allied	38
Enamellers	6
Plate manufacturers	54
Jewellery wholesalers and factors	64
Jewellery case makers	19
Jewellery tool makers	17
Bullion dealers	1
Refiners	10
Mounters	1
Ring makers	17
Gilders & electro-platers	51
Medallists, badge and military ornament makers	3
Retail jewellers	-
Chain and filigree makers	28
Chasers	50
Cutlers	6
Jet and black ornament makers	23
 Total	 991
 Number of streets in which jewellery firms are present.	 41
 Non-jewellery firms in those streets.	 1543

Source: Derived from Hulley's Birmingham Directory 1876-7. John Hulley Birmingham.

TABLE 8.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1886.

Street	Jewellery firms	Other firms	Total
Vyse Street	113	25	138
Warstone Lane	85	87	172
Spencer Street	80	15	95
Great Hampton Street	66	108	174
Branston Street	64	41	105
Northampton Street	64	8	72
Caroline Street	50	41	91
Frederick Street	43	19	62
Vittoria Street	41	28	69
Augusta Street	40	11	51
Hylton Street	36	3	39
Tenby Street	33	14	47
St. Paul's Square	32	39	71
Tenby Street North	32	13	45
Hockley Hill	28	142	170
Albion Street	21	29	50
Graham Street	20	34	54
Regent Parade	19	9	28
Regent Place	20	7	27
Hall Street	18	43	61
Mary Street	14	11	25
Warstone Parade East	13	3	16
Kenyon Street	10	22	32
Northwood Street	11	42	53
Hockley Street	10	31	41
Key Hill	9	42	51
Newhall Street	7	201	207
Pitsford Street	7	10	17
Regent Street	7	0	7
Charlotte Street	6	43	49
Legge Lane	6	10	16
Lionel Street	6	79	85
Brook Street	5	12	17
Powell Street	4	4	8
Carver Street	3	43	46
Mary Ann Street	3	20	23
Pope Street	2	25	27
Water Street	2	16	18
Arthur Place	2	9	11
George Street	1	-	1
Regent Row	1	2	3
Total	1032	1341	2373

Source: Derived from Kelly's Directory of Birmingham for 1886.



TABLE 9.

Numbers of firms associated with jewellery, silverware  
and allied trades in the  
Birmingham Jewellery Quarter in 1886.

Trade	Number of Firms
Stampers and piercers	26
Manufacturing jewellers	333
Setters	21
Engravers	94
Die-sinkers	46
Jewellery designers	-
Polishers & finishers	23
Solderers	-
Embossers and goldcutters	20
Badge makers (see Medallists)	-
Spinners and wiredrawers	8
Casters	-
Photo-lithographers	-
Silversmiths and goldsmiths	57
Lapidaries / stone dealers	33
Trophy makers	-
Pearl workers & stringers	3
Horologists (& allied)	38
Enamellers	8
Plate manufacturers	46
Jewellery wholesalers	28
Jewellery case makers	27
Jewellery tool makers	18
Bullion dealers	3
Refiners	6
Mounters	4
Ring makers	28
Gilders & electro-platers	65
Medallists, badge and military ornament makers	7
Retail jewellers	-
Chain and filigree makers	31
Chasers	39
Cutlers	5
Jet and black ornament makers	14
 Total	 1032
 Number of streets in which jewellery firms are present.	 41
 Non-jewellery firms in those streets.	 1341

Source: Derived from Kelly's Directory of Birmingham for 1886.

TABLE 10.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1896.

Street	Jewellery firms	Other firms	Total
Vyse Street	148	34	182
Spencer Street	99	23	122
Northampton Street	84	15	99
Warstone Lane	82	90	172
Branston Street	68	37	105
Great Hampton Street	52	124	176
Frederick Street	45	12	57
Augusta Street	41	14	55
Vittoria Street	40	45	85
Tenby Street	38	20	58
Hylton Street	37	5	42
Tenby Street North	34	15	49
Caroline Street	28	51	79
St. Paul's Square	24	55	79
Albion Street	23	19	42
Hockley Hill	23	145	168
Hockley Street	20	45	65
Regent Parade	17	7	24
Regent Place	15	12	27
Hall Street	14	26	40
Northwood Street	14	25	39
Key Hill	13	37	50
Pitsford Street	13	17	30
Graham Street	12	44	56
Mary Street	11	23	34
Kenyon Street	8	19	27
George Street	6	36	42
Legge Lane	6	11	17
Newhall Street	6	205	211
Carver Street	4	53	57
Regent Street	3	2	5
Arthur Place	3	17	20
Brook Street	2	14	16
Charlotte Street	2	42	44
Mary Ann Street	2	15	17
Pope Street	2	18	20
Newhall Hill	1	37	38
Total	1040	1409	2449

Source: Derived from Kelly's Directory of Birmingham for 1896.

TABLE 11.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1896.

Trade	Number of Firms
Stampers and piercers	29
Manufacturing jewellers	310
Setters	25
Engravers	75
Die-sinkers	49
Jewellery designers	-
Polishers & finishers	28
Solderers	2
Embossers and goldcutters	18
Badge makers (see Medallists)	-
Spinners and wiredrawers	11
Casters	7
Photo-lithographers	-
Silversmiths and goldsmiths	59
Lapidaries / stone dealers	35
Trophy makers	-
Pearl workers & stringers	6
Horologists (& allied)	37
Enamellers	11
Plate manufacturers	50
Jewellery wholesalers	43
Jewellery case makers	24
Jewellery tool makers	12
Bullion dealers	4
Refiners	7
Mounters	13
Ring makers	35
Gilders & electro-platers	50
Medallists, badge and military ornament makers	8
Retail jewellers	-
Chain and filigree makers	29
Chasers	51
Cutlers	6
Jet and black ornament makers	6
 Total	 1040
 Number of streets in which jewellery firms are present.	 37
 Non-jewellery firms in those streets.	 1409

Source: Derived from Kelly's Directory of Birmingham for 1896.

TABLE 12.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1906.

Street	Jewellery firms	Other firms	Total
Vyse Street	170	46	216
Spencer Street	109	26	135
Warstone Lane	108	79	187
Northampton Street	89	9	98
Frederick Street	74	17	91
Branston Street	65	45	110
Great Hampton Street	61	125	186
Augusta Street	60	13	73
Vittoria Street	54	30	84
Tenby Street	52	16	68
Caroline Street	42	30	72
Hockley Street	39	52	91
Tenby Street North	35	12	47
Hylton Street	32	3	35
Regent Place	28	13	41
Hockley Hill	26	126	152
Albion Street	25	32	57
St. Paul's Square	24	56	80
Pitsford Street	22	15	37
Regent Parade	19	6	25
Graham Street	15	31	46
Northwood Street	13	25	38
Warstone Parade East	14	3	17
Key Hill	13	44	57
Newhall Street	12	291	303
Hall Street	11	21	32
Kenyon Street	10	19	29
Mary Street	9	10	19
Carver Street	7	37	44
Legge Lane	7	10	17
Pemberton Street	5	0	5
Brook Street	4	8	12
Regent Street	4	0	4
Water Street	3	19	22
Arthur Place	3	2	5
Charlotte Street	2	40	42
George Street	2	44	46
Newhall Hill	2	40	42
Mary Ann Street	1	22	23
Pope Street	1	18	19
Total	1272	1435	2707

Source: Derived from Kelly's Directory of Birmingham for 1906.

TABLE 13.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1906.

Trade	Number of Firms
Stampers and piercers	44
Manufacturing jewellers	328
Setters	41
Engravers	35
Die-sinkers	68
Jewellery designers	-
Polishers & finishers	35
Solderers	3
Embossers and goldcutters	10
Badge makers (see Medallists)	-
Spinners	16
Casters	3
Photo-lithographers	-
Silversmiths and goldsmiths	109
Lapidaries / stone dealers	39
Trophy makers	-
Pearl workers & stringers	5
Horologists (& allied)	50
Enamellers	12
Plate manufacturers	67
Jewellery wholesalers	43
Jewellery case makers	34
Jewellery tool makers	19
Bullion dealers	4
Refiners	7
Mounters	20
Ring makers	41
Gilders & electro-platers	66
Medallists, badge and military ornament makers	12
Retail jewellers	-
Chain and filigree makers	34
Chasers	61
Cutlers	2
Jet and black ornament makers	4
 Total	 1272
 Number of streets in which jewellery firms are present.	 40
 Non-jewellery firms in those streets.	 1435

Source: Derived from Kelly's Directory of Birmingham for 1906.

TABLE 14.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1926.

Street	Jewellery firms	Other firms	Total
Vyse Street	179	39	218
Spencer Street	121	40	161
Warstone Lane	98	77	175
Northampton Street	91	19	110
Frederick Street	86	19	105
Branston Street	78	35	113
Augusta Street	60	11	71
Hockley Hill	58	140	198
Vittoria Street	55	23	78
Hockley Street	48	46	94
Tenby Street North	41	18	59
Tenby Street	39	13	52
Great Hampton Street	37	78	115
Caroline Street	33	25	58
Albion Street	32	24	56
Hylton Street	32	13	45
Regent Place	23	14	37
Pitsford Street	18	10	28
Mary Street	16	10	26
Northwood Street	14	22	36
Regent Parade	14	5	19
Parade East	14	4	18
Graham Street	13	24	37
Hall Street	13	19	32
Key Hill	13	34	47
St. Paul's Square	10	34	44
Legge Lane	9	10	19
Carver Street	8	30	38
Newhall Hill	7	40	47
Kenyon Street	6	20	26
Charlotte Street	5	25	30
George Street	4	29	33
Mary Ann Street	3	13	16
Newhall Hill	3	291	294
Pemberton Street	3	0	3
Regent Street	3	2	5
Arthur Place	3	7	10
Pope Street	2	12	14
Total	1292	1280	2572

Source: Derived from Kelly's Directory of Birmingham for 1926.

TABLE 15.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1926.

Trade	Number of firms
Stampers and piercers	65
Manufacturing jewellers	360
Setters	40
Engravers	75
Die-sinkers	50
Jewellery designers	-
Polishers & finishers	27
Solderers	2
Embossers and goldcutters	16
Badge makers (see Medallists)	-
Spinners and wiredrawers	20
Casters	4
Photo-lithographers	-
Silversmiths and goldsmiths	132
Lapidaries / stone dealers	33
Trophy makers	-
Pearl workers & stringers	3
Horologists (& allied)	49
Enamellers	25
Plate manufacturers	92
Jewellery wholesalers	40
Jewellery case makers	34
Jewellery tool makers	12
Bullion dealers	7
Refiners	9
Mounters	22
Ring makers	36
Gilders and electro-platers	59
Medallists, badge and military ornament makers	23
Retail jewellers	-
Chain and filigree makers	32
Chasers	16
Cutlers	8
Jet & black ornament makers	1
 Total	 1292
 Number of streets in which jewellery firms are present.	 38
 Non-jewellery firms in those streets.	 1280

Source: Derived from Kelly's Directory of Birmingham for 1926.

TABLE 16.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1936.

Street	Jewellery firms	Other firms	Total
Vyse Street	171	48	219
Spencer Street	98	27	125
Warstone Lane	93	79	172
Northampton Street	91	13	104
Branston Street	49	28	77
Augusta Street	45	11	56
Frederick Street	42	36	78
Hockley Hill	37	149	186
Vittoria Street	38	29	67
Tenby Street North	30	19	49
Great Hampton Street	29	71	100
Hockley Street	29	47	76
Hylton Street	28	14	42
Albion Street	29	27	56
Tenby Street	23	10	33
Regent Place	19	13	32
Caroline Street	15	31	46
Northwood Street	13	26	39
Key Hill	12	35	47
Warstone Parade East	12	4	16
Mary Street	11	7	18
Regent Parade	10	6	16
Hall Street	9	19	28
Graham Street	6	25	31
St. Paul's Square	5	28	33
Newhall Hill	5	30	35
Carver Street	4	24	28
Charlotte Street	4	20	24
George Street	4	26	30
Pemberton Street	4	0	4
Regent Street	3	3	6
Pope Street	2	6	8
Mary Ann Street	1	8	9
Arthur Place	1	3	4
Total	972	922	1894

Source: Derived from Kelly's Directory of Birmingham for 1936.



TABLE 17.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1926.

Trade	Number of firms
Stampers and piercers	56
Manufacturing jewellers	248
Setters	33
Engravers	60
Die-sinkers	39
Jewellery designers	-
Polishers & finishers	26
Solderers	2
Embossers and goldcutters	12
Badge makers (see Medallists)	-
Spinners and wiredrawers	12
Casters	7
Photo-lithographers	-
Silversmiths and goldsmiths	74
Lapidaries / stone dealers	35
Trophy makers	-
Pearl workers & stringers	8
Horologists (& allied)	47
Enamellers	25
Plate manufacturers	42
Jewellery wholesalers	32
Jewellery case makers	30
Jewellery tool makers	15
Bullion dealers	8
Refiners	7
Mounters	20
Ring makers	36
Gilders & electro-platers	44
Medallists, badge and military ornament makers	22
Retail jewellers	-
Chain and filigree makers	11
Chasers	18
Cutlers	3
Jet & black ornament makers	-
 Total	 972
 Number of streets in which jewellery firms are present.	 34
 Non-jewellery firms in those streets.	 922

Source: Derived from Kelly's Directory of Birmingham for 1936.

TABLE 18.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1953.

Street	Jewellery firms	Other firms	Total
Vyse Street	153	44	197
Warstone Lane	108	66	174
Northampton Street	80	22	102
Spencer Street	59	32	91
Branston Street	46	29	75
Augusta Street	29	15	44
Hylton Street	28	16	44
Vittoria Street	27	28	55
Albion Street	24	28	52
Great Hampton Street	23	36	59
Frederick Street	22	35	57
Hockley Street	22	21	43
Tenby Street North	18	7	25
Hockley Hill	17	42	59
Tenby Street	17	6	23
Caroline Street	15	28	43
Key Hill	8	25	33
Northwood Street	9	34	43
Legge Lane	7	6	13
Regent Place	7	21	28
Pitsford Street	6	12	18
Camden Drive	5	33	38
Carver Street	5	15	20
Charlotte Street	5	19	24
Mary Street	5	4	9
S. Paul's Square	5	29	34
Hall Street	4	11	15
Kenyon Street	4	15	19
Newhall Hill	4	93	97
Regent Parade	4	7	11
Pemberton Street	3	0	3
Graham Street	2	0	2
Pope Street	2	7	9
Regent Street	2	7	9
James Street	1	6	7
Total	776	799	1575

Source: Derived from Kelly's Directory of Birmingham for 1953.

TABLE 19.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1953.

Trade	Number of firms
Stampers and piercers	44
Manufacturing jewellers	283
Setters	39
Engravers	38
Die-sinkers	26
Jewellery designers	1
Polishers & finishers	20
Solderers	12
Embossers	2
Badge makers	11
Spinners	13
Casters	9
Photo-lithographers	1
Silversmiths and goldsmiths	74
Stone dealers	13
Trophy makers	-
Pearl workers & stringers	4
Horologists (& allied)	36
Enamellers	22
Plate manufacturers	11
Jewellery wholesalers	32
Jewellery case makers	16
Jewellery materials suppliers	5
Jewellery tool makers	1
Bullion dealers	4
Refiners	4
Mounters	14
Ring makers	23
Gilders	9
Medallists	9
Retail jewellers	-
 Total	 776
 Number of streets in which jewellery firms are present.	 35
 Non-jewellery firms in those streets.	 799

Source: Derived from Kelly's Directory of Birmingham for 1953.

TABLE 20.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery trades, in the streets of the Birmingham Jewellery Quarter in 1963.

Vyse Street	137	36	173
Warstone Lane	87	54	141
Northampton Street	69	13	82
Spencer Street	60	26	86
Hylton Street	31	10	41
Frederick Street	28	30	58
Albion Street	28	19	47
Augusta Street	28	14	42
Branston Street	28	14	42
Vittoria Street	28	32	60
Great Hampton Street	23	50	73
Hockley Street	22	25	47
Tenby Street North	19	10	29
Hockley Hill	16	6	22
Caroline Street	14	28	42
Tenby Street	13	6	19
Key Hill	11	24	35
Regent Place	11	18	29
Legge Lane	6	9	15
Mary Street	5	4	9
Regent Parade	6	10	16
St. Paul's Square	5	8	13
Camden Drive	4	4	8
Camden Street	3	27	30
Graham Street	3	0	3
Northwood Street	3	26	29
Pitsford Street	3	9	12
Parade East	3	4	7
Charlotte Street	2	7	9
Constitution Hill	2	n/a	2
Hall Street	2	10	12
Kenyon Street	2	13	15
Newhall Hill	2	18	20
Pemberton Street	2	2	4
Powell Street	2	4	6
Regent Street	2	6	8
Water Street	2	19	21
Total	711	593	1304

Source: Derived from Kelly's Directory of Birmingham for 1963.

TABLE 21.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1963.

Trade	Number of Firms
Stampers and piercers	25
Manufacturing jewellers	262
Setters	38
Engravers	30
Die-sinkers	25
Jewellery designers	2
Polishers & finishers	36
Solderers	8
Embossers	2
Badge makers	12
Spinners	15
Casters	11
Photo-lithographers	2
Silversmiths and goldsmiths	44
Stone dealers	14
Trophy makers	3
Pearl workers & stringers	3
Horologists (& allied)	34
Enamellers	17
Plate manufacturers	14
Jewellery wholesalers	28
Jewellery case makers	15
Jewellery materials suppliers	5
Jewellery tool makers	2
Bullion dealers	3
Refiners	7
Mounters	18
Ring makers	23
Gilders	9
Medallists	4
Retail jewellers	-
 Total	 711
 Number of streets in which jewellery firms are present.	 37
 Non-jewellery firms in those streets.	 593

Source: Derived from Kelly's Directory of Birmingham for 1963.

TABLE 22.

Numbers of firms associated with the jewellery, silverware and allied Trades, and non-jewellery trades, in the streets of the Birmingham Jewellery Quarter in 1973.

Vyse Street	74	21	95
Albion Street	49	19	68
Spencer Street	41	20	61
Warstone Lane	32	20	52
Frederick Street	28	16	44
Vittoria Street	28	26	54
Hylton Street	18	7	26
Legge Lane	18	11	29
Great Hampton Street	17	52	69
Branston Street	13	12	25
Hockley Street	13	11	24
Tenby Street North	12	6	18
Caroline Street	9	14	23
Tenby Street	9	10	19
Hockley Hill	8	27	35
Pitsford Street	8	4	12
Regent Place	8	9	17
Graham Street	7	10	17
Key Hill	6	7	13
Hall Street	4	9	13
Northwood Street	4	19	23
Newhall Hill	3	7	10
St. Paul's Square	3	8	11
Brook Street	2	1	3
Camden Street	2	30	32
Constitution Hill	2	2	4
Pemberton Street	2	2	4
Powell Street	2	6	8
Parade East	2	1	3
Charlotte Street	1	4	5
Mary Street	1	5	6
Regent Street	1	7	8
Water Street	1	19	20
Total	428	451	879

Source: Derived from Kelly's Directory of Birmingham for 1973.

TABLE 23.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1973.

Trade	Number of Firms
Stampers and piercers	12
Manufacturing jewellers	172
Setters	19
Engravers	20
Die-sinkers	9
Jewellery designers	2
Polishers & finishers	31
Solderers	8
Embossers	3
Badge makers	13
Spinners	2
Casters	6
Photo-lithographers	1
Silversmiths and goldsmiths	37
Stone dealers	10
Trophy makers	3
Pearl workers & stringers	1
Horologists (& allied)	16
Enamellers	10
Plate manufacturers	6
Jewellery wholesalers	18
Jewellery case makers	7
Jewellery materials suppliers	1
Jewellery tool makers	1
Bullion dealers	1
Refiners	5
Mounters	4
Ring makers	5
Gilders	2
Medallists	3
Retail jewellers	-
 Total	 428
 Number of streets in which jewellery firms are present.	 33
 Non-jewellery firms in those streets.	 451

Source: Derived from Kelly's Directory of Birmingham for 1973.

TABLE 24.

Numbers of firms associated with the jewellery, silverware and allied trades, and non-jewellery firms, in the streets of the Birmingham Jewellery Quarter 1987.

Street	Jewellery firms	Other firms	Total
Vyse Street	113	83	196
Warstone Lane	55	37	92
Hylton Street	36	18	54
Caroline Street	34	740	774
Frederick Street	24	28	52
Branston Street	20	19	39
Spencer Street	21	11	32
Tenby Street	19	10	29
Vittoria Street	18	20	38
Augusta Street	21	15	36
Northampton Street	15	5	20
Pitsford Street	15	5	20
Albion Street	12	18	30
Tenby Street North	12	16	28
Hockley Street	11	1	12
Hall Street	8	6	14
Regent Place	7	17	24
Kenyon Street	3	8	11
Legge Lane	3	9	12
Mary Street	2	9	11
Northwood Street	2	0	2
Pemberton Street	2	2	4
Carver Street	1	13	14
Charlotte Street	1	6	7
James Street	1	1	2
Regent Street	1	6	7
Total	457	403	828

Source: Derived from personal mapping exercise.



TABLE 25.

Numbers of firms associated with jewellery, silverware  
and allied trades  
in the Birmingham Jewellery Quarter in 1987.

Trade	Number of Firms
Stampers and piercers	10
Manufacturing jewellers	184
Setters	14
Engravers	10
Die-sinkers	7
Jewellery designers	-
Polishers & finishers	28
Solderers	6
Embossers	-
Badge makers	9
Spinners	6
Casters	17
Photo-lithographers	-
Silversmiths and goldsmiths	21
Stone dealers	10
Trophy makers	7
Pearl workers & stringers	2
Horologists (& allied)	14
Enamellers	5
Plate manufacturers	8
Jewellery wholesalers	13
Jewellery case makers	4
Jewellery materials suppliers	-
Jewellery tool makers	4
Bullion dealers	5
Refiners	4
Mounters	9
Ring makers	4
Gilders	3
Medallists	3
Retail jewellers	50
 Total	 457
 Number of streets in which jewellery firms are present.	  33
 Non-jewellery firms in those streets.	  403

Source: Derived from personal mapping exercise.

APPENDIX B.

Appendix B consists of a series of charts which reflect the historical changes in the numbers of firms per street, and key trades in the Birmingham Jewellery Quarter.

The charts are in groups as follows;

Group 1. Number of firms per street for the period 1850 - 1987.

- |           |  |
|-----------|--|
| Chart 1.  | Vyse Street.   |
| Chart 2.  | Gt. Hampton Street.  |
| Chart 3.  | Caroline Street.   |
| Chart 4.  | Warstone Lane.   |
| Chart 5.  | Northampton Street.  |
| Chart 6.  | Augusta Street.  |
| Chart 7.  | Branston Street.   |
| Chart 8.  | Spencer Street.  |
| Chart 9.  | St. Paul's Square.   |
| Chart 10. | Hylton Street.   |
| Chart 11. | Frederick Street.  |
| Chart 12. | Vittoria Street.   |
| Chart 13. | Total number of jewellery firms in the Quarter.  |
| Chart 14. | Percentage of total jewellery firms in the Quarter represented by the total of Charts 1 to 12. |

Group 2. Number of firms engaged in key trades in the Quarter for the period 1850 to 1987.

- Chart 15. Manufacturing jewellers.
- Chart 16. Jet and black ornament makers.
- Chart 17. Medal and badge makers.
- Chart 18. Enamellers.
- Chart 19. Stampers and piercers.
- Chart 20. Setters.
- Chart 21. Engravers.
- Chart 22. Die-sinkers.
- Chart 23. Polishers and finishers.
- Chart 24. Silversmiths & goldsmiths.
- Chart 25. Jewellery wholesalers and  
retailers.
- Chart 26. Chasers.
- Chart 27. Ring makers.
- Chart 28. Mounters.
- Chart 29. Jewellery case makers.
- Chart 30. Bullion dealers & refiners.

Group 3. Chart 31. Numbers in employment in the Quarter, in Birmingham and the West Midlands, and the remainder of Great Britain, 1951 to 1987.

CHART 1.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

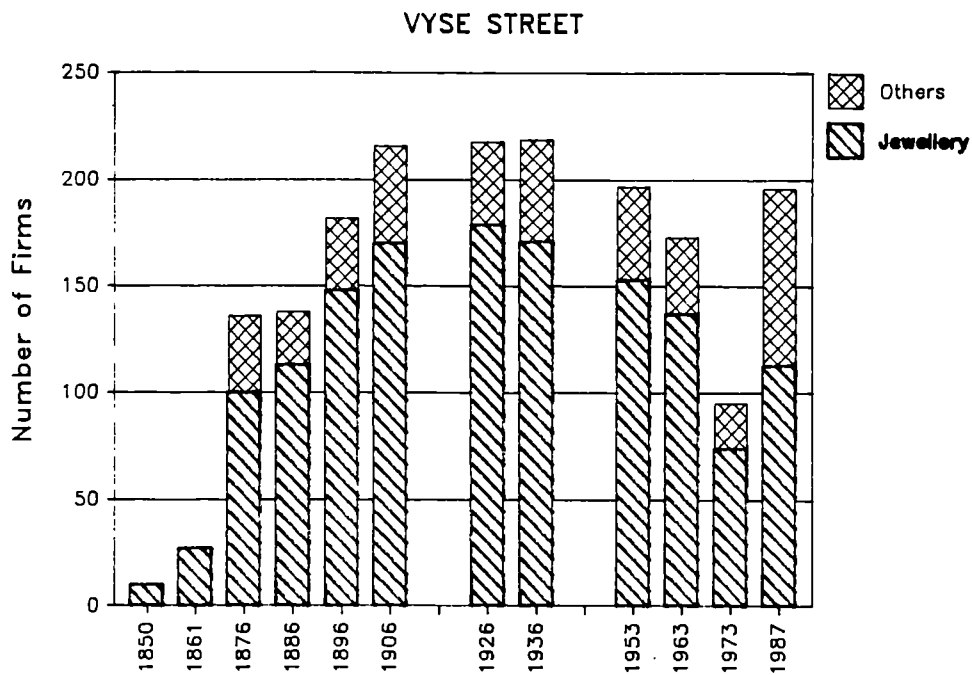


CHART 2.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

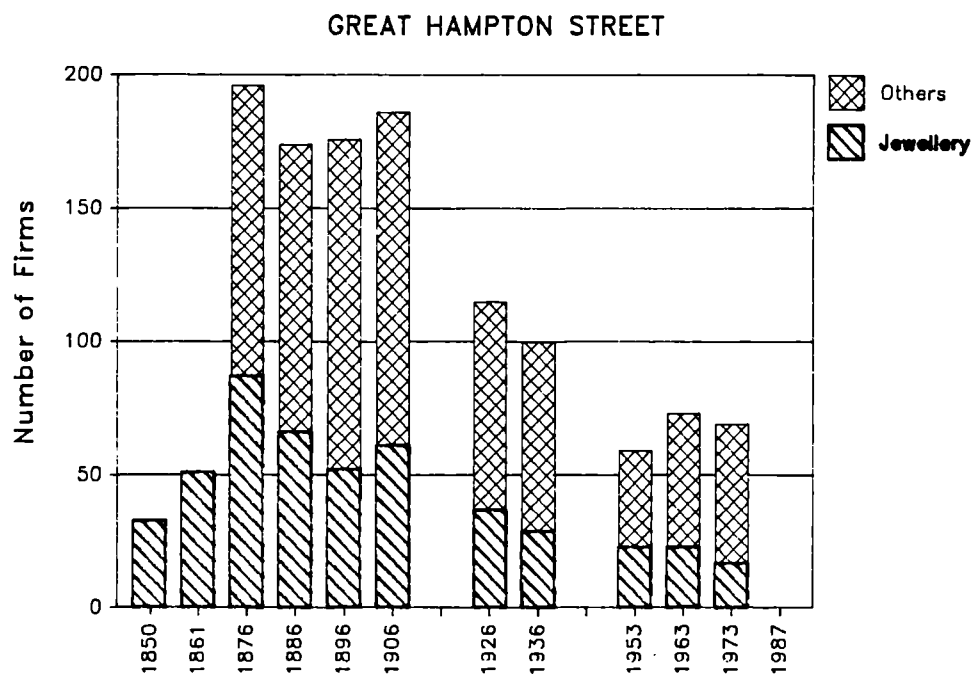


CHART 3.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

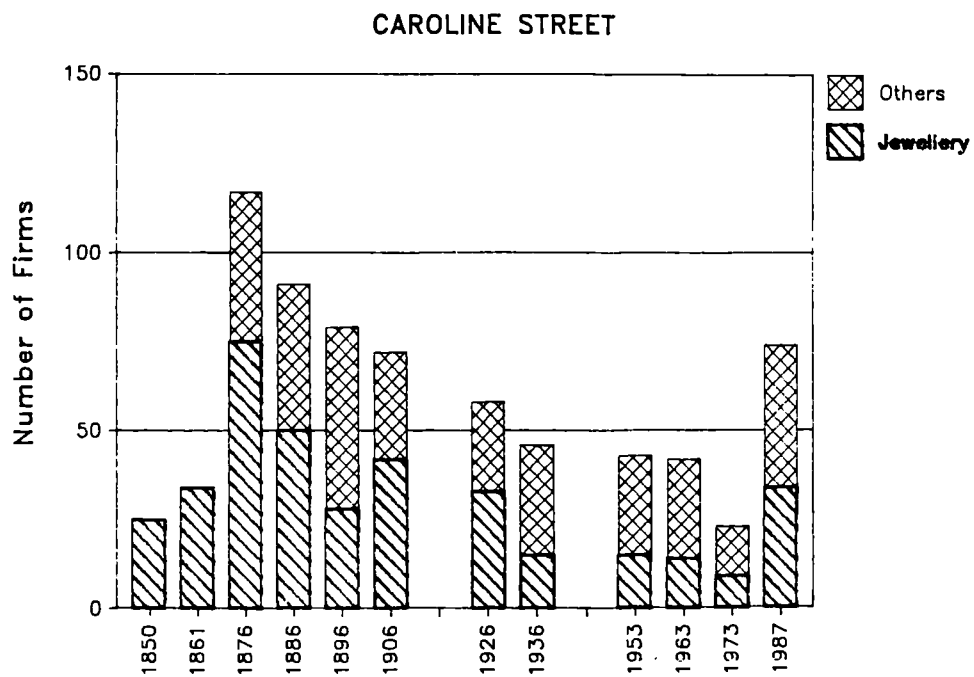


CHART 4.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

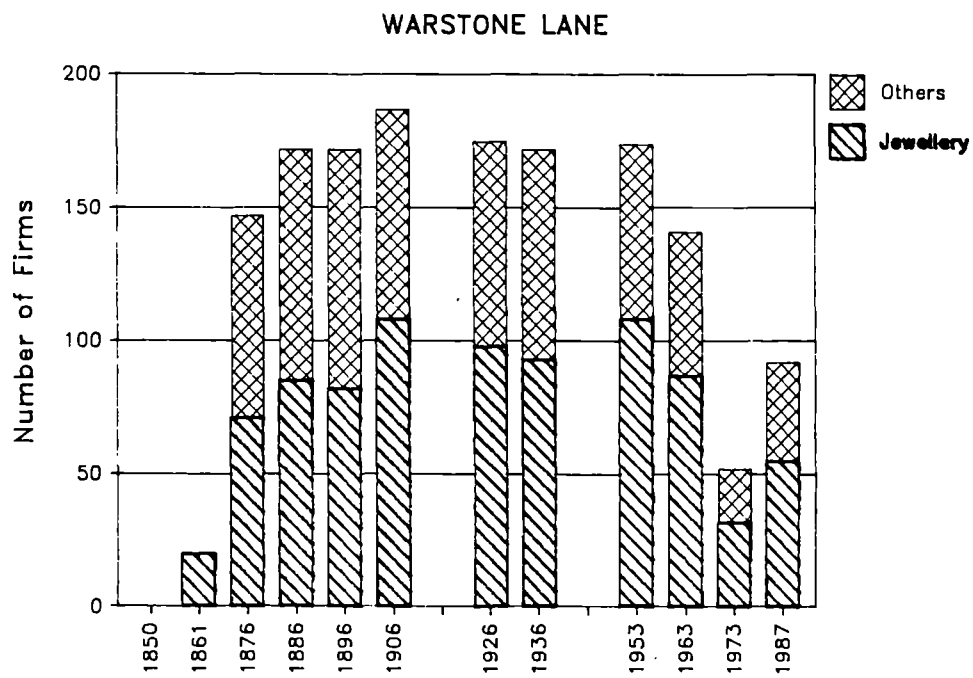


CHART 5.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

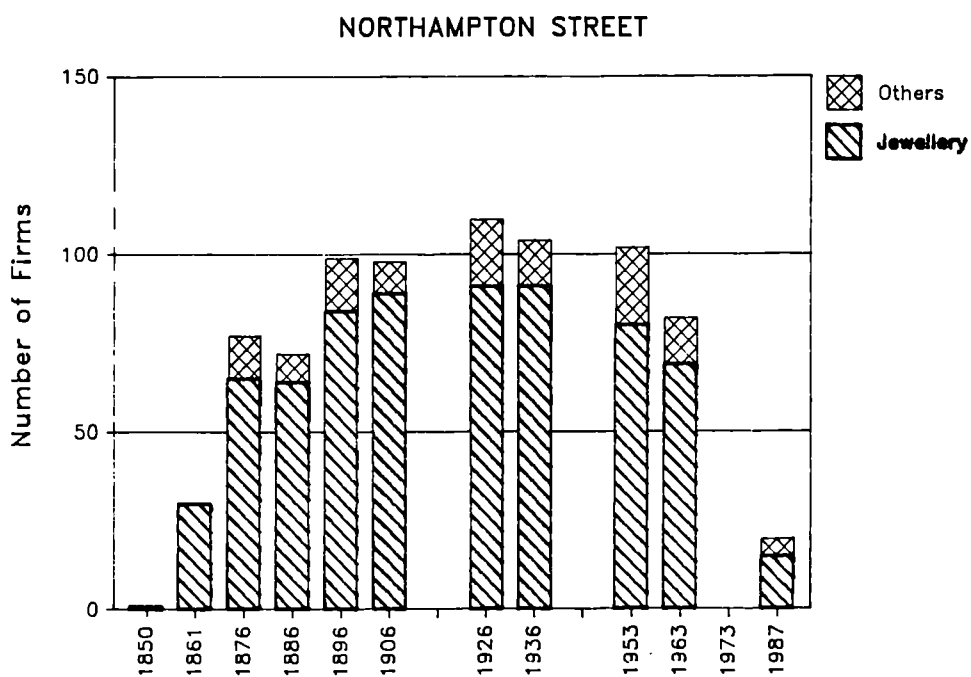




CHART 6.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

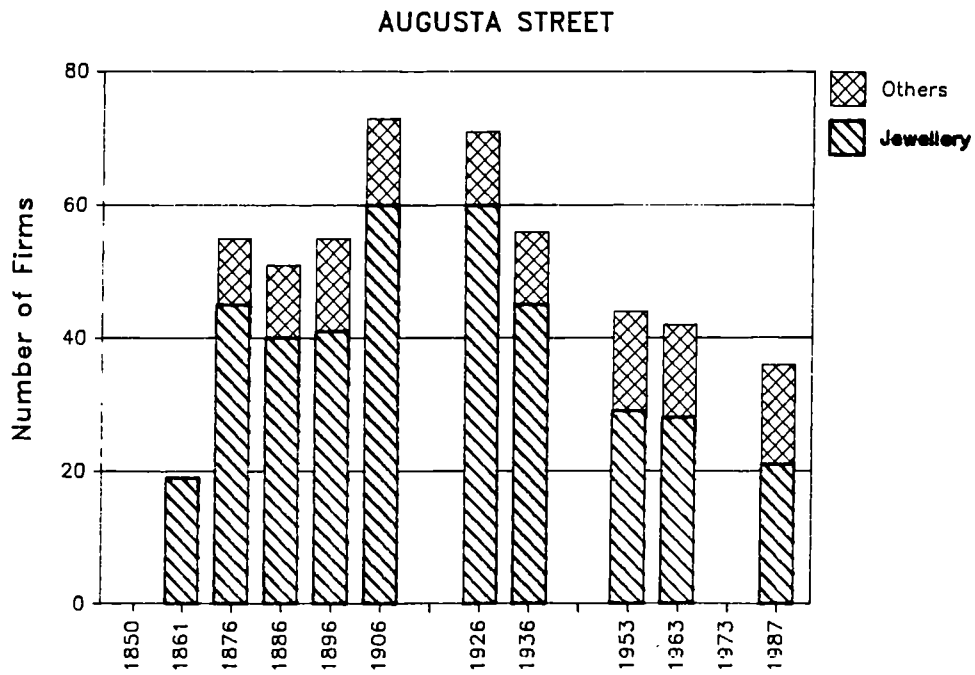


CHART 7.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

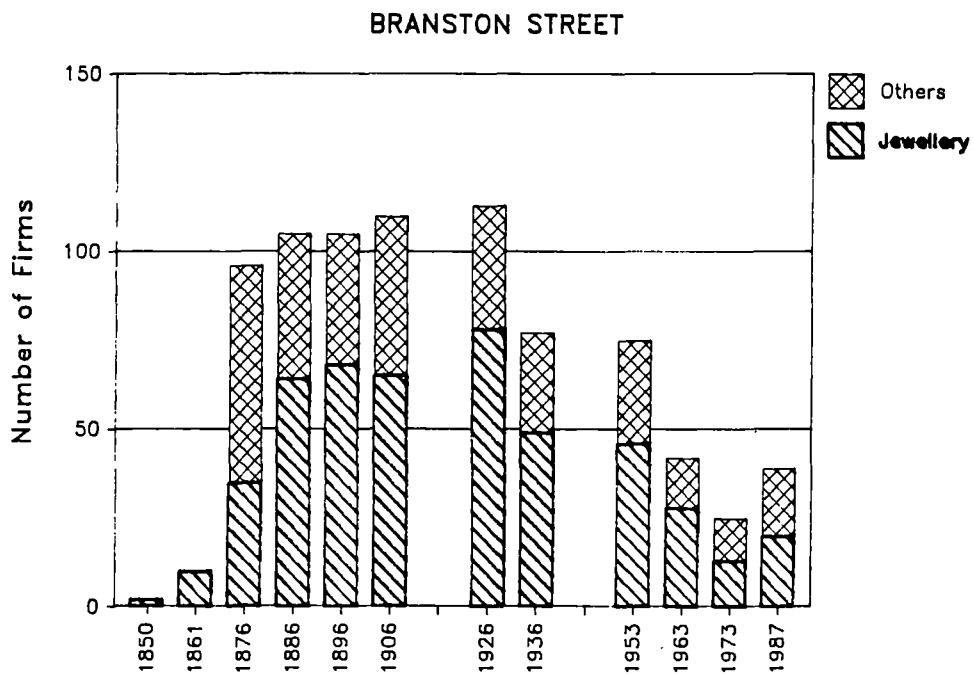


CHART 8.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

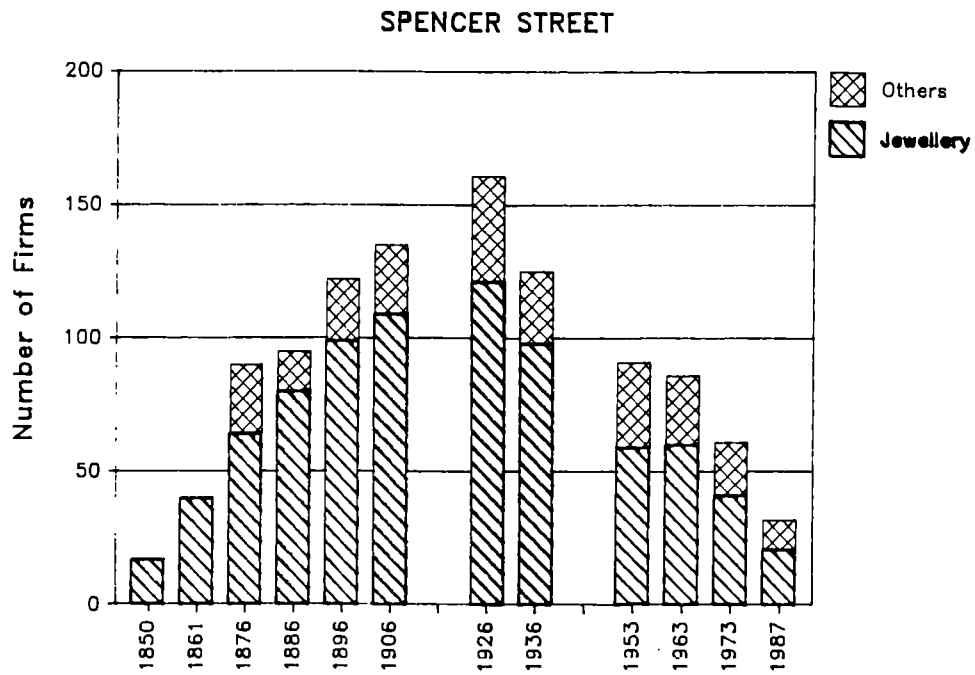


CHART 9.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

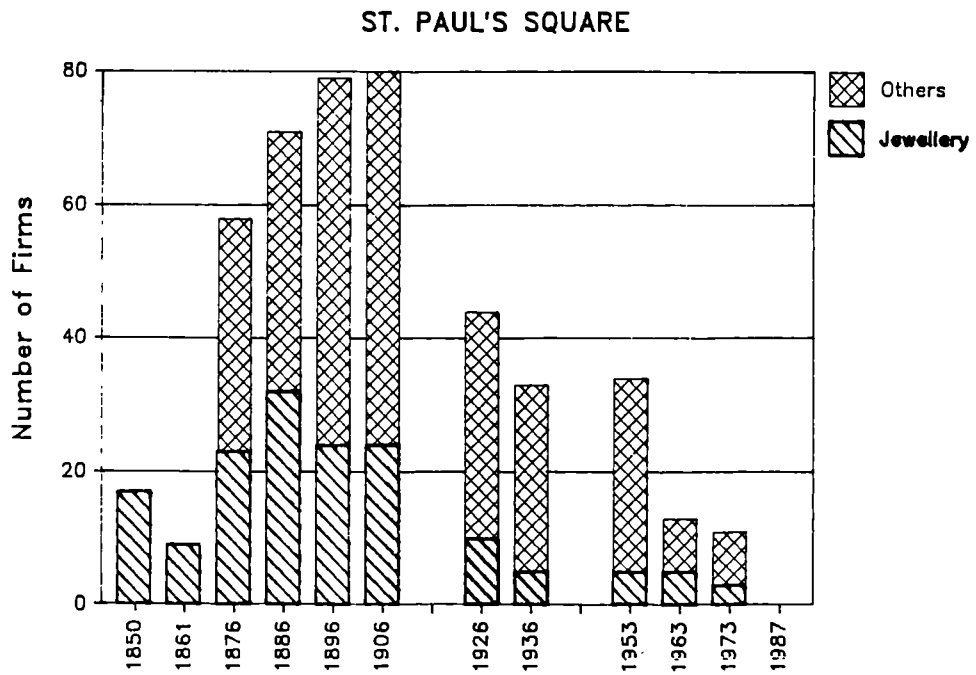


CHART 10.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

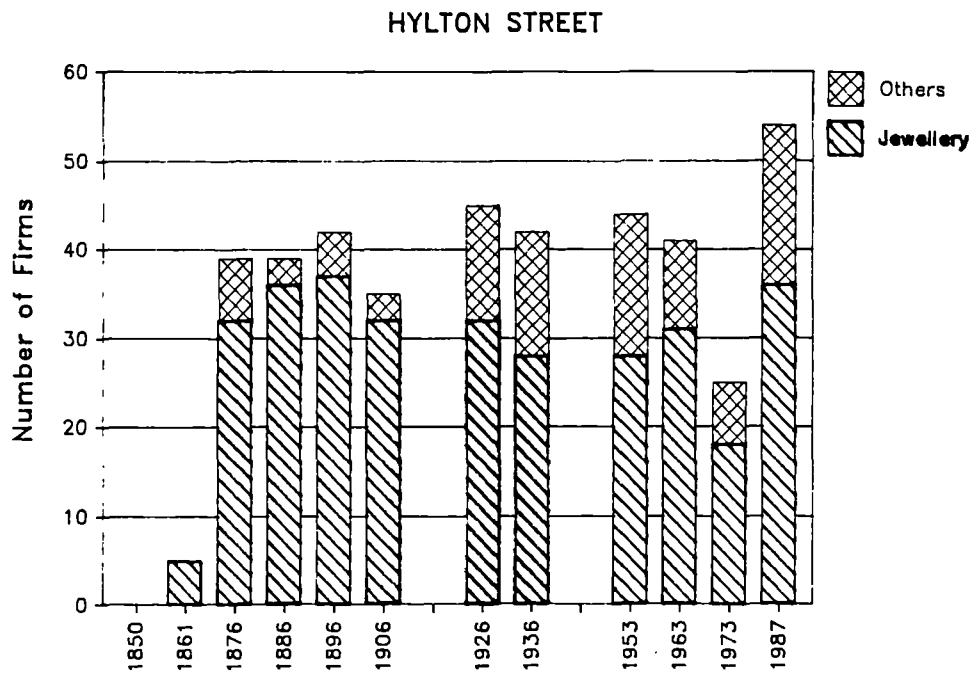


CHART 11.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

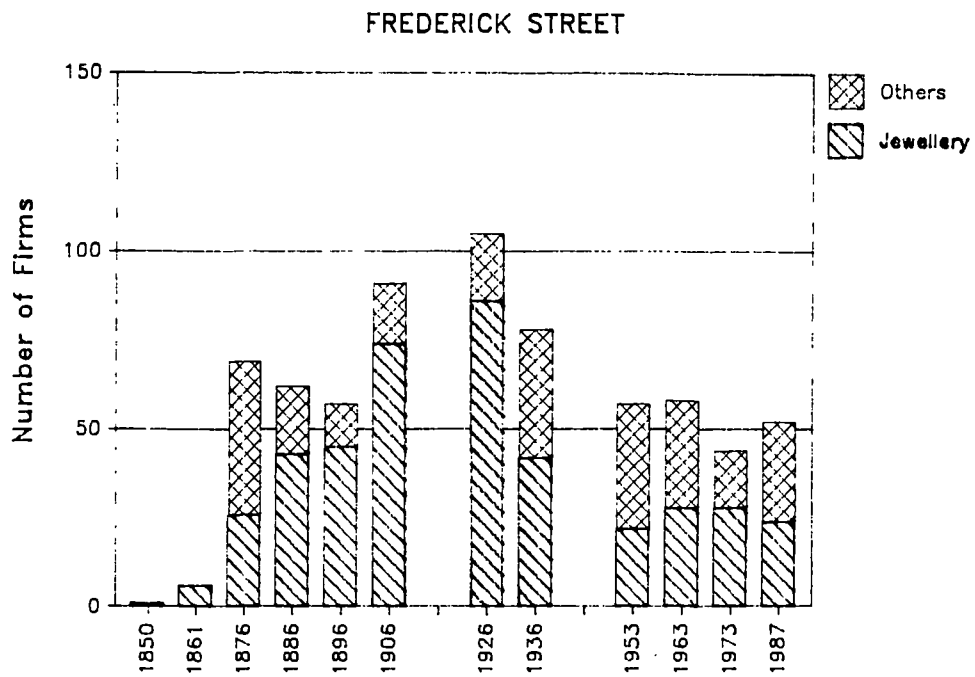


CHART 11.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

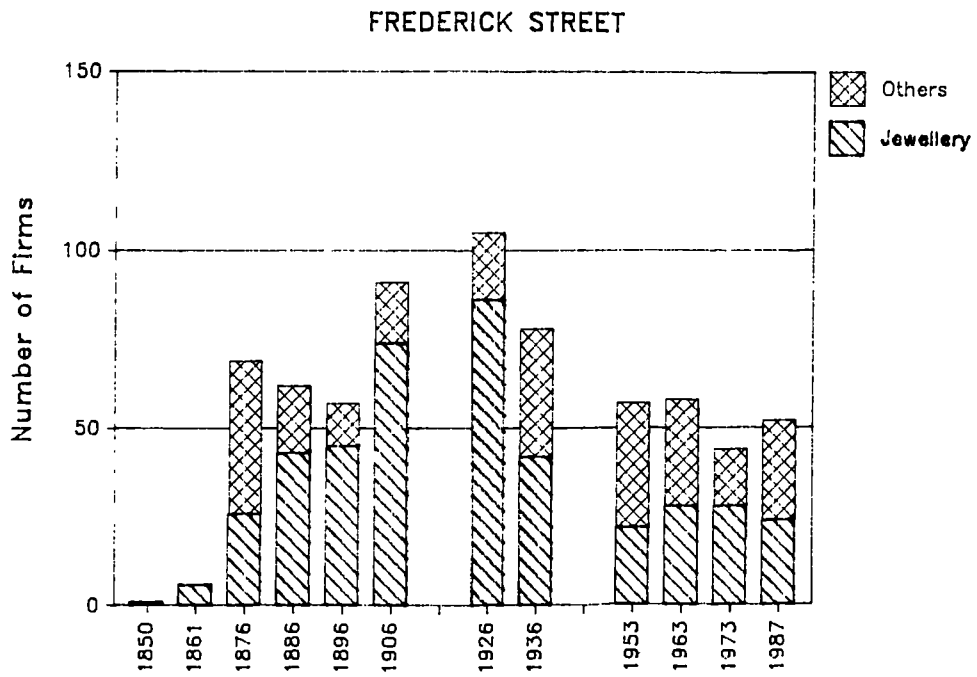


CHART 12.

Number of jewellery, silverware and allied trades  
and non-jewellery firms by street 1850-1987.

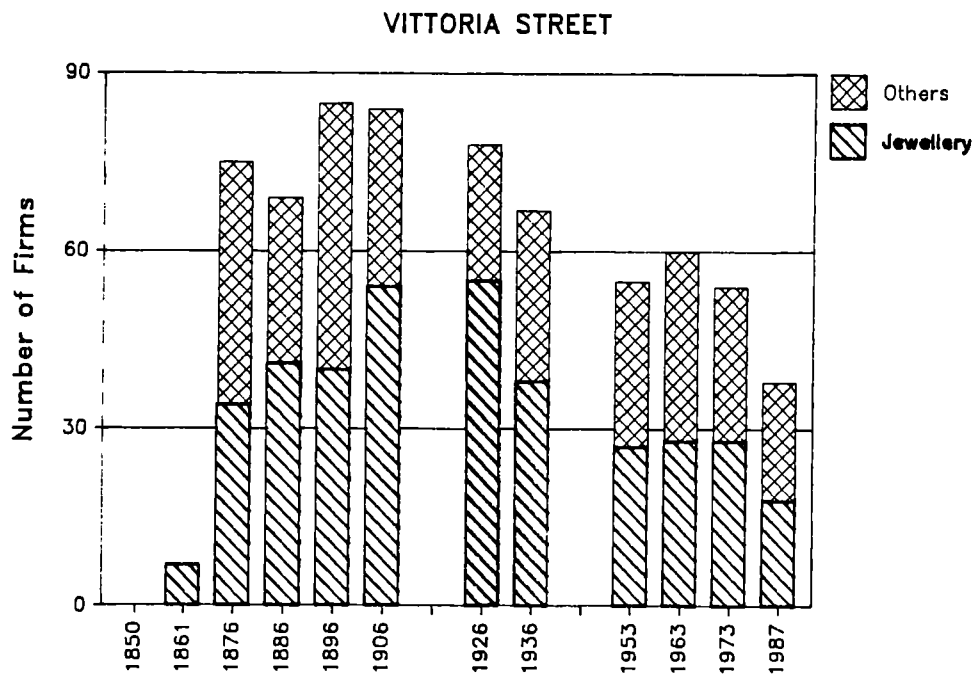




CHART 13.

Total number of firms in the Quarter.

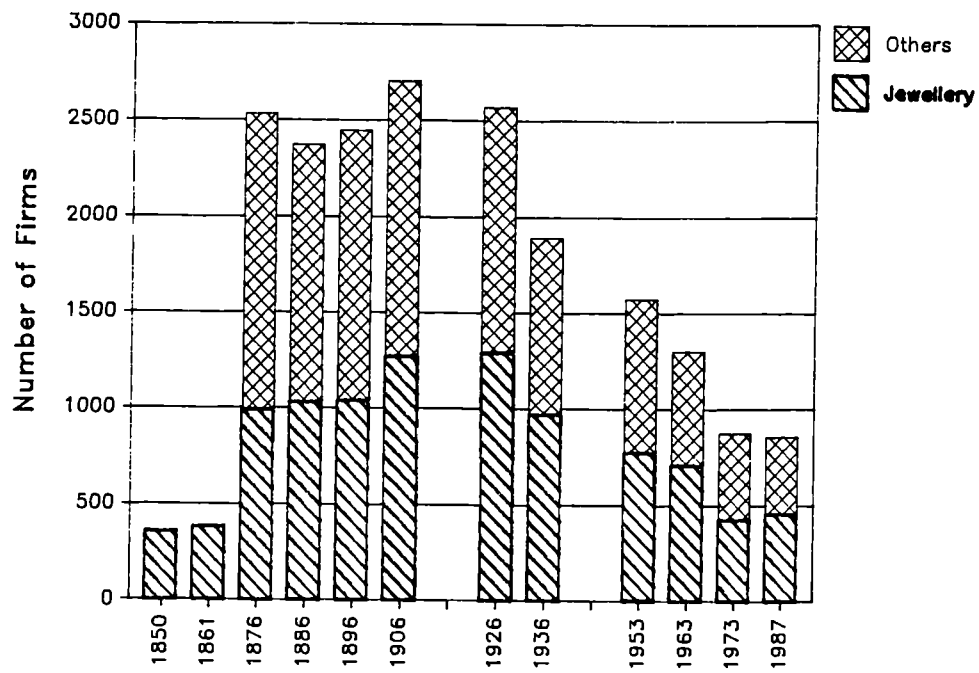


CHART 14.

Percentage of all jewellery firms in the Quarter  
represented by the total of Charts 1 to 12.

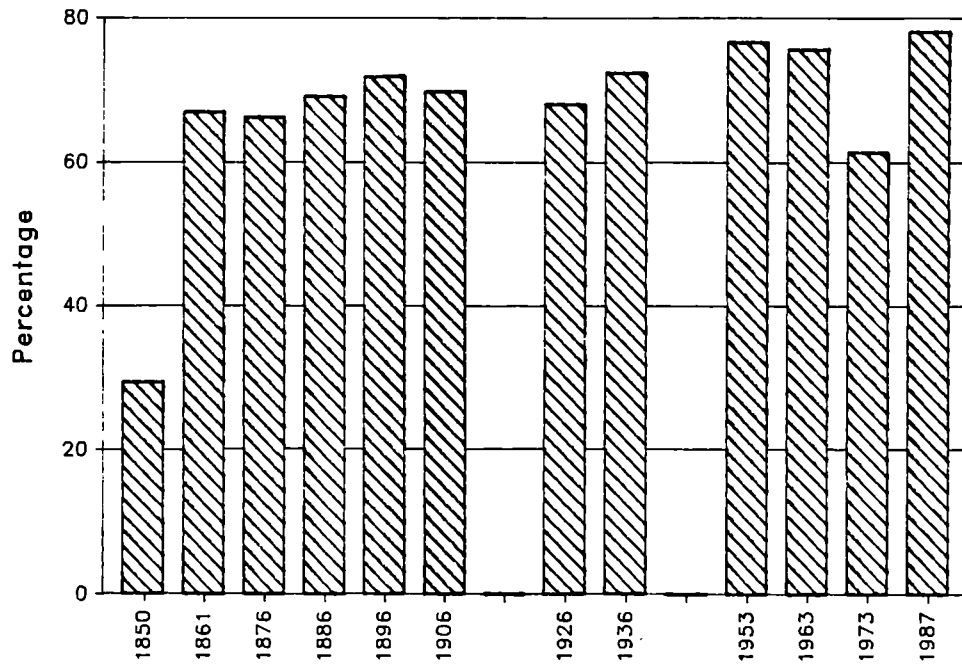


CHART 15.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

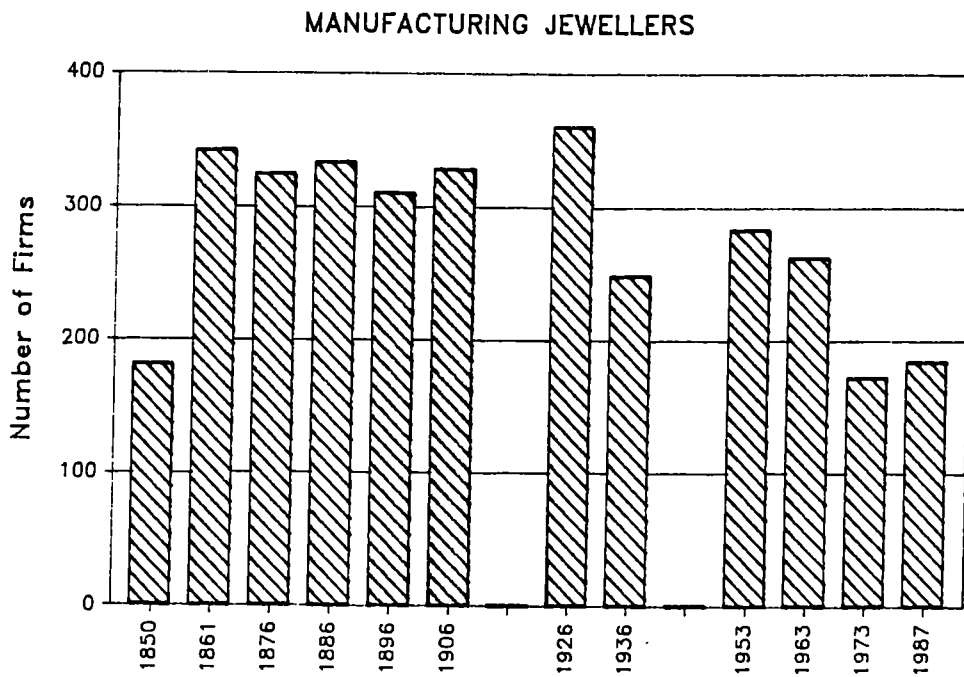


CHART 16.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

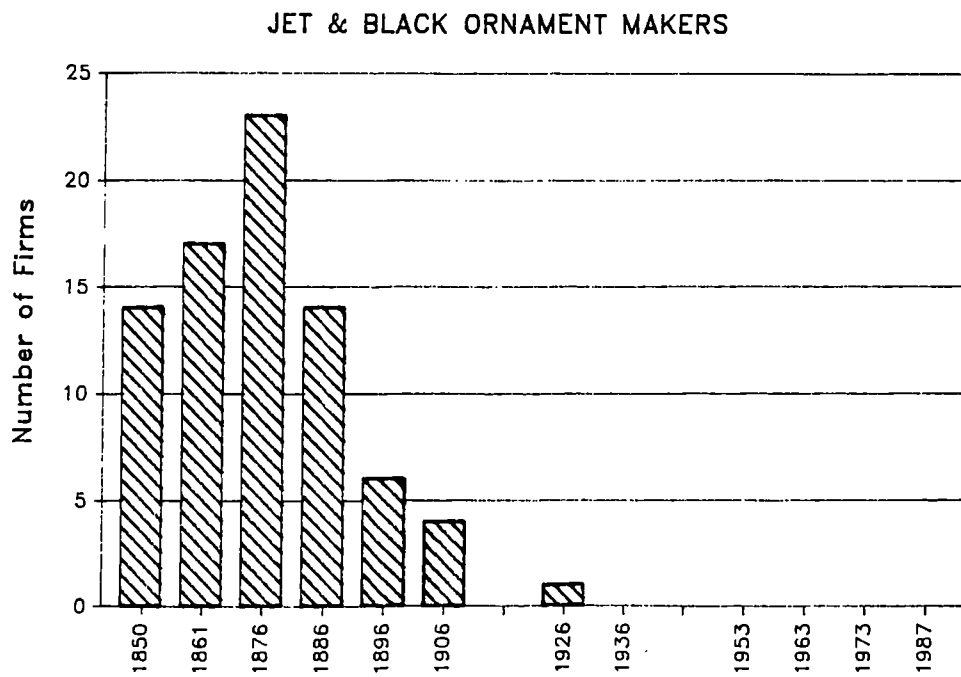


CHART 17.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

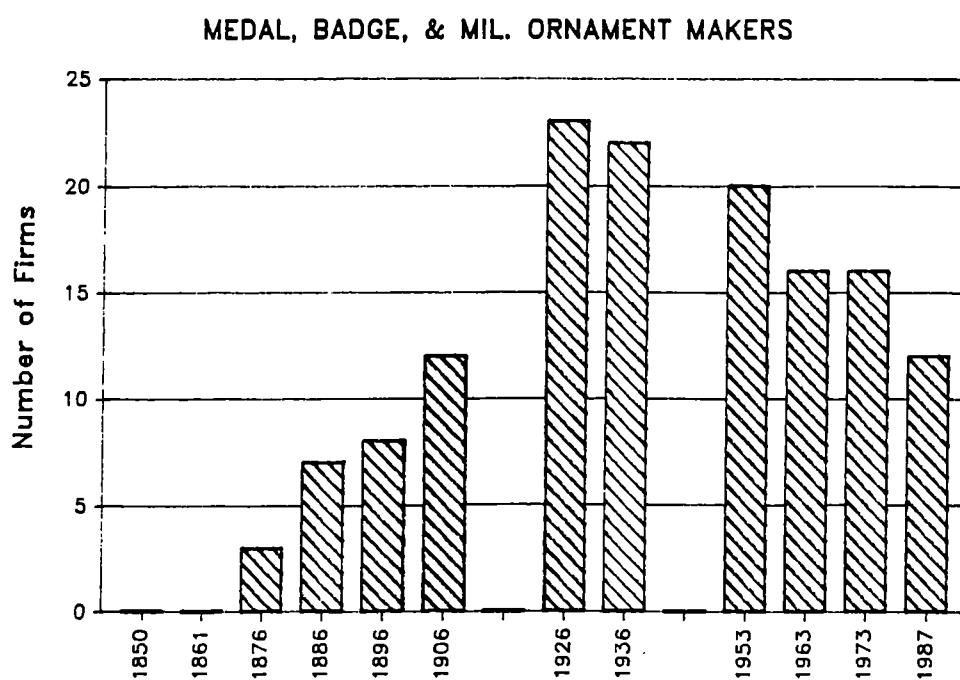


CHART 18.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

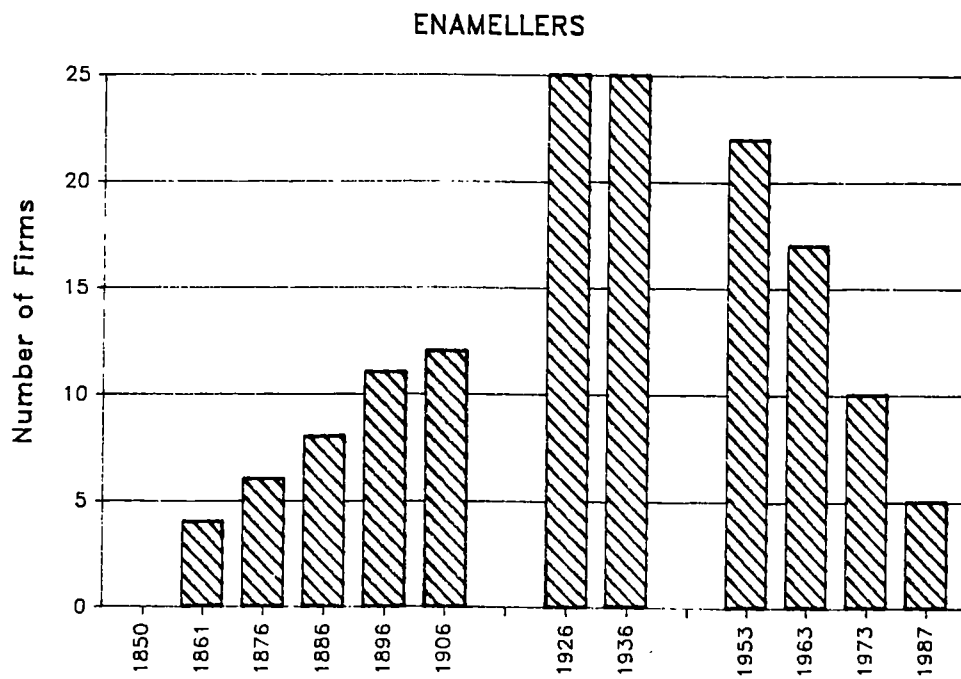


CHART 19.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

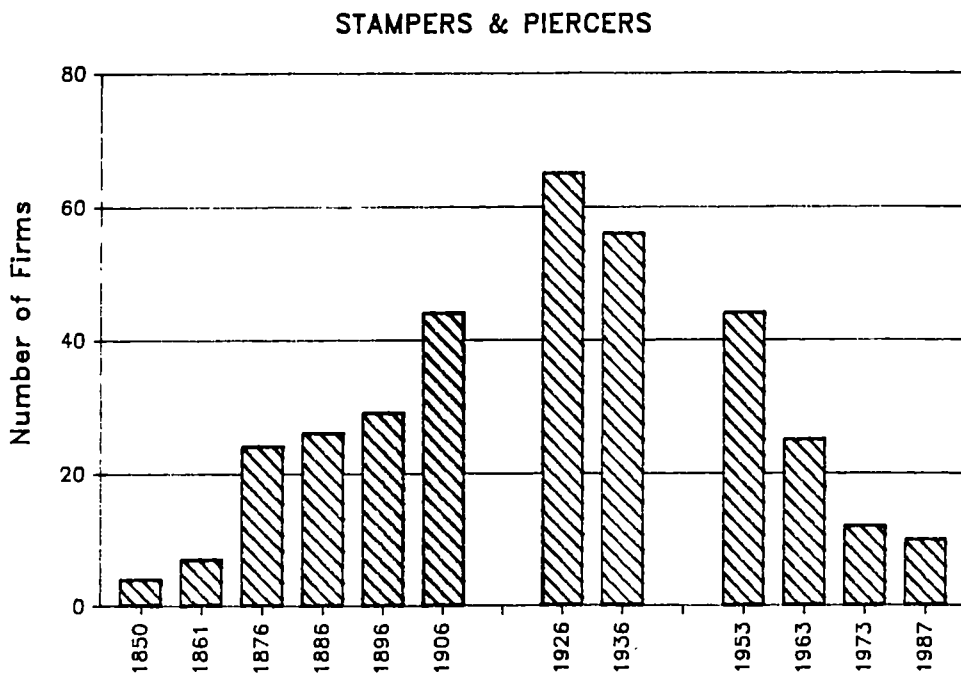


CHART 20.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

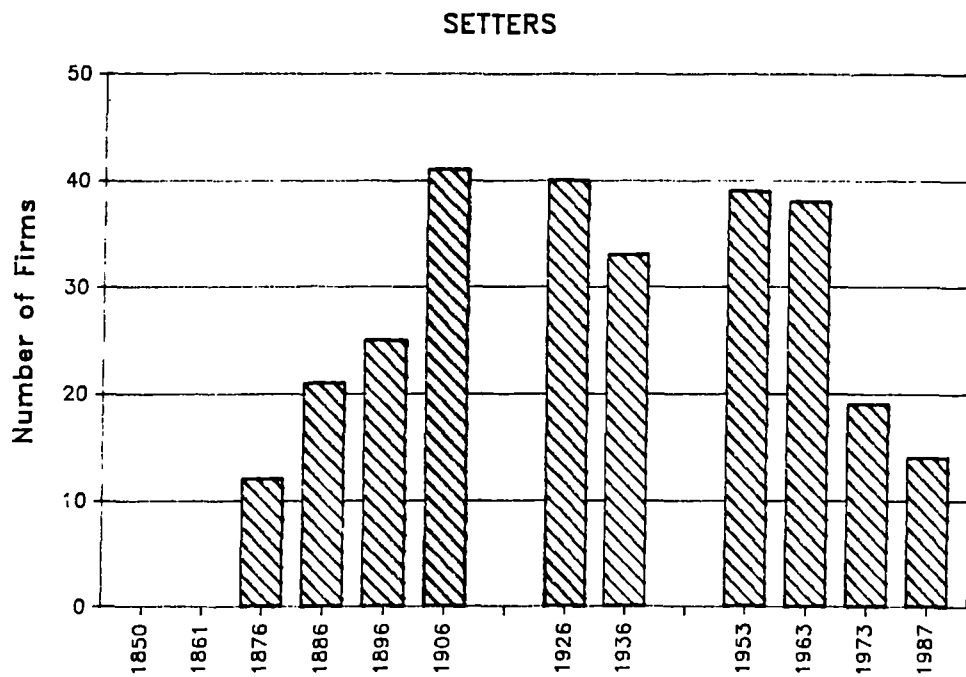




CHART 21.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

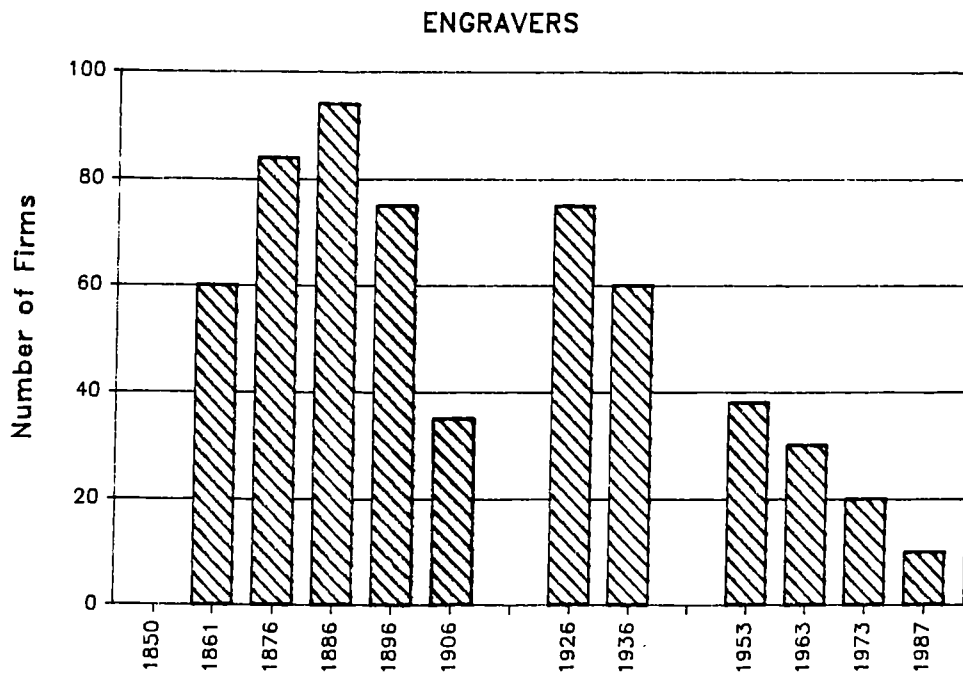


CHART 22.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

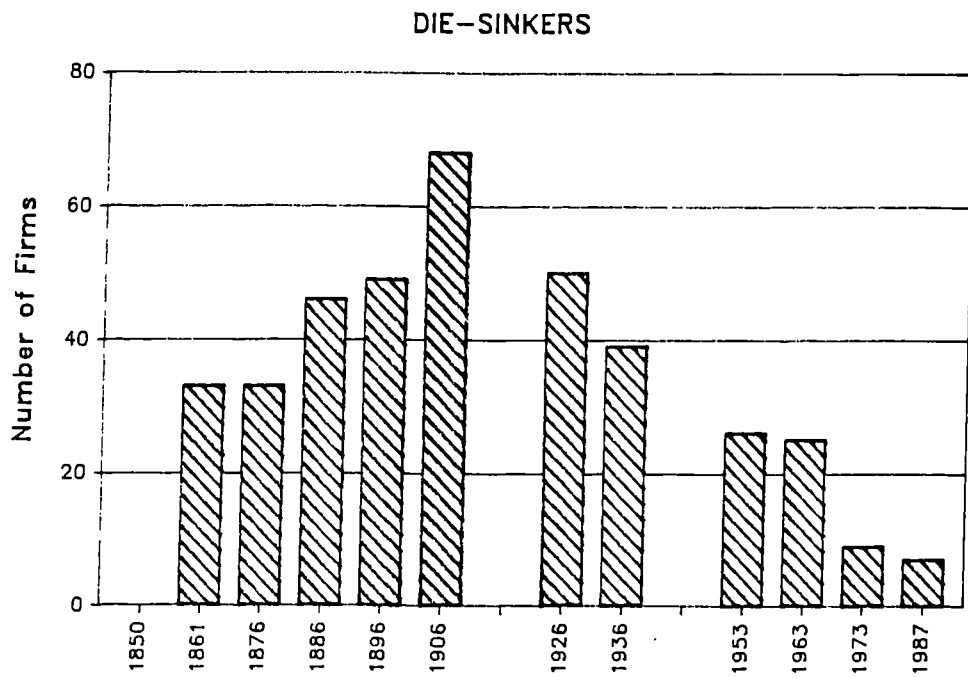


CHART 23.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

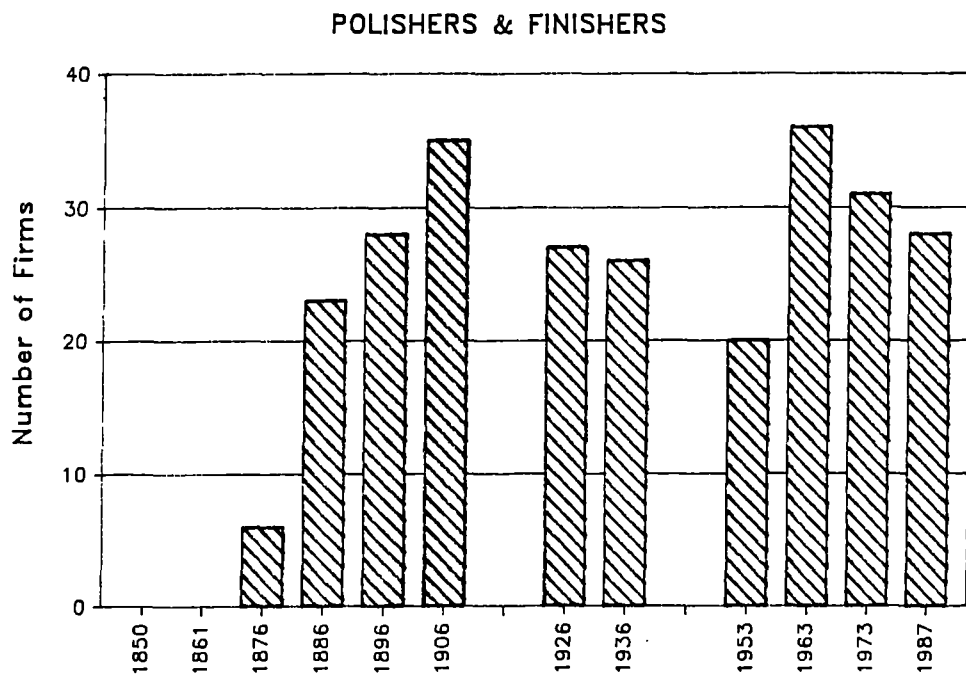


CHART 24.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

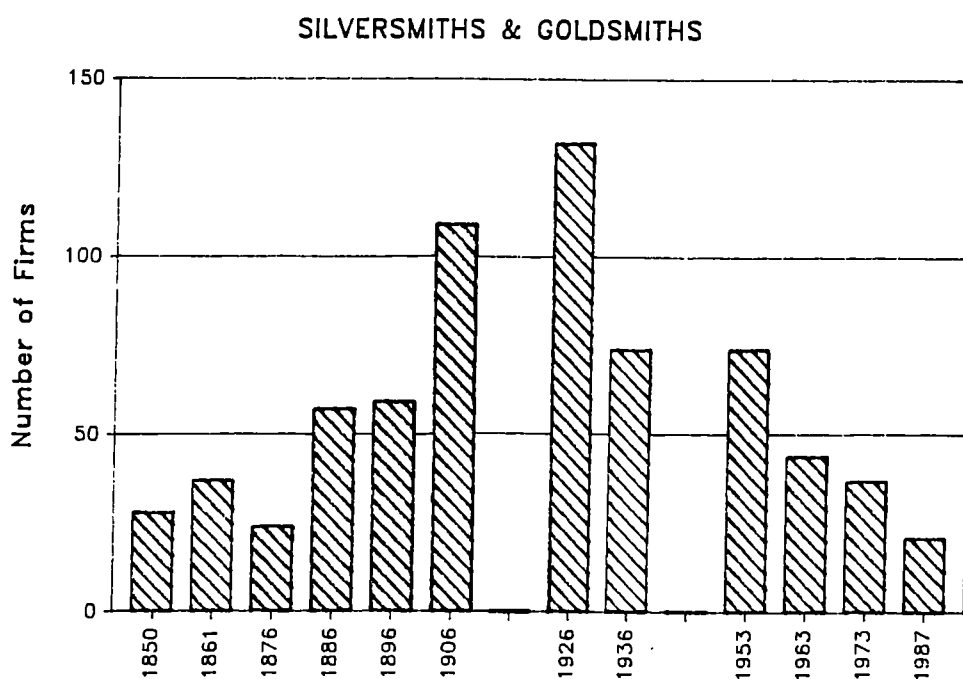


CHART 25.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

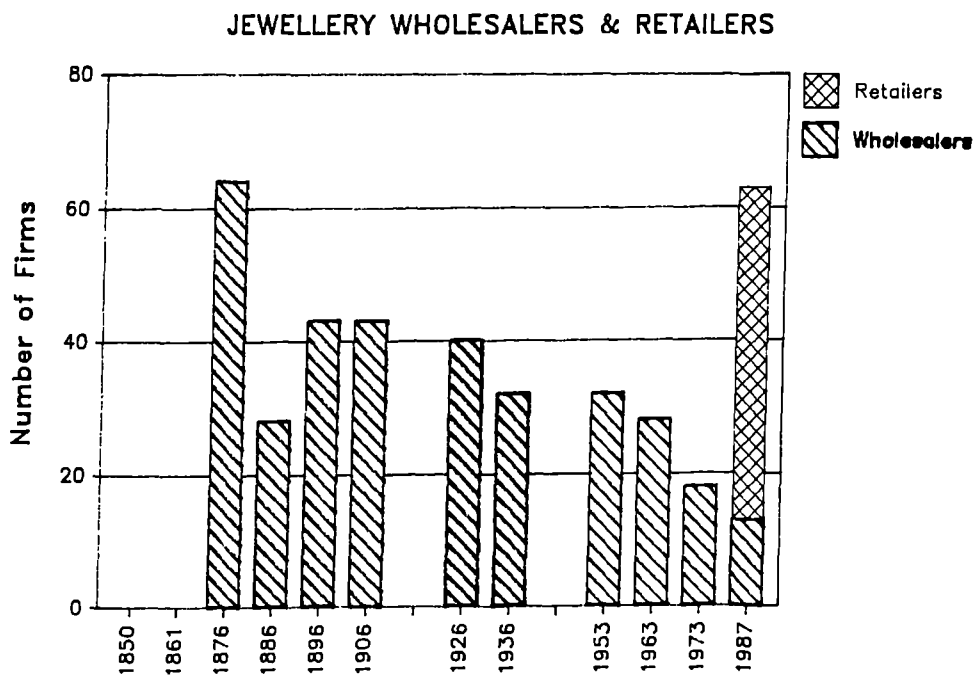


CHART 26.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

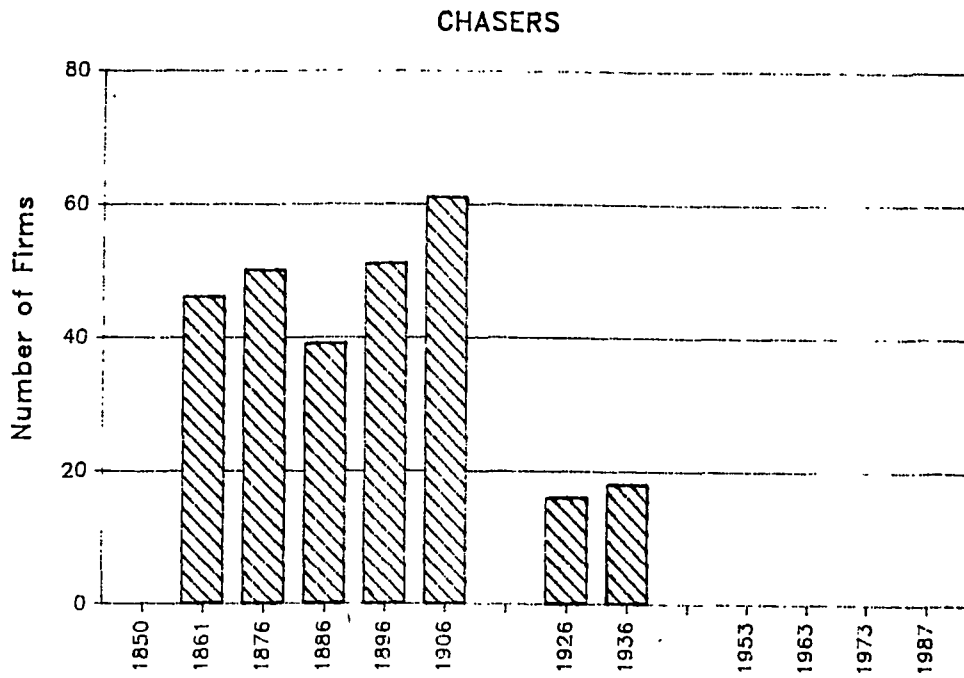


CHART 27.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

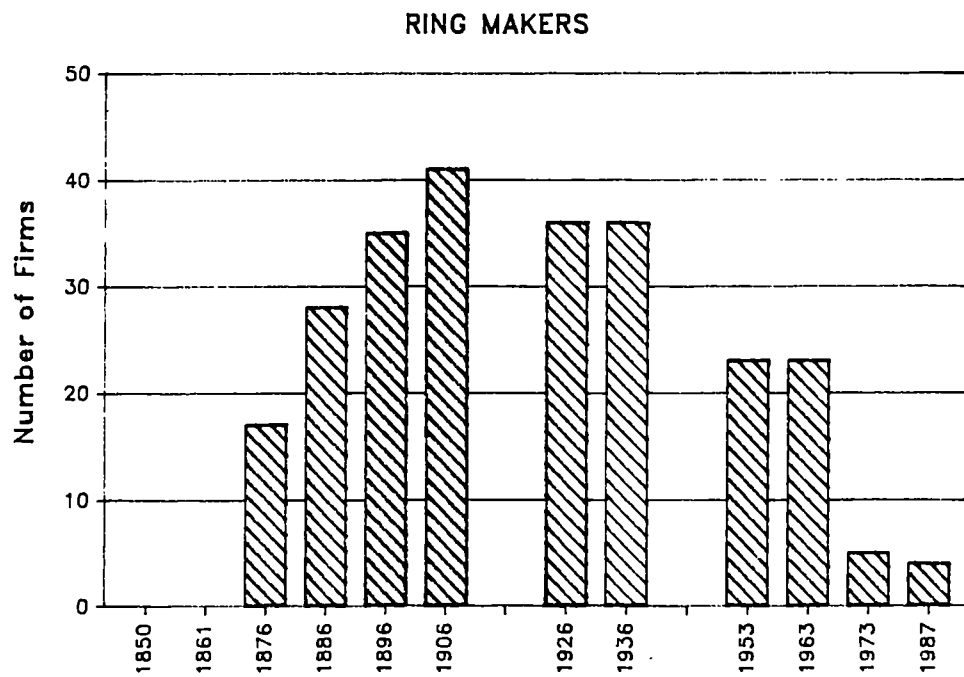


CHART 28.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

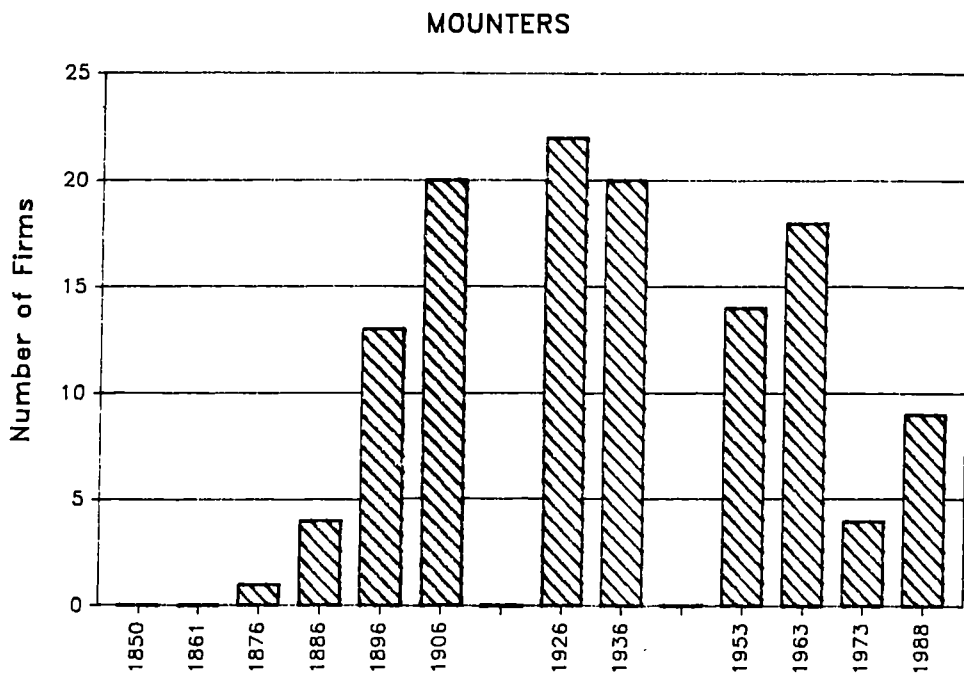




CHART 29.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

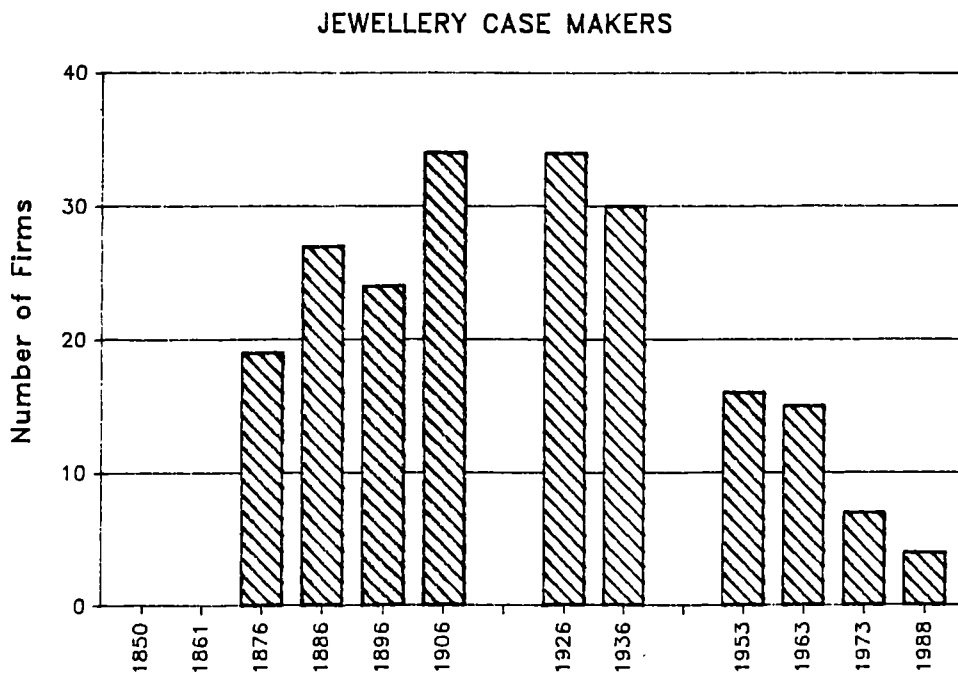


CHART 30.

Number of firms engaged in key trades in  
the Quarter for the period 1850 to 1987.

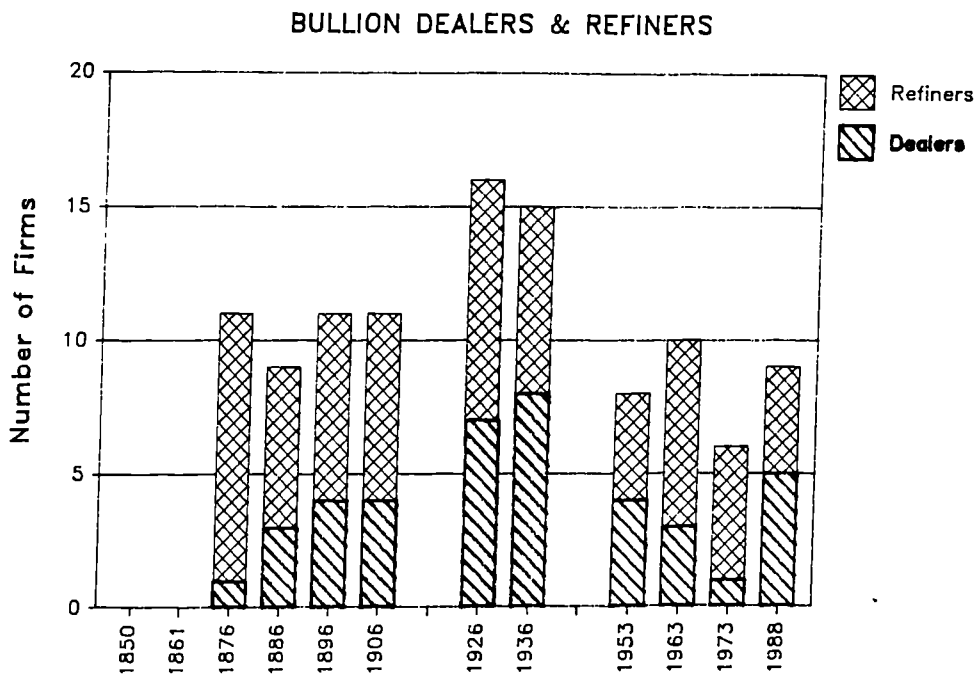
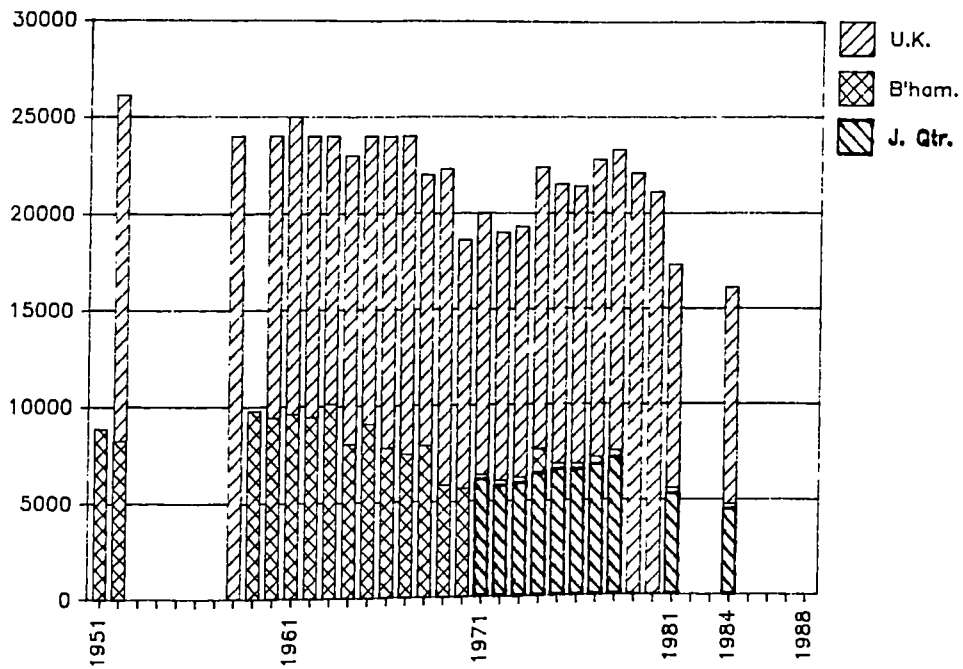


CHART 31.

Numbers in employment in the Quarter, Birmingham, and  
Great Britain 1951 - 1987.



APPENDIX C.

SCHOOL OF JEWELLERY AND SILVERSMITHING PRIZE AWARDS 1986

FULL TIME TRADE

First Year

City and Guilds	1st. Male		
BTEC/H.N.D.	1st. Male	Certificate: Female	
B.A. (Hons)	1st. Female		

Second Year

Silversmithing	1st. Male	2nd. Male	3rd. Male
Jewellery	1st. Male	2nd. Male	
Engraving	1st. Female		
Drawing and Design	1st. Female	2nd. Female.	

Third Year.

Silversmithing	1st. Male	2nd. Female	3rd. Male
Jewellery	1st. Male	2nd. Male	
Engraving	1st. Female		
Drawing and Design	1st. Female	2nd. Female	
Fashion Jewellery	1st. Female	2nd. Female	

PART TIME TRADE

Jewellery Mounting	1st. Male	2nd. Male	
Engraving Craft	1st. Male	2nd. Male	
Engraving Advanced Craft			
	1st. Female	2nd. Male	

YOUTH TRAINING SCHEME PRIZES

B.J.A.	1st. Female	2nd. Male	3rd. Male
--------	-------------	-----------	-----------

A.U.E.W./T.A.S.S.

Precious Metals Divisions

Joint 1st. - both male

GEMMOLOGY.

Preliminary Female  
Diploma Female

RETAIL JEWELLERY

Preliminary Female  
Diploma Female

SPECIAL AWARDS 1986

B.J.A. Travel Bursary

Male

B.J.A. Centenary Centrepiece Design Award

1st. Male

Runners up: 2 males

Victor Ludorum Male

Birmingham Assay Office Silver Design Prize

1st Female 2nd Female 3rd Female

Durant Prize for Jewellery Mounting

Female

Durant Prize for Jewellery Design

Female

The Fischer Prize Male

The Meeks Prize Male

The Needham Prize Male

Harry Brown Prize Male

Thomas Sutton Female

Sid Perkins Prize for Engraving

Male

B.A. HONS DEGREE IN ART AND DESIGN (JEWELLERY)

Twelve out of the twelve graduates were women.

CITY AND GUILDS OF LONDON INSTITUTE

Fashion Jewellery Crafts	Three out of five were women.
Diamond Mounting	Seven out of twelve were women.
Advanced Craft Fashion Jewellery	Both students were women.
Advanced Craft Diamond Mounting	Five out of seven were women.
Die Sinking	One male student
Silversmithing Craft	Three male students
Craft Engraving	Two out of six were women.
Advanced Craft Silversmithing	Three out of six were women.
Advanced Craft Engraving	One of three was a woman

NATIONAL ASSOCIATION OF GOLDSMITHS' RETAIL  
JEWELLERS' EXAMINATION

Preliminary:	Five out of ten were women
Diploma:	Five out of eleven were women

GEMMOLOGICAL ASSOCIATION OF GREAT BRITAIN

Preliminary:	Five out of eight were women
Diploma:	Three of the four were women

SCHOOL OF JEWELLERY AND SILVERSMITHING PRIZE AWARDS 1987

FULL TIME TRADE

First Year

City and Guilds	1st. Female	Certificates 3 males
H.N.D.	1st. Female	Certificate 1 Female
B.A. (Hons)	1st. Female	Certificate 1 Female

Second/Third Year

Silversmithing	1st. Male	2nd. Male
	Certificate Female.	
Jewellery	1st. Female	
	Joint Second: Male and Female	
	Certificate Male	
Engraving	1st. Male	2nd. Female
	Certificate Female	
Design	1st. Female	2nd. Male
Fashion Jewellery	1st. Female	2nd. Female
Horology (Preliminary)	1st. Male	2nd. Female
Horology (Intermediate)		
	1st. Male	2nd. Male
Horology (Final)	1st. Male	2nd. Male

PART-TIME TRADE

Jewellery Setting (Craft)		
	1st. Male	2nd. Male
	Certificate Male	
Jewellery Mounting (Craft)		
	1st. Male	
Jewellery Mounting (Advanced)		
	1st. Male	2nd. Male
	Certificate Male	
Silversmithing (Craft)		2nd. Male
Silversmithing (Advanced)		
	1st. Female	2nd. Female
Engraving (Craft)	1st. Female	
Engraving (Advanced)	1st. Male	2nd. Male





EXAMINATION SUCCESSES

B.A.Hons. All 11 students were women.

BTEC/H.N.D. Design (Crafts). 12 out of 17 were women.

City and Guilds Results:

Craft Certificate in Jewellery (Fashion Jewellery).

2 out of 6 were women.

Advanced Craft Certificate in Jewellery

(Fashion Jewellery).

2 out of 4 were women.

Advanced Craft Certificate in Jewellery (Diamond Mounting).

4 out of 10 were women.

Craft Certificate in Silversmiths' Work and Allied Crafts'

Silversmithing.

1 woman.

Craft Certificate in Silversmiths' Work and Allied Crafts'

Engraving.

3 women.

Advanced Certificates in Silversmiths' Work and Allied

Crafts' Silversmithing.

1 out of 4 was a woman.

Advanced Certificate in Silversmiths' Work and Allied

Crafts' Engraving.

2 out of 5 were women.