

'BLACK SPOT ON THE MERSEY'
A STUDY OF
ENVIRONMENT AND SOCIETY IN EIGHTEENTH AND NINETEENTH CENTURY LIVERPOOL

BY

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ABSTRACT

Liverpool underwent immense growth during the commercial and industrial revolutions of the eighteenth and nineteenth centuries, becoming the second largest city in the country and the fourteenth in the world (outside the Orient). This growth brought with it great problems and, despite an early reputation for healthfulness, the 1840's saw the town with the worst record of mortality in the country. At the same time the town's social geography was evolving into a distinct series of socially homogeneous regions which differed significantly in terms of their public health attributes.

This thesis investigates the nature and background of the public health crisis in eighteenth and nineteenth century Liverpool and combines it with an analysis of the processes operating to produce a diverse spatial structure. Population structure, migration, social class, income, poverty, housing type, house occupancy characteristics and public health are each examined in turn to build up a composite and comprehensive picture of Liverpool's social and residential environment.

A conclusion reached is that the beginning of Liverpool's environmental deterioration can be firmly traced to the 1780's. From then on, the fickle nature of the port economy, the proximity to Ireland and her poor, high land prices, insufficient space standards of housing, and inadequate urban services combined to create an environment peculiarly suited to engender and propagate contagious diseases.

At the same time the social geography of the town was beginning to take on many of the characteristics authorities have attributed to the 'modern' city - residential segregation through the spatial expression of social distance. In Liverpool this process was accelerated by the division of the working class into a largely Irish immigrant unskilled labour force and a non-Irish, skilled, manual workforce. The former tended to occupy the worst of the riverside side and inner district insanitary courts and the latter to segregate themselves increasingly into newer 'suburban' terrace housing.

A factor analysis of a large number of variables relating to social and residential matters identified three separate elements of Liverpool's urban structure. The first showed the close interrelationship between many environmental distributions and disease, (In particular, housing and population density). This component tended to display a distributional pattern that picked out the major court districts of the town, especially those of the north end. The second factor was related to cellar habitation and this was spatially related to the older 'made-down' failed 18th century middle class district. The third factor related to lodgings and wards that scored most highly were distributed in the inner district.

Finally a descriptive model is proposed that links the various elements of the urban system - economy, society and residential environment - in so far as they affected life-chances within Liverpool. It is hoped that this ecological framework would

provide a more satisfactory method for viewing the inter-relationships between the urban situation and public health than has ^{hitherto} ~~presently~~ been the case in the study of 19th century cities .

Iain C. Taylor

PREFACE

The roots of this work lie in a childhood in a Liverpool that was still essentially that of Victoria and Edward. My early years were spent in a fast-fading lower middle class terrace surrounded by an 1870's landscape of the bye-law streets off Lodge Lane; the 1950's, in the more slowly fading middle class villardom of Sefton Park's periphery. Interest in the 19th century landscape grew while attending an inner city high school which had a sixth form programme that permitted (if not condoned) a first-hand intimacy with dockland, slums¹, and the secrets of the Liverpool Record Office. Most of the 1960's were spent in two other large 19th century creations, Leeds and Toronto, where my interest in social and urban history became more generalised. Return to a physically transformed Liverpool re-kindled my interest in an urban past that was rapidly passing into oblivion. The present work is the result.

In conducting this research I should like to give thanks to the staff of the Liverpool Record Office, especially to Janet Smith, and to a large number of other Corporation officials for their assistance in locating sources.

Acknowledgement and thanks for assistance is given to many of the staff and post-graduate students (especially Hugh Cutler), of the Geography Department, of Liverpool University. To my advisor, Professor Richard Lawton, whose pioneering work on social-

¹ A familiarity updated and systematised in Taylor, 1975.

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Finally, I should like to recognize the support of my family; to my father for his introduction to the satisfactions of non-urban landscapes; to my mother for her humanity and the continuation of the family tradition of urban social work; most of all to my wife, Nancy, for her continued support and assistance at all stages of this work.

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INTRODUCTION

This thesis is concerned with two interlinked themes: the evolving relationship between society and the urban environment, and the spatial expression of these relationships. In addressing these themes, the focus is unashamedly that of a particular town viewed within a particular time period. It is hoped however that the narrowness is one of focus and not of perspective. This is an attempt at urban biography with wider questions in mind. Hopefully, the work makes a contribution at several levels - explanation of the unique and peculiar circumstances exemplified by Liverpool in the 18th and 19th centuries; a contribution to our growing knowledge of life within the context of 19th century economy and society; a contribution to our understanding of the roots of the spatial arrangement of contemporary cities.

The approach is holistic and broad and it stems from a conviction that, only by glimpsing the totality of the urban system, can certain problems be adequately explained. A major focus is on public health and this topic is one that defies any overly narrow viewpoint. Despite the early (and long-lived) association drawn between 'health and housing', the connexion is to some degree an oversimplification of the complex pattern of inter-relationships that link man with his micro-biological environment. There have been few attempts to portray the total pattern of urban living during the public health crisis of the mid-19th century and there are few modern works which have addressed themselves to the question of 19th century

urban health from a spatial or ecological standpoint.¹ This era of 'blue-book' reform has usually been viewed in the context of administrative history and the growth in the social responsibilities of local and national government² or within the history of medicine.³ The lack of work specifically addressing the question of 19th century urban mortality from an ecological perspective is surprising in view of the attention paid to these questions by the early social investigators and epidemiologists themselves, many of whom were well aware of the strong social and geographic correlates of morbidity and death.⁴

The second focus, that of urban spatial structure, also demands far greater attention than is usually paid to the links between the built environment and the social groups who variously occupied it. Work in urban history has generally concentrated on either the evolution of housing and residential areas⁵ (though far less attention is usually paid to

1 The work of the French historical demographer, Chevalier, is a notable exception. (Chevalier, (1958), 1973).

2 See, for instance, Flinn, 1965; Hennock, 1957; Lewis, 1952; Roberts, 1969.

3 See, for instance, Brockington, 1965; Crellin, 1968.

4 For specifically medical treatises, on Dublin see the work of Barker, 1818; Barker and Cheyne, 1821; Grattan, 1819; O'Brien, 1827; on Scottish cities, see, Cleland, 1836 (Glasgow); Cowan, 1840 (Glasgow); Littlejohn, 1865 (Edinburgh); Syke, 1843; on English cities, see Slaney, 1846 (Birmingham); Gaulter, 1833 (Manchester), Thackrah, 1831 (Leeds), [Baker], 1839 (Leeds); Smith, 1837-8 (Bethnal Green and Whitechapel). For reports on the 'state of the lower classes' which included health, see, for Manchester, Adshead, 1842; Faucher, 1844; Gaskell, 1833; Kay, 1832; for Bristol, Fripp, 1840; for Nottingham, Felkin 1840; for Belfast, O'Hanlon, 1853; for Glasgow, Cleland, 1832; for Hull, Manchester Statistical Society, 1842; for London, Weld, 1843; [Anon], 1840.

5 See, Chalkin, 1974; most of the chapters in Chapman, 1971, Checkland, 1964, Dyos, 1961; Forster, 1972; Kellest, 1961; Mortimore, 1969; Ward, 1962.

the development of urban infra-structures) or a social-ecological approach that treats housing as an independent variable which is 'present' to be variously taken up by different groups.⁶ Other works while addressing the topic of public health in an urban context have done so by largely ignoring the spatial perspective,⁷ though that of Stedman-Jones has taken the widest conceptual approach to the question.⁸

The present work separately analyses several elements which are considered to be crucial to an understanding of the urban social and residential environment. These are: population change, occupational structure, earnings and poverty, housing types, public health. For the 18th century, these analyses are contained in Chapters 1 and 2, and for the 19th century in Chapters 3 to 7. The two major foci, public health and spatial structure, to some extent serve as integrating devices and for the 18th century these topics are treated in Chapter 2, sections 2.5 and 2.6, and for the 19th century in Chapters 8 and 9. Chapter 10 attempts to link the various topics explored in the thesis by means of a statistical analysis and the development of a descriptive model.

6 Borchert, 1971; Goheen, 1970; Lawton, 1956; Robson, 1969.

7 Armstrong, 1974, Gauldie, 1974.

8 Stedman-Jones, 1971. It could be strongly argued the Engels classic stands alone in breadth and viewpoint (Engels, 1844, see Marcus, 1974).

Chapter 1

ECONOMY AND SOCIETY IN GEORGIAN LIVERPOOL

"All you see spread out beneath you - that immense place which stands like another Venice on the waters - which is intersected by those numerous docks - which glitters with those cheerful habitations of well-protected men - which is the busy seat of trade - ... where there is the cheerful face of industry - where there are riches overflowing and everything which can delight a man who wishes to see the prosperity of a great community and a great empire, all this has been executed by the industry and well-disciplined management of a small number of men since you were a boy."⁹

1.1. Growth of Trade

Liverpool's founding charter in 1207 was granted to a town felt to be of strategic significance on King John's route to Ireland. Its commercial importance in medieval times was severely limited, however, by its poor location and backward hinterland. But by the Restoration, it is clear that the 'decayed state' of the early Tudor period had passed.¹⁰ Salt and its manufacture (which commenced in the town in 1611) could be considered as a vital commodity in the growth of the town's trade, opening up links both inland towards Cheshire and across the sea towards Ireland, Bordeaux, and Spain. These commercial beginnings were the responsibility of a growing body of merchants, the 'nest of rogues' referred to in Sir Edward Moore's Rental of 1670 - men who were to take full advantage of Liverpool's increasing trade opportunities in the following

⁹ Erskine in 1792 quoted by Muir, 1907, p. 242.

¹⁰ Picton, 1875, Vol. 1, p. 44.

century.

The town's 18th century growth was closely tied to the increase of economic activity in its immediate hinterland and to the new overseas connexions, especially with Africa and the New World. The construction, from 1709 to 1715, of the country's first commercial dock was a necessary prerequisite for this expansion. The availability of capital for such a novel and expensive enterprise in a town still extremely moderately sized, reflected this Post-Restoration upturn in prosperity and the enterprise of the town's merchant elite.

The first decades of the 18th century also saw the improvement of inland water links with 'river navigation' schemes on the Mersey, Irwell, Weaver, and Douglas Rivers, succeeded in the 1760s by new canals and on land by turnpiked roads. These transport improvements ensured that Liverpool would be fully participating in and contributing to, the growth of South Lancashire's economy. Coal, salt, glass, and pottery were the early mainstay of the port's economy, the export of which linked Liverpool to N. America and the West Indies.¹¹ Salt was an industrial raw material too, vital in the town's growing metal and glass industry, necessary for pottery glazing, and later forming the basis for Liverpool's chemical and soap industries.

Cheap canal-borne coal was used as domestic fuel or could be exported and exchanged for other commodities such as

¹¹ Barker and Harris, 1954.

china clay from Cornwall to be used in the town's growing pottery industry.¹² The craft of clock and watch making had begun as an off-shoot of the Prescot industry, brought to Liverpool by John Wyke and was stimulated by the maritime needs for chronometers and the commercial demands of punctuality.

While local enterprises thrived, the town's trans-oceanic trade connexions also expanded greatly. Tobacco from the Carolinas¹³ and sugar from the West Indies became staple import commodities and led to the establishment of local processing industries. After 1740, slaving too became an important activity. Faster ships and competitive prices enabled Liverpool to undercut and, later, replace Bristol and London as the country's chief slave trading port. This activity led to the creation of banking and credit facilities which could handle planters' bills and promissory notes. The demands of the slave traders also helped create a local ship-building industry.

This continued diversification in products carried and in markets penetrated, was the formula and keynote of Liverpool's successful trade expansion in the late 18th and 19th centuries. Several factors gave continued impetus to the port's activities. First, the end of the slave trade and disturbances to traditional markets in America and France

12 By 1790, there were 74 houses on Shaw's Brow which were occupied by 374 persons engaged in pot production (Hyde, 1971, p. 20). The town had several well known potters including Richard Chaffers, the porcelain maker, Seth Pennington, the producer of punch bowls, John Sadler, and Guy Green, the discoverers of transfer printing.

13 Hyde, 1971, p. 26.

rewarded innovative entrepreneurs who adopted wide ranging trading policies of global diversification.

Added to these external factors encouraging 19th century port growth were internal and perhaps even more significant stimuli. Industries within a hundred mile radius of the port poured out manufactured articles which, in turn, demanded raw materials. These had, almost by necessity, to be shipped through the port of Liverpool on their way to and from Britain's far flung trading empire.

1.2. Occupational Structure

The demands of commerce and manufacture shaped the occupational structure of the community but in contrast to the research done on Liverpool's economic growth, little is known about many aspects of its emerging occupational structure.¹⁴ It is clear that one important change in employment structure began to emerge in the 18th and early 19th centuries. There was an increasing demand for less skilled workers as against the apprenticed skilled trades. In Liverpool, there were few trades that suffered from the technological changes that affected the textile occupations of East Lancashire. More important was the substitution of lower quality, unregulated production through the competition of 'dishonourable' tradesmen. The classic examples here were tailoring and shoemaking. Cheaper, lower quality articles not requiring as much skill in

¹⁴ Especially in the matter of wage rates, size of enterprise, reliability of employment, work habits, and practices.

preparation allowed for the 'interloping' of 'dishonourable' workers such as apprentices, women, children and 'dungs' (semi-skilled slop workers).¹⁵

Perhaps the most fundamental factor in the relative shift towards unskilled occupations was the changing balance of Liverpool's urban economy in general. Inter-regional and international specializations in craft production had forced many Liverpool crafts - watch and pottery making, for instance - out of business by the middle of the 19th century.¹⁶ The ability of capital and labour to turn easily to other enterprises in a growing commercial economy was probably of equal importance. Skilled labour could move and craft industrialists could sell their sites to other users. The fate of Liverpool's potteries and shipbuilding yards well illustrated these tendencies.¹⁷

The disappearance of these traditional craft industries meant the extinction of embryonic working men's organizations that had been able to evolve within the fairly restricted confines of the apprenticed trades. These societies had some limited effect on shielding their workers from the

¹⁵ Accounts in the Morning Chronicle, June 24 and July 1, 1850 describe in detail how this process operated. Before 1792 the trade was controlled by master tailors. Gradually piece-work, 'sweating' and women workers were introduced and the trade finally opened after a strike in 1827 was broken by the introduction of Irish unskilled workmen. The sweating system grew, encouraged by the continued immigration of Irish (57.5 per cent of the tailors sampled from the 1851 Liverpool Parish enumeration books were Irish). ('Sweating'; work at home for low wages under sub-contract (O.E.D., first usages 1851 and 1879).

¹⁶ Hyde, 1971, p. 40.

¹⁷ Liverpool's potters left for Staffordshire and the Herculaneum pottery site for example was sold to timber merchants. In 1800, there were 600 shipwrights in Liverpool but by 1835 the industry was declining (Neal, 1969, p. 170).

worst misfortunes of old age, widowhood, and accident, as well as being able to push up wages during boom years and hold back cuts in slumps. With their disappearance, the work force was unorganised and powerless.¹⁸

The skilled trades that continued were usually those that benefited directly by the maritime connection. Metal founding and metal working for example - the striking of anchors, chains, or the supply of marine parts - was a significant skilled industry. Trades closely connected with the growth of the town's physical fabric were also of continuing importance. The building industry employed a high proportion of semi- and unskilled men. It was these latter occupational classes that were most favoured by Liverpool's expansion. The demand for work involving unskilled physical labour increased progressively with the expansion of trade. All activities concerned with the transport and storage of cargo - shipping, warehousing, hauling, and freighting and with every phase of the

¹⁸ The Liverpool Shipwrights' Society is a good example of such an organization. As freemen, they wielded considerable political power and they were even able to finance a row of cottages for retired workmen built in 1823 on Bond St. (The cottages are depicted in a model in Liverpool's Museum of Public Health.) At the height of their strength, a locally made jug was commissioned displaying their tools (axe, adze, auger, and hammer) and the Society's motto, 'Let Brotherly Love Continue' (Hikins, 1973, Plate 1).

'Turn-outs' of tailors (1756 and 1765), potters (1757), pewterers (1765), cabinet makers (1760), sawyers (1762), coopers (1764), and shipyard apprentices (1773) suggests the existence of other 18th century working men's associations (Hikens, 1973, p. 12). Significantly, all these trades (with the exception of coopering for which no technological substitute could be found) were subject to declines or displacement as Liverpool came to specialise more heavily on the commercial function.

capital works programme of dock, warehouse, road and later railway construction demanded large numbers of common labourers. As these activities were little affected by the revolution in steam locomotion even until the First World War¹⁹ the demand for men was relatively inelastic - there were no technological substitutes. An upturn in trade and commerce was, therefore, immediately reflected in a rising demand for such labour.

There is little direct evidence on the nature and size of this labour force before 1830 and by and large the record is silent on the matter of how the ordinary person earned his living. The most telling index is the record of the work accomplished - the docks built, tonnage of cargo loaded, ships manned, etc. The documentary evidence is limited.²⁰ We hear of occasional strikes such as the seaman's strike and riots of 1762 and 1775²¹ and a more peaceful 5 to 6 week walkout in 1791, which involved seamen, ship repairers and carpenters,^{strikes} which marked the final labour action prior to the anti-combination legislation of the Napoleonic period.

Estimates of the size of the marine work force in Liverpool at this time suggest that numbers of seamen in Liverpool-owned ships (an approximation of the number of Liverpool seamen) increased steadily in the 18th century (Figure

19 Hobsbawm, 1964, p. 207.

20 Careful analyses of the 18th century directories (for which Liverpool is well supplied) would reveal something of the occupational distribution of the population. The coverage of directories was however partial and was strongly oriented towards a commercial and middle class clientele.

21 Hikins, 1973, p. 14.

1.1). Enfield gives a total of 5,664 in 1771²² and Troughton, 6,000 in 1801.²³

Warehousing, portering, and dock labour formed a vital element in the movement of ships' cargoes. Yet specific references to this work ^{are} ~~is~~ almost entirely absent from the literature before 1830. Similarly, the occupational implications of the capital works programme in the pre-Victorian era is difficult to determine. In the 18th century, 6 docks were built at a cost of 150,000 pounds²⁴ and the 14 years between 1811 to 1825 saw an equivalent amount of construction taking place with the opening of Canning, Union, and Prince's Docks.

By the 1830s, the diversification of markets served, and products carried, by Liverpool's merchant fleet had given the town a formidable lead in Britain's international commerce. But this very success in trading and market exploitation skewed the port's industrial and occupational structure. The broadly based port economy, lacking specialisation in particular commodities, was served by a highly specialised urban economy and occupational structure almost totally geared to the needs of commerce. By the mid 19th century, as we shall see later, six unskilled manual occupations alone accounted for over a third of the entire male adult labour force.²⁵

22 Enfield, 1773, p. 67.

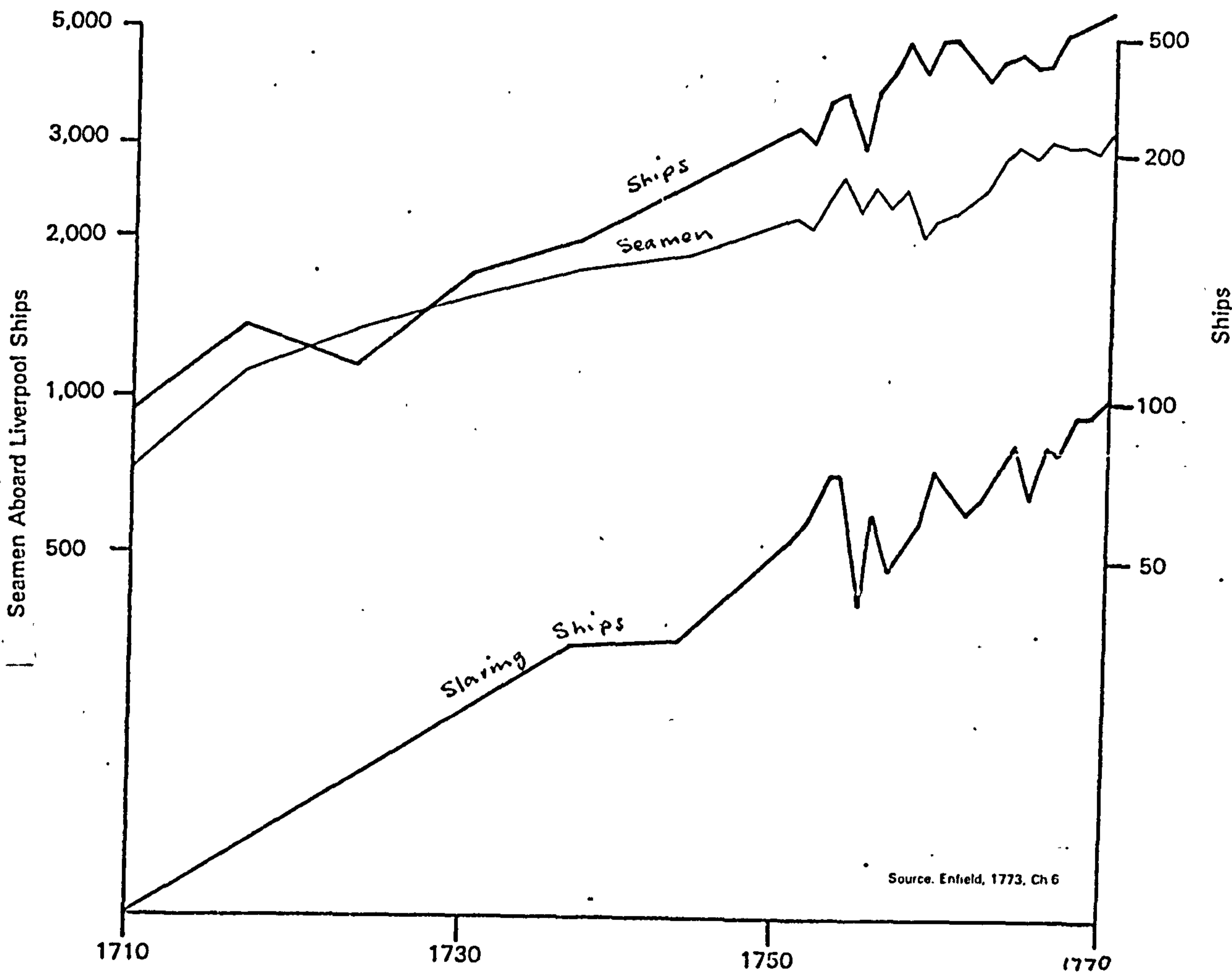
23 [Troughton], 1811, p. 268.

24 Hyde, 1971, p. 78.

25 General labourers, seamen, dock workers, warehousemen, and agricultural workers (the latter were probably recent immigrants who were stating their last type of employment).

FIGURE 1.1

Liverpool Ships and Seamen, 1709-1761



1.3. Growth of Population

"That Liverpool has received and continues to receive the constant influx of new inhabitants, is evidenced from the well known fact that on the Exchange, if any spot containing one hundred merchants is indiscriminately chosen, not more than fifteen in every hundred will be found to be natives of the town."²⁶

The graph of Liverpool's population growth matched that of its growing commerce, indeed the two were closely tied (Figure 1.2). In the 18th century, the tonnage of shipping cleared from Liverpool increased fourteen-fold and between 1800 and 1900 it grew twenty-six times.²⁷ Between 1700 and 1775, population growth took place at the rate of one person for every three new tons of shipping (Table 1.1). Thereafter, the ratio decreased as ship sizes and operating efficiency increased, until by the 1870s the ratio was closer to 10 tons per capita. Expressed another way, during most of the 18th century, trade doubled every 20 years and population every 30 years. In the first half of the 19th century this pace quickened (Table 1.2) and Smithers described it as an increase "equal to, if not exceeding many of the United States".²⁸ Natural increase (as expressed by the excess of christenings over burials) amounted to about 13 per thousand in the period 1821 - 32⁹ so that this probably accounted for less than one-third of the 45.6 per cent increase for Liverpool and district in the decade 1821 - 31. The greater part of the growth was, therefore, attributable

26 Smithers, 1825, p. 208.

27 Hyde, 1971, Appendix 1.

28 Smithers, 1825, p. 199.

29 ibid. p. 201.

FIGURE 1.2

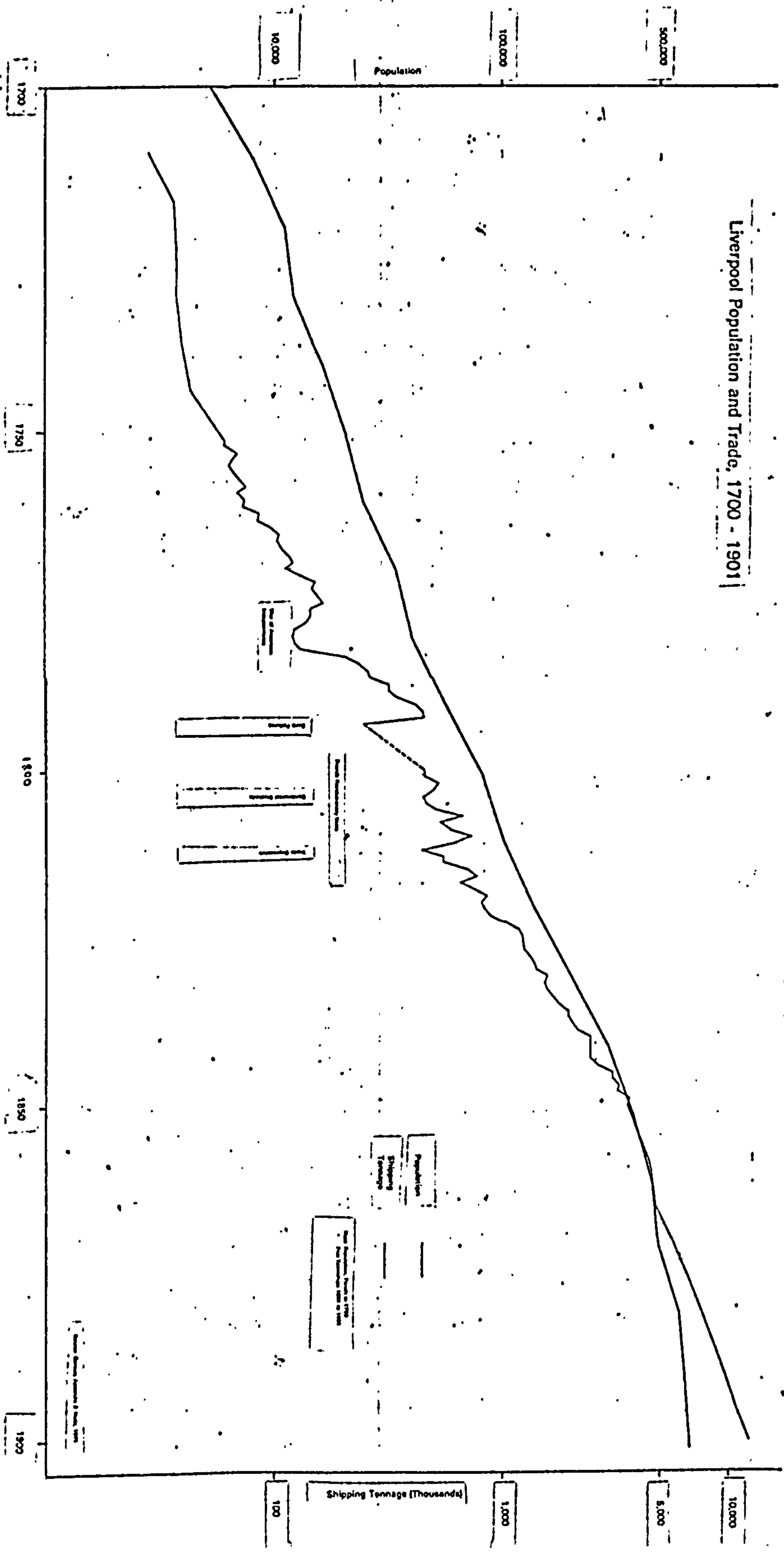


TABLE 1.1
 Liverpool, 1723-1870
 Shipping Tonnage and Population Growth

	<u>Shipping 000's Tons</u>	<u>Population 000's</u>	<u>Tons Per Capita</u>
1723	37.2	12	3.3
1752	60.9	20	3.0
1770	112.6	34	3.3
1789	34.0	56	6.1
1811	611.2	94	6.5
1830	1412.0	190	7.4
1850	3536.3	360	9.8
1870	5728.5	530	10.8

Source: Shipping - Hyde, 1971, Appendix 1.
 Population - Table A3.1

TABLE 1.2
 Liverpool, 1700-1905
 Years Taken Doubling Trade and Population

<u>Year</u>	<u>Years Interval</u>	<u>Tons of Shipping Cleared (000's)</u>	<u>Population (000's)</u>	<u>Years Interval</u>	<u>Year</u>
			5		1700
1710		30		16	
	41		10	33	1716
			20		1749
1751	26	60		31	
1767		120			
	17	240	40		1780
1784				22	
1801	17	480			
			80		1802
1822	21	960		24	
			160		1826
1836	14	1920		20	
			320		1846
1852	16	3840		45	
1880	28	7680			
	25		640		1891
1905		15,360			

Source: Shipping - Hyde, 1971, Appendix 1
 Population - Table A3.1

to in-migration.

A thriving coastal trade linked Liverpool to virtually every small port around the Irish Sea.³⁰ The town was, therefore, less than a few days' sail from some of the remote and backward rural areas of the kingdom with their abundant surplus rural populations.³¹ Liverpool's commercial connexion with Ireland was of long standing but one of the first references to Irish elements in its population can be found in a letter by the traveller Samuel Derrick in 1767, who claimed "the majority" of Liverpool's inhabitants were "either native Irish or of Irish descent".³² This was unlikely, for Burke found only fifteen Irish names in the 1766 Directory, published the year before Derrick's letter.³³ ~~Three years later~~ ^{For the year 1769,} Burke found twenty-two and, in 1781, 80 Irish names (those of County Wexford being the commonest). By 1790, the number had risen to 120, the majority engaged in trade of some sort. The Liverpool Irish population must, therefore, barely have exceeded 1,000 persons (two per cent of the total population) - certainly not the

30 For instance, in 1788, 988 ships entered and 991 cleared Liverpool for Ireland (Smithers, 1825, p. 92).

31 Systematic data on population origins in pre-1841 period can only be gleaned from detailed study of church records (especially marriage registers). Such a study would provide valuable new evidence of Liverpool's drawing power in the early years of its growth.

32 Derrick, 1767, p. 24. He slyly added that "the Hibernians thrive best when transplanted". The earliest reference to Irish in Liverpool that I encountered is contained in Stanley's remarks in a sermon given a year after the opening of the Public Infirmary in which he refers to the Infirmary's role in "relieving the distress of our fellow subjects in Ireland, who are visibly incorporating more and more with [Liverpool]" (Stanley, 1750, n.p.).

33 Burke, 1910, p. 30. The list included five ship's captains, two merchants and eight 'slopmen' (traders).

significant element implied by Derrick and far below the numbers of Irish-born enumerated in 1841 (when they constituted 17.3 per cent of the town's population).

At the turn of the century, population movement from Ireland increased dramatically following the chaos and bloodshed associated with the United Irishmen's uprising of 1798.³⁴ The emigrants included not only the respectable but also the lower orders who were to play such a major role in Liverpool's 19th century life.³⁵ John Gladstone believed that this migration was chiefly responsible for the population increase of over 17,000 persons in the 1801 - 11 decade.³⁶ Wallace thought it had given a stimulus to trade³⁷ but the Irish also brought problems and one commentator noted an increase in house rents and lodgings to 'exorbitant' levels.³⁸

The size of the Irish immigration to Liverpool in the early years of the century is difficult to determine³⁹ but the estimates indicate a very strong numerical increase in Irish

34 See Brooke, 1853, p. 301; Mercator [Sir John Gladstone], 1816, p. 6; [Troughton] 1810, p. 198; [Wallace], 1797, p. 267; Burke, 1910, p. 30.

35 [Troughton], 1810, p. 198, referred to the fact that "many very immoral characters of the lower class have emigrated ... hither, but the vigilance of a well-regulated police will doubtless redress the operations of criminality in this town whether native or foreign". An entry in a contemporary gazeteer also singles out the number of Irish in the town as a fact of note (Anon., 1808, Vol. 2, p. 1184).

36 Mercator, 1816, p. 6.

37 [Wallace], 1797, p. 267.

38 [Troughton], 1810, p. 198.

39 Most estimates of the Irish population rely on the application of a factor to Catholic baptismal statistics. These usually range between 18 and 25 times the baptismal figures. Not all Catholics were Irish nor all Irish, Catholics, so it is difficult to estimate the exact proportions.

moving into Liverpool during the first decades of the 19th century.⁴⁰ (Table 1.3)

The social impact of these Irish migrants was considerable. The easy-going tolerance, the rough democracy of the boisterous slaving port that impressed Wesley⁴¹ appeared to sour in the early years of the Irish migration.⁴² On July 12, 1819, an anti-Irish riot occurred and 7 years later the significantly termed Catholic Defence Society (later less combatively named the Catholic Truth Society) was formed.⁴³ Militant Protestantism emerged in Liverpool in the 1830s spurred by the Emancipation question nationally and the Corporation

40 The growth of the Irish Catholic population is also reflected by the increase in church provision - St. Peters, Seel St. 1788; St. Anthony's, 1804; St. Nicholas, 1807; and St. Patrick's, 1827. These churches could accommodate 12,000 sittings (Smithers, 1825, p. 38) and were 'numerously attended' ([Troughton], 1810, p. 387).

41 John Wesley's journal of 14 April, 1775 recorded, "The people [of Liverpool] in general are the most mild and courteous I ever saw in a seaport town, as indeed appears by their friendly behaviour not only to Jews and Papists who live among them but even to the 'Methodists', so called." quoted by Benas, 1920, p. 193. The Catholic St. Mary's Church, Edmond St. had been burned down by rioting ships' carpenters in 1746 celebrating the defeat of the Jacobites at Carlisle, but the Corporation had later donated a site and money for the rebuilding of the church (Picton, 1875, Vol. 1, p. 180).

42 The ignorant Irishman was a handy butt of local humour (see, [Anon], 1820(?)).

43 The timing closely corresponds with the growth in strength of the 'Belfast Defenders' (descendants of the Ribbonmen of 1798), a movement born in similar circumstances (Baker, 1973, p. 190). Remarkably though, Liverpool was not named in the investigation into the Orange Lodge which led to the Lodge's suppression in 1836. (P.P., 1835, XVII, p. 1) though there were certainly Orange organizations in Liverpool at the time.

TABLE 1.3

Liverpool, 1800-1841

Baptisms and Estimated Size of the Irish-Catholic Population

<u>Year</u>	<u>Catholic Baptisms</u>	<u>Estimated Catholic Population</u>	<u>Estimated Irish-Catholic Population</u>	<u>Estimated % Irish of Total Population</u>
1800	459	8,200-10,100	4950	6.4
1810	764	13,800-16,800	8240	8.7
1820	1021	15,300-22,500	11,020	9.3
1830	1750	26,200-38,000	18,900	11.4
1841 (census)			49,639	17.3

* Total Irish population.

Note: A high (22) and low (18) ratio has been applied to baptism totals. Irish baptisms were estimated to be 40% of Catholic baptisms.

Source: [Anon.], 1832

school debate locally.⁴⁴

Of other immigrant groups in the period before 1830, it is difficult to say much. Liverpool's Welsh population was apparently increasing in size by the end of the 18th century⁴⁵ and John Gladstone refers to them as labourers on "the new docks and other public buildings".⁴⁶ Perhaps the clearest indications of the Welsh presence ~~was~~^{were} the Welsh school and the chapels which conducted Welsh language services.⁴⁷ These chapels could accommodate 5,000 worshippers (one-quarter the accommodation available in the Church of England). Not until 1826 was an Established church (St. David's) erected to conduct services in Welsh. It was founded following a petition that pointed out that "a great number of persons from the principality have resorted to and become residents of Liverpool."⁴⁸ By this time, Smithers estimated the number of

44 'A great Protestant meeting' was held in Liverpool on October 29, 1835 and a Protestant Association founded. A short-lived periodical Liverpool's Protestant Sentinel Vol. 1 (1841 - 2) described the history and initiation ceremonies of the then banned Orange Order (no doubt for the benefit of clandestine Orange groups). For the fierce controversy that raged over the attempt by the Whigs to introduce non-denominational classes at the two Corporation schools, see Murphy, 1959. The reaction brought to the fore Reverend Hugh McNeile, a fierce Anglo-Irish churchman with unusual power of oratory and a leader of bible-carrying demonstrations. The electoral reaction to this mild experiment introduced by the Unitarian humanist, William Rathbone, was a Tory victory in 1841. By allying Religion with Party the Conservatives were assured of a half century of uninterrupted control of council.

45 Wallace, 1797, p. 207. A Welsh Methodist Chapel in Pall Mall had been opened in 1787.

46 [Mercator], 1816, p. 6.

47 Smithers, 1825, p. 36. The school, founded in 1804, cost 1,700 pounds and could hold 600 to 700 boys (Midwinter, 1970, p. 75).

48 Journal of the House of Commons Vol. 81 (1826). Enacted 7 Geo. IV c. 51.

Welsh inhabitants at 15,000⁴⁹ approximately equal to the number of Irish at that time.

Churches of the Church of Scotland with accommodation for 3,100⁵⁰ also point to the presence of another national grouping of some significance in the town. They came to include many professional and merchant families. For example, the first of the Gladstone family to come to Liverpool was a Scottish corn factor who arrived in the late 18th century. The future ship-building tycoon, William Laird, came to Liverpool from Greenock in 1810.

Alongside these national groups (the full social significance of which will be discussed later in Chapter 5) were the numerous migrants from other parts of England, especially the counties of the North West. In the absence of detailed census data on the county of origin of English immigrants prior to 1851, a few successful must speak on behalf of thousands of their more humble fellows - men such as George Holt from Rochdale arriving in 1807 "with a guinea in his pocket", Brocklebank and Ismay from the Cumberland coast, Thomas and James Harrison from Garstang in Lancashire.⁵¹

1.4. The Problem of the Poor

"New wealth was in the pockets of new men.
A new poor lived in new hovels."⁵²

49 Smithers, 1825, p. 37.

50 ibid.

51 Hyde, 1971, p. 46.

The structural changes in Liverpool's economy and the rapid growth of population in pre-Victorian times produced an increasingly large poor and pauper class. The former were the casually employed, thrown out of work by the vagaries of wind and the trade cycle. The latter were the unfortunates - the widows, children, sick and injured produced by the town or perhaps attracted to it by the possibility of charity. The merging of the two groups, and the need to extend charity from specific cases to a whole section of the workforce, produced the solutions contained in the New Poor Law whereby charity was 'institutionalized'.⁵³

The Georgian period in Liverpool is one in which this transition from the 'old' to the 'new poor' took place and it is reflected in the various attempts by the Parish and individual charities to cope with the ever rising problem of poverty and its relief. In part, this growth was a reflection of an increasing population, but there is some evidence to indicate that the proportion of the population deserving poor relief was also increasing.

The evidence in this pre-statistical period is, of course, fragmentary and towns had always had a pauper

52 Holt, 1936, p. 2.

53 Simey, 1951, p. 23. No longer could individual charity differentiate between the 'charitable objects' and the undeserving poor - those apparently employable men who were without work.

problem.⁵⁴ but the largely qualitative evidence appears to point to the increasing vulnerability of the population to the vagaries of the town's commercial fortunes. The aftermath of the Seven Years War had resulted in a considerable increase in distress.⁵⁵ Streets were filled with "the most abandoned and dissolute characters" with no visible means of support" and with begging children, whores, and thieves.⁵⁶ The years of the War of American Independence with "our gallant ships laid up and useless"⁵⁷ and the Napoleonic Wars, were highly disruptive to trade and productive of distress. A petition to the House of Commons from the Parish in 1806 stated that "as the trade and commerce of Liverpool have increased [so] the number of poor has also increased".⁵⁸

The end of the Napoleonic wars did not see the disappearance of poverty. Indeed, poor rates increased so rapidly (especially in 1817 and 1818) that a disgruntled

54 In 1678, for instance, there were complaints in Liverpool that "a great concourse of people have of late time resorted hither and have been concealed in design to gain settlement" (Clark and Slack, 1972, p. 34).

55 In 1769, the mayor remonstrated against landlords letting cheap houses to the poor, for, at rents below 10 pounds per annum, the houses were not ratable (Troughton, 1810, p. 147). A new workhouse was opened in 1772, by which time the old one (built in 1732) was "found incapable to accommodate the increasing number of poor" (Smithers, 1825, p. 296).

56 [Troughton], 1810, p. 147.

57 *ibid.* p. 160.

58 Journal of the House of Commons, Journal Vol. 61 (1806) p. 72. This was an attempt to improve the Parish's tax base by obtaining rating powers over neighbouring townships where resided "many persons having counting houses, warehouses, offices or shops, situated in the Parish".

electorate revolted and forced a reorganization of the Vestry.⁵⁹ By 1820, 40,620 poor were being relieved of whom 13,527 were admitted to the workhouse. Although these totals were to drop under the new financially rigid regime of the reformed Vestry which attempted to exclude the able-bodied poor from relief whatever the state of trade, the crisis probably accurately reflected the increasing size of Liverpool's poor population. It could be said that the behaviour of the Vestry prior to 1821 represented the charitable standards of the 18th rather than the more harsh Benthamite economies of the 19th century. If such was the case, the rise in expenditure in the earlier period can be seen as a genuine reflection of increasing poverty defined under the 'old' standards, by then become 'over-generous'.⁶⁰

Private charity too became active during the period of the Napoleonic Wars. A local branch of the national 'Society for Bettering the Conditions and Increasing the Comforts of the Poor' was established in 1808. That winter was especially hard and the increase in the price of food was such that in Liverpool "the poor could not by any exertions of their own procure a supply of the coarsest and most ordinary

59 The Sturges-Bourne Act was adopted by the Parish. This act instituted strict controls on the local poor law administration. In its workhouse test and the firm line drawn between the 'deserving' and the 'idle and profligate poor', it anticipated the provisions of the New Poor Law by 15 years.

60 The new Vestry had to confess that though the numbers in the workhouse were large, "it consists almost entirely of such as from infancy, old age or infirmity [who] are reduced utterly incapable of earning a livelihood by means of their own labour" (Peet, 1912, Vol. 2, p. 171). The 'in-house' poor had always been largely of this class, in 1794 for instance only 35 per cent of the inmates were between the ages of 20 and 60.

sustenance."⁶¹ This comparatively small society was able to relieve 6,413 families (23,094 persons) applying for relief during the winter 1808 - 9⁶² and a further 15,985 persons in the following winter.⁶³ The war with the United States in 1812 affected trade and this was a year "of unexampled distress and an increase in poor never before equalled".⁶⁴ War and the violent economic fluctuations that it entailed were obvious causes of growing distress, but there were other factors. The 1820s, for instance, were years of trade revival but there are indications that the town's pauper population was still on the increase.⁶⁵

The Irish migration discussed earlier in this chapter appears to have been a strong contributory factor. John Gladstone was first to publish the view that there was a connexion between pauperism and the immigrant. His arguments anticipated most of the points in a debate that were to be repeated in the following 40 years.⁶⁶ Another famous father, Henry Booth, also felt that, though the heavy migration obeyed 'the hidden hand' of political economy, the influx would have severe consequences for the town.⁶⁷

61 Society for Bettering the Conditions and the Comforts of the Poor ... [S.B.C.I.C.P.] ... , 1812(?), p. iv; see also Picton, 1907, Vol. 1, p. 288.

62 ibid. p. 3.

63 ibid.

64 Peet, 1912, Vol. 2, p. 78.

65 Booth, 1824, p. 2, for example, estimated 14,000 human beings "lamentably deficient in lodging, clothing and food".

66 [Mercator], 1816.

67 Booth, 1824. He felt the movement an inevitable consequence of the lack of an Irish, and the presence of an English, poor law.

These men of affairs feared the vulnerability of Liverpool to a continued and large-scale influx of Irish from what must have seemed at the time a bottomless sink of peasant misery ("a poor and unemployed population swelling out and extending itself to great sea ports").⁶⁸ Booth described the plight of typical migrants to Liverpool arriving in

"the most deplorable condition. For a few days, they traverse our streets and quays in an ineffectual search for employment. They become domiciled in their new abode, struggling with a thousand hardships till at length in the hopelessness of utter destitution they serve in their day and generation to swell the ranks of pauperism, of sickness and death."⁶⁹

Those that were not thrown on charity

"became of necessity persevering competitors with the English labourer, depriving him to a certain extent of the advantages he would otherwise reap from the superior habits, manners, civilizations of his own country men."⁷⁰

In prophetic words, 25 years before the great epidemics of the late 1840s, he accurately foresaw something of Liverpool's future,

"What hope is there that if Liverpool continues to flourish for another quarter century there will not be an increase of extreme poverty and wretchedness proportionate to the increasing wealth and prosperity of the town?"⁷¹

The Irish were becoming "the main foundation of our burden"⁷² and Booth proposed to return them to Ireland "by the shiploads

68 Booth, 1824, p. 49.

69 *ibid.* p. 44.

70 *ibid.* See also Smithers, 1824, p. 200.

71 *ibid.* p. 53.

72 [Mercator], 1816, p. 6.

to seek a living as best they can ..."⁷³

The Irish were, therefore, certainly one important element in the growing pauper class of the town. It is apparent, however, that though they were disproportionately represented among the poor⁷⁴ there were at least an equal number of non-Irish in similar circumstances.

1.5. Conclusion

Liverpool's success in creating a diverse commercial economy appears to have been accompanied by other less desirable features. The rapid population growth that was generated by an increasing market for labour involved the immigration of large numbers of workers from the rural areas around the Irish Sea Coast. The Irish were especially subject to considerable pressure at home, and began to arrive in Liverpool after the first years of the 19th century. The labour market in which they found themselves was the product of an economy that was becoming ever more heavily specialised on the port and its ancillary functions. The town's traditional craft industries were on the decline while the growth sector of the urban economy demanded labour with few skills. The occupational distribution

73 ibid. The 'passing back' of Irish paupers came into effect in the 1820s. For instance, 17,235 Irish living in Liverpool were passed back to Ireland in the years 1823 to 1831 - almost half of the number of Irish passed back from all England (S.C. Irish Vagrants, P.P., 1833, XVI, p. 354).

74 The newly formed Liverpool District Provident Society in the winter of 1830 relieved 3,897 persons with soup, bread and coal of whom 63 per cent were Irish (Liverpool District Provident Visiting Society, First Annual Report, 1830, n.p.).

produced by this economy became the dominant characteristic of Liverpool's 19th century society and is fundamental to the understanding of the nature of its subsequent urban structure.

The prime consequences of this economic-occupational structure which demanded labour of low skill were twofold, wages were low and work was uncertain. Further discussion of the effects of this employment structure will be given later in Chapter 4, but it is important to note that the pre-Victorian period saw the increasingly ugly human consequences of this economy.

As the population increased, a constant proportion of poverty and pauperism would, in any case, have produced massive numerical increases in distress. As it was, evidence has been cited that appears to indicate a more than proportionate growth in the pauper population. Without available statistical sources, the claim cannot be conclusive but the extent and nature of public comment, together with the record of the establishment of charitable societies, can be interpreted as indicators of rising levels of distress. The overriding impression of contemporary observers, however, was of the sheer size of the increasing pauper population. It was growing despair at improving the material lot of the poor that Simey feels contributed to a change in charitable emphasis from good works to religious teaching.⁷⁵ The more difficult it became to

75 Between 1811 and 1822, 13 societies were formed in Liverpool most of which were dedicated to the propagation of the Gospel among the poor. See Smithers, 1825, p. 267 ff and Simey, 1951, Ch. 2.

comprehend and treat the problem, the more inclined were the middle classes to attribute poverty to the failings in character of the poor themselves.

The growth in the numbers of poor began to influence the character of the urban environment. Signs of urban distress began to appear. Housing, for example, was increasingly difficult to find and outright homelessness became a problem⁷⁶ More threateningly, pauper districts grew in size until they began to contain within them populations equivalent in size to entire towns of medium rank. "In some of the most populous districts of the town, whole streets are entirely occupied by the poor themselves", stated an annual report of a charitable society.⁷⁷

To the middle classes, the growth of these poverty-ridden areas was a frightening phenomenon. Whole districts of the town were becoming unknown and alien to all but the most stout-hearted of urban explorers and it is to this process of urban differentiation that we shall turn next.

76 By 1830, a society established the 'Permanent Night Asylum for the Houseless Poor' and in one year provided 42,000 night's' shelter for those who would otherwise have taken refuge "in carts, on horse middlens under cellar lids or any other place which they can find..." Permanent Night Asylum for the Houseless Poor. 1830, p. 8. The society purchased a house in Freeman's Row" unsuitable for respectable tenants on account of being in the immediate vicinity of the most indigent part of the Liverpool population" (*ibid.* p. 2).

77 S.B.C.I.C.P., 1813(?), p. 4.

Chapter 2

HOUSING AND THE URBAN ENVIRONMENT IN THE 18TH CENTURY

"The first observation which a stranger makes upon his arrival in Liverpool is generally, perhaps, that the streets are much too narrow either for convenience, ornament, or health. And it must be owned, that in the ancient parts of the town, little attention has been paid to regularity or elegance; and that in general, the buildings are so crowded, that the inhabitants are much more indebted for their health to nature than to art. Liverpool in common with most other large towns, labours under the inconveniences which arise from the want of a regular plan of building, when it first began to flourish. At that time every one, probably built in whatever place and form best suited his own purposes, without consulting the appearance of the town"78

This chapter will be concerned with the question of Liverpool's 18th century urban environment. The first section will investigate spatial changes in urban form, particularly as they relate to the development and growth of districts with differing housing characteristics. The evolution of 'middle class' and 'working class' housing provision will be examined and the culmination of these trends will be presented in an analysis of the residential geography of the town in 1790 - 1. The second section will concentrate on the provision of working class housing and the process of court building as it took place in a sample area. Finally, an assessment of the town's public health in the 18th century will be presented that will attempt to assess some of the implications of Liverpool's changing urban environment for its inhabitants.

78 Enfield, 1773, p. 21.

2.1. Land

18th century Liverpool inherited an urban structure little changed from medieval times. The original borough founded by King John in 1207 had consisted of seven 'ancient' streets arranged in the form of an 'H'.⁷⁹ Within the narrow confines of the town were the burgage plots, thin strips of property arranged at right angles to the ancient streets, on which were erected the original wattle and daub cottages with gardens behind.⁸⁰ To the north lay the open fields of 'Breck-Shute' which ran downhill from the Everton boundary towards the river. These fields were enclosed early and the remainder consolidated in 1733. Enough of their striking linearity remained, however, (even in their enclosed form) to set a distinctive stamp on the pre-urban cadaster,⁸¹ which was later indelibly etched on the street patterns of the 'north end' in the 19th century.

Across the Pool to the south and east, the thin, sandy soils of the Common were inhospitable for agriculture. Moss Lake, a shallow depression in the heathland, periodically flooded, provided a turbary for fuel. The Liverpool Common was the subject of a prolonged legal dispute between the Corporation and the locally powerful Molyneux family. Lordship of the manor,

79 The southern upright consisted of Water and Dale streets; the northern, of Chapel and Tithebarn Streets; the cross piece (High St.) and extending beyond, to the open fields, north of the borough, Old Hall St. and towards the castle and the pool to the south, Castle St. (See Chadwick's map of 1725, Appendix 2)).

80 See also Beresford, 1967, p. 161.

81 See also Ward, 1962.

which included rights over the heath, ~~were~~^{was} leased by the Corporation in 1672 and the reversion purchased in 1777. This represented probably the single most important land transaction in Liverpool's history for it gave the Corporation control over half the land in the township and enabled it to direct and profit from building developments during later urban expansion (Figure 2.1). Beyond the town 'liberties' in the townships of Kirkdale, Everton, West Derby, and Toxteth Park, much land was held by the powerful Stanley (Lords Derby) and Molyneux (Lords Sefton) families which were to become extremely valuable estates with the outward growth of Liverpool in the 19th century.

By the beginning of the 18th century, the major elements of Liverpool's pre-urban cadastre were already established. In the Parish the striking contrast in land ownership patterns lay between the numerous freehold burgages in the enclosed open fields to the north and the large block of corporately controlled heathland to the south; around the Parish lay the manorially-owned townships which were also subject to centralised estate management.⁸²

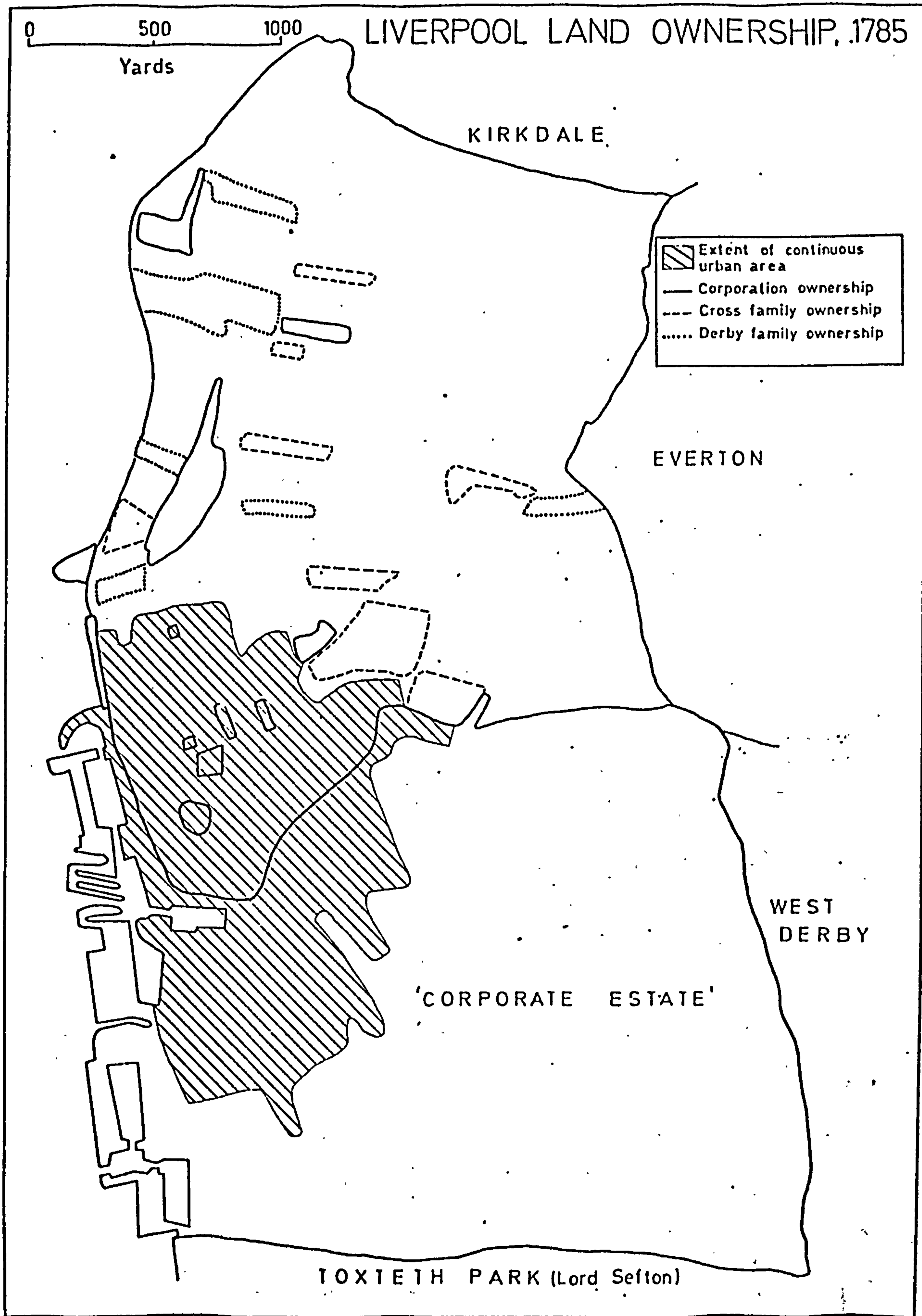
2.2. Urban Structure

The population growth of the 18th century was accompanied by a commensurate physical expansion of the town. Between 1753 to 1783, for instance, there was an increase of 84 per cent in the number of houses in the town.⁸³ New streets were

82 See Eyes' plan of 1785, Appendix 2.

83 From 3700 (Enfield) to 6819 (Gregson).

FIGURE 2.1



being laid out as the town expanded - as many created in the period 1760 to 1790 as had been in the previous century.⁸⁴ There is evidence to indicate that this process was accompanied by an increasing spatial sorting of houses - and classes - of differing worth and this sorting process will be examined in the following section.

A. Middle Classes

Residential location in pre-industrial or 'mercantile' towns has been treated as having comparatively weak spatial attributes.⁸⁵ But it has been recognised that even in small towns there were some differences in comparative site advantage for middle class housing.⁸⁶ Size, suitability, and location of middle class housing in the 17th and 18th centuries was, to a large extent, a function of its economic role. An owner's dwelling could have been his warehouse or counting house and its design and location frequently reflected these other uses - as a mid 18th century Liverpool advertisement indicated.

"To be let in Old Hall St., a large commodious house now tenanted by the Mathew Strong, merchant, containing 4 rooms on a floor with a counting house and a warehouse wherein may be laid 70 hogsheads of sugar on a floor and a large commodious yard with a coach or cart road to it."⁸⁷

Where access to trade, the local market, or business meeting

84 The totals are: 18 streets, 1700 - 29; 13, 1730 - 59; 44, 1760 - 89 (taken from Picton, Vol. 2, 1905).

85 See Goheen, 1970 and Ward, 1975.

86 Even in medieval times, location around the central square of a planned town would presumably have been the most desirable location for traders (Beresford, 1967, p. 153).

87 Picton, Vol. 2, 1875, p. 38.

place was important, merchants' business premises tended in Liverpool to be drawn towards the Exchange. This building, located at the point of intersection of High, Dale, Castle, and Water Streets, was the hub of local commerce and these streets leading from it natural extensions of its activities. The attraction of the Exchange and the main streets for the middle classes was not, however, overwhelming. Even the narrow lanes south of Lord St. contained some of the "most respectable residents and best shops".⁸⁸

The Old Dock, opened in 1715, acted as a significant catalyst that began the tendency towards an increased shaping and definition of Liverpool's urban structure as the dock now focused maritime activities previously scattered along the river front. The transferral of the Customs House from Water St. to the dockside in 1720 symbolised the emergence of this second economic hub in the town. Henceforth, the Exchange and the Dock came to represent divided but complementary functions: organization and finance; and the handling of cargo and ships. The spatial separation of these functions continued with the growth of purpose-built warehouses and offices, a tendency which, for the middle classes, was to allow the beginnings of a division between work place and home.

The construction of the Old Dock had a second important effect on the town's morphology. By reclaiming the

⁸⁸ Picton, Vol. 2, 1875, p. 134.

headwaters of the Pool⁸⁹ new building land beyond was brought within easy reach of the Exchange and the Dock. This new land was to become the first major extension outside the confines of the medieval town and the first middle class 'faubourg' developed around St. Peter's Church.⁹⁰ By the third quarter of the 18th century, several squares had been laid out⁹¹ and the district intersected by right angle streets (See Chadwick Plan, 1725, Appendix 2).⁹²

The district became the focal point for the middle class institutions of late 18th century enlightenment: the Newsroom, Palatine, Lyceum and Atheneum Clubs and Libraries, the Theatre Royal (1772), the Dispensary for the Sick on Church St. (1782), the Bluecoat School (1716).⁹³ The workhouse (1732) on College Lane was one institution that was to prove inimical to the local residents and its removal to Brownlow Hill in 1770 was prompted by its being "found to be a nuisance to the then

89 Though a general raising of the ground to a level above the highest tides was not achieved.

90 This was the second church to be erected in the town and was opened in 1709.

91 Williamson Square, 1764; Clayton Square (with "commodious well-built houses", Picton, 1875, Vol. 2, p. 172.) 1785. The development bears only superficial resemblance to the extensive contemporary estate planning in London, Bath, Dublin, or Edinburgh. It can be seen, however, as an interesting comparison with the later, more ambitious Moss Lake Fields development in which the Corporation was to be engaged some 50 years later.

92 Many of the main streets were over 37 feet in width, considerably wider than any in the medieval town but the side streets were often lanes of only 20 feet in width (See also Chaiklin, 1974, p. 101).

93 This established a tendency that continued into the next century. The 19th century antecedents of Liverpool's hospitals, cathedrals and university were located in the Moss Lake fields middle class area. The 20th century was to see the district almost totally occupied by them.

aristocratic neighbourhood of Hanover St."⁹⁴

North of Hanover St. it seems as if this first middle class district was comparatively successful; houses were taken up and businesses became common along Church St. and around Hanover St. To the south of Hanover St., however, Duke St. was the only notable address. Lined with noble mansions "All neat, many elegant; with scarce an interruption of a shop, public house or warehouse",⁹⁵ it was built from the proceeds of the African trade. The surrounding area had some initial success as a middle class area but underwent comparatively rapid degeneration. Kent, Wolstenholme, and Cleveland Squares, for instance, were initially fashionable localities, the latter contained an obelisk and was surrounded by respectable houses and a row of elm trees. But by 1797, Wallace felt that none of these places deserved the dignity of the name 'square'.⁹⁶ The reason for their failure was due in part to the immediate seizure of their open space for commercial purposes. By the end of the century, Cleveland Square boasted "a weekly flesh and green market [which] may be convenient to the neighbouring inhabitants but contributed as little to the improvement of the square as it does to the pleasure of the occupiers of the surrounding houses."⁹⁷ Even the adjoining churchyard of St. Thomas was used as an extension to the market.

More important to the fate of the southerly

94 Picton, 1875, Vol. 2, p. 170.

95 Moss, 1796, p. 18.

96 [Wallace], 1797, p. 82.

97 ibid. p. 83.

section of the intended middle class estate was its proximity to the Old Dock and its neighbouring land uses. Blackbourne's saltworks on Salthouse Lane burned large amounts of coal and filled the district around with "soot and obscurity ... unfavourable to the health of the inhabitants".⁹⁸ Cleveland Square in particular was "often times ... filled with smoke".⁹⁹

As a consequence, the area fell from favour and the neighbouring Wolstenholme and Kent Squares were "like many other similar attempts in Liverpool never completed".¹⁰⁰ By the end of the 18th century, these squares and the streets around had lost or failed to attract the middle class residents for whom they had originally been intended. "Grass and moss rise in the interstices of the pavement and give the transient spectator an idea of desertion and depopulation."¹⁰¹ The area was given over to commercial uses and to the subdivided tenements of the working classes.

To the north, St. Paul's was another middle class area which began to develop at the same time as the St. Peter's district. It was, initially at least, far safer from the intrusions of distasteful maritime activities. It was salubrious, open to the clean sea breezes, and overlooked the river from the low cliffs at Bath St.¹⁰² The area's origins lay in the early 18th century, the street names celebrating the

98 Moss, 1784, p. 37.

99 *ibid.* p.54.

100 Picton, 1875, Vol. 2, p. 286.

101 [Wallace], 1797, p. 83.

102 Plainly visible in Perry's 'South East Prospect of Liverpool' drawn in 1770.

politics of the Hanoverian succession. On its northern edge, Maiden's Green, a 'ladies' walk' between a row of elms (similar to that at the upper end of Duke St.), was laid out as a place of respectable promenade.

A rare survival of a Liverpool rate book of 1778 allows a fairly detailed reconstruction of property values in this part of town.¹⁰³ Figure 2.2 indicates the generalisation of this rate data for individual streets. There are comparatively few (3.9 per cent) houses of high value (rated more than 10 pounds per annum) and these clustered on a limited number of streets. High St. and Old Hall St. (ancient thoroughfares), had along them about half of all the high value houses in the district. Houses on these streets were also commercial premises but those on St. Paul's Square and the streets around it were not, indicating the beginnings of a 'suburban' middle class district. One house on the square was built and sold for 500 pounds in 1768.¹⁰⁴ But the lack of high value housing on two sides of the square in 1778 indicates the area's limited success which, in turn, reflected Wallace's general criticism of such schemes in Liverpool.¹⁰⁵

The St. Paul's district, like the ill-fated

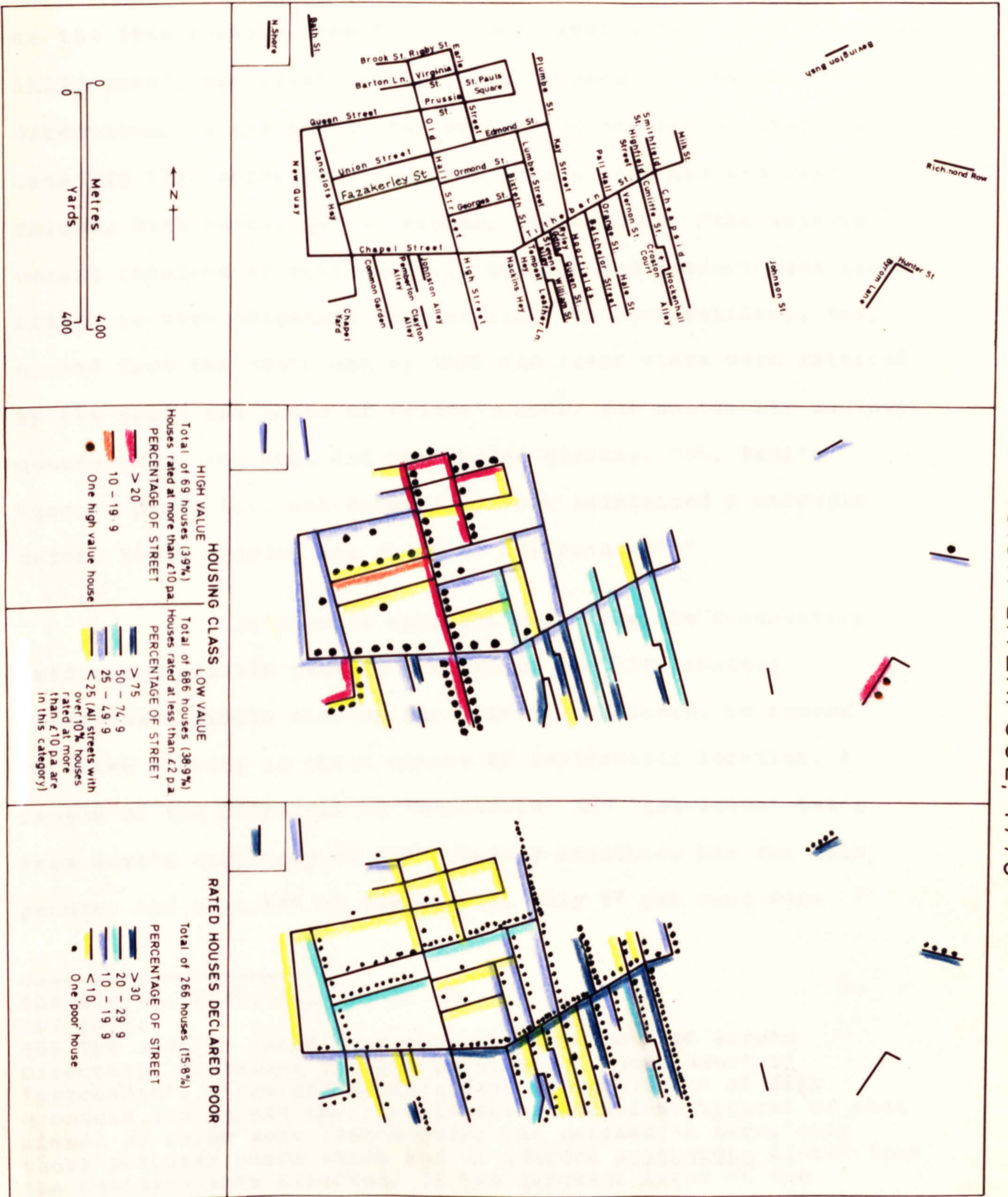
103 Liverpool Parish, Assessments for Rates, 1778. The Parish was divided for rating purposes into three districts which in total contained 6,206 houses. The North Division represents 28 per cent of these properties (1,764 houses in 54 streets). The name of the tenant, landlord, assessed value, and whether the occupant was a pauper is indicated for each property.

104 Chalklin, 1974, p. 210.

105 "Few of the plans are accomplished. The builders here as at London and Birmingham, appear to suffer their avarice to get the better of their discretion." [Wallace], 1797, p. 82).

FIGURE 2.2

NORTH DIVISION LIVERPOOL, 1778



squares of South Liverpool, was to come under increasing attack as the 18th century drew to a close. Previously free of 'baneful influences', the area's amenity was threatened from two directions. In the north, the arrival of the Leeds-Liverpool Canal in 1774 began to affect the area's land use and land values. With yards, quays, wagons, and workmen, "the zephyrs became redolent of coal dust ... fashion and comfort took their flight to more congenial regions"¹⁰⁶ Dock building, too, spread from the south and by 1820 the river views were latticed by the spars and masts of Prince's Dock. But unlike its southern counterpart, the area did not change quickly. "St. Paul's Square, Earle St., and Union St., long maintained a struggle before their dignity was shorn of its beams."¹⁰⁷

It becomes apparent even from the fragmentary evidence available that by the end of the 18th century Liverpool's middle classes were already beginning to assess relative amenity in their choice of residential location. A sample of the addresses of 'merchants' and 'gentlemen' taken from Gore's Directory of 1790 clearly indicates how far this process had gone.¹⁰⁸ Of the sample, only 17 per cent were

106 Picton, 1875, Vol. 2, p. 43.

107 ibid.

108 The sample, taken from the letters A to E of Gore's Directory, contained the addresses of 86 'gentlemen' or 'merchants'. These occupations were assumed to be of high economic status and their residential locations typical of that class. As firms were listed under the merchant's name, only those merchant names which had an address separately listed from the business were selected. If the merchant lived on the premises, two separate listings in the Directory were usually given. It is possible that this procedure is somewhat biased against merchants with combined business and home addresses.

residents of the old town.¹⁰⁹ The remainder lived in the 'new' suburbs built since the 1730s but the scatter was not even. St. Anne's, St. Peter's, and Duke St. accounted for about one half the residences, whereas virtually none were found in the southern and north-eastern districts. The growth of suburban colonies well-removed from the town is also evident. Twelve per cent of the addresses were outside the Parish of Liverpool. Everton was the most popular but there were also residences as far away as Great Crosby and Wavertree. This new generation of merchant-gentlemen was often able to establish homes well distant from the town. As early as 1768, the Yates and Perry map indicated 32 'country seats' which lay within a four-mile radius of the town.

Residential differentiation of the middle classes which began in a limited way after the opening of the Old Dock in 1715 had become an important element in Liverpool's urban structure. The phase that could be described as 'spatially poorly sorted' or classless had ended. The separation of workplace from residence was a gradual process and, as we have seen in 1778, there was a juxtaposition of both 'main street' and peripheral middle class residences. But increasing land values in the business district and the threats to amenities of the earliest 'suburbs' ensured the persistent decline of the inner area's attraction for the middle classes.

109 Defined as the area lying inside Paradise St., Whitechapel, Tithebarn St., Chapel St. boundaries of the medieval town.

B. Lower Classes

Eighteenth century urban growth created a town of a size in which locational advantage began to play an important role in determining residential land uses. The construction of the Old Dock has been cited as a major element in determining residential patterns in the streets around and artisans connected with the commerce of the port were attracted to its vicinity.¹¹⁰ The area west of Park Lane already shown as built up by 1725¹¹¹ saw the development of narrow lanes and dense housing. Reclamation of foreshore associated with the construction of Salthouse (South) Dock in 1737 added land which the Corporation quickly leased for the building of houses and workshops. The district, St. Thomas, became Liverpool's Radcliffe Highway,¹¹² the haunt of sailors on shore leave, amidst "the lowest haunts of vice and profligacy".¹¹³

A second district of lower class housing in Liverpool probably began its evolution rather earlier than St. Thomas. The closes or 'heys' lying between Tithebarn St. - Dale St. and Whitechapel were developed some time after the

110 See Monkhouse and Wilkinson, 1964, p. 351. Their map, based on listings contained in the first Gore's Directory of 1766, indicates the presence of 21 of the 30 boat builders, 18 of the 30 coopers, and 11 of the town's 14 sailmakers, living within 200 yards of the Old Dock. The concentration of boat builders was greater on Mersey St., of coopers on Coopers' Row and sailmakers on Paradise St.

111 Chadwick Plan, Appendix 2.

112 The London dockside that Dickens in Sketches by Boz (Scenes, Chapter 21) described as "that reservoir of dirt, drunkenness and drabs; thieves, oysters, baked potatoes and pickled salmon". Eighteenth century Liverpool would have added the press gang to that list.

113 Picton, 1875, Vol. 2, p. 290.

Restoration. Moore's rental of 1650 mentions his intention to lay out a lane and offer building sites in the hey behind John Hacking.¹¹⁴ In the following 80 years, several such lanes were laid out in this district. Most were alleys - Tempest Hey, Leather Lane, Stephen's Alley, Ryley's Gardens - were less than 10 feet wide and crowded with small cottages, many of which were still indicated on the mid-19th century Ordnance Survey plans. The rate return of 1778 indicate the generally low value of property in this area lying to the east of the wealthy axis of High St. - Old Hall St., (Figure 2.2). Virtually all these narrow lanes lying between Tithebarn and Dale Streets were largely composed of low value housing (less than two pounds per annum) and several were also 'pauper streets'.¹¹⁵

By the 1770s, therefore, Liverpool not only had two clearly defined middle class areas (St. Peter's and St. Paul's) but also two larger and rather more populous lower class areas (the St. Thomas and Dale St. - Tithebarn St. districts). St. Thomas was a highly maritime-oriented district developed during the years 1720 - 1750, whereas the rather earlier northern district was the result of post-Restoration growth (1680 - 1740), along the Dale St. axis.

Hence, Liverpool's embryonic ecological structure had a distinctive spatial patterning of rich and poor (Figure

¹¹⁴ The lane was probably laid out in the 1680s and the name is, of course, preserved in Hacking's Hey (Picton, 1875, Vol. 2, p. 67).

¹¹⁵ Over one-third of the houses on Cheapside, Orange St., and Pall Mall were rated poor.

2.3). The distribution of these districts reflected their estate history, variations in the urban environment, and access to employment opportunities. By the end of the 18th century, the central area was still a heterogeneous but declining residential area. The emergence of peripheral districts with distinctive social and residential patterns in the mid-18th century was to prove highly influential to the development of future 'suburban' developments in the remainder of the 18th and the whole of the 19th centuries.

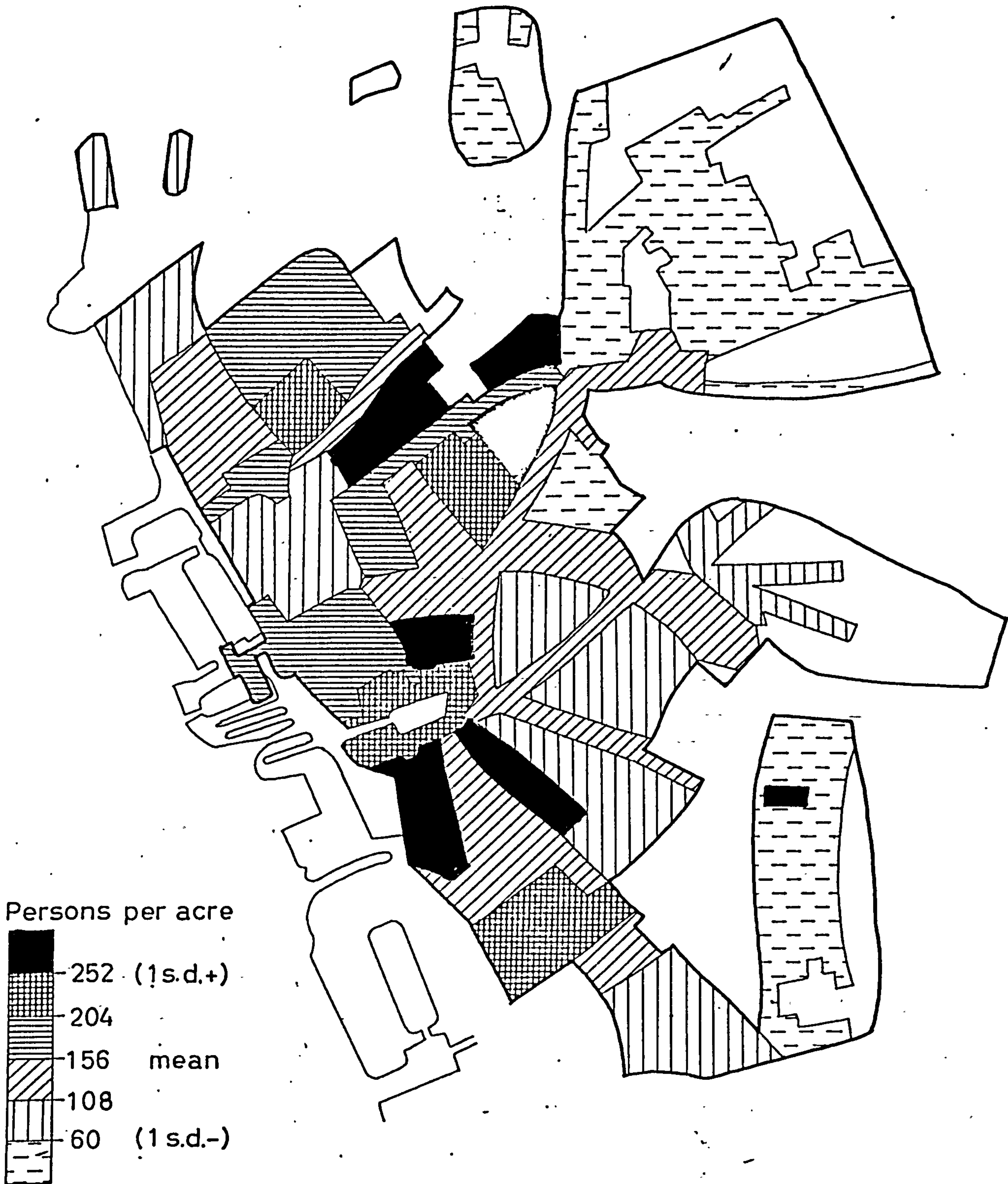
2.3. Housing the Labouring Classes

The 18th century was, as we have seen, a period of rapid population and urban growth. Two aspects of housing standards should be considered which provide general measures of the effect of this growth on the population as a whole. The first is the extent to which the housing supply was adequate for the new urban dwellers: changes in space standards (the amount of usable space per individual) ^{are} ~~is~~ obviously an important and fairly sensitive indicator of such housing pressure. The second general consideration is the quality of the housing provided in terms of its layout, sanitary facilities, etc.. To provide totally adequate answers to these questions would require more information than is (or was) available in the 18th century. However, an investigation of Liverpool's primary sources has revealed enough data to allow an attempt at such generalisations.

Probably the best overall measure of housing

FIGURE 2.3

LIVERPOOL 1790



0 Metres 900
0 Yards 900

DENSITY OF POPULATION

standards, in the absence of information on cubic capacities of dwellings or even the numbers of rooms, is the changing number of inhabitants per house (Figure 2.4). At this period, there are only three firm dates at which this can be judged 1773, 1789 - 90, and 1801 (see Table A3.1).¹¹⁶ The statistics indicate a rising level of house occupancy over the period (5.8 persons per house in 1773; 6.6 in 1789 and 6.8 in 1801). Providing house sizes remained fairly constant (and there is some evidence given later to indicate that ^{they} may have been decreasing), this 15 per cent increase in occupancy levels is substantial and significant. Moreover, in comparison with other towns, Liverpool's rates appear to have been quite high.¹¹⁷ This increasing pressure was noted at the time:

"The present augmentation of individuals in each dwelling clearly arises from the number of small houses not being sufficiently proportioned to the increase of the mediocrity [i.e., the poor]."¹¹⁸

The second consideration, that of the physical characteristics and quality of the dwelling, is rather more difficult to quantify and to summarise in comparative statements. While the evidence is scattered, and tends to be qualitative in nature, certain points do emerge.¹¹⁹

The ordinary housing built in Liverpool during

¹¹⁶ The 1773 enumeration was an 'actual survey' (Enfield, 1773, p.24); the Simmons Enumeration in 1789 - 1790 is discussed in Appendix 1; the 1801 figure was provided by the first Census.

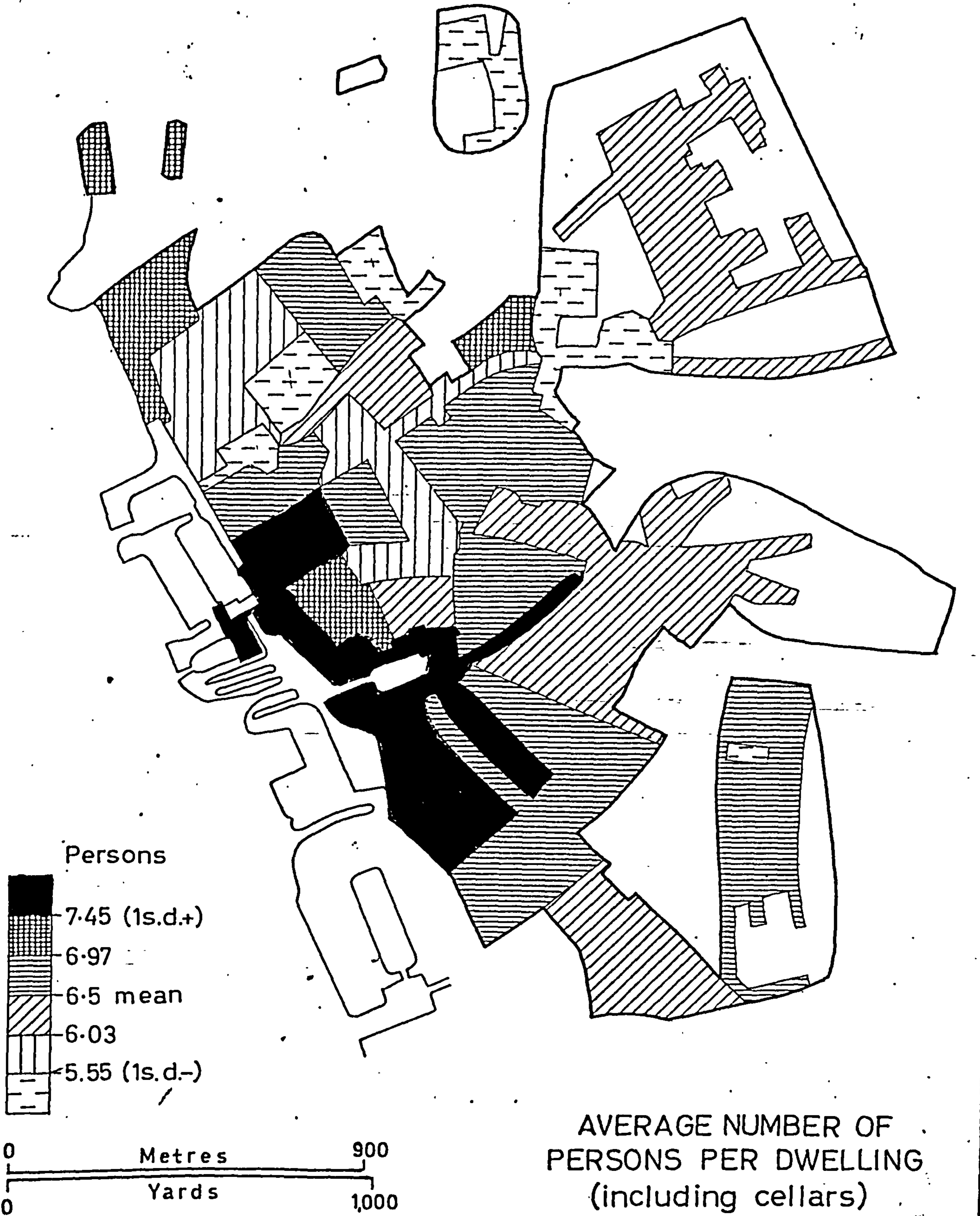
¹¹⁷ Leeds in 1775 had 5.0 persons per house and 4.6 in 1801 (Rimmer, 1960, p. 175); Nottingham 5.5 in 1779, 5.7 in 1801 (Chapman, 1963, p. 87); Sheffield, 4.1 in 1788, 3.8 in 1796, 4.1 in 1801 (Holland, 1843, p.69).

¹¹⁸ Wallace, 1797, p. 70; see also Moss, 1796, p. 51.

¹¹⁹ Parts of this and succeeding sections first appeared in Taylor, 1970.

FIGURE 2.4

LIVERPOOL 1790



AVERAGE NUMBER OF PERSONS PER DWELLING (including cellars)

much of the 18th century probably differed little from its earlier counterparts. In terms of building materials and layout, such housing had its stylistic origins in the rural cottages of lowland Lancashire. Herdman's drawings of early 19th century Liverpool portray single storeyed, two-roomed thatched cottages in rows of two or three dwellings, with plastered and whitewashed exteriors and cottage gardens.¹²⁰

By the third quarter of the 18th century, however, the increasing population pressure evidenced by rising occupancy levels led to a more intensive use of urban land. The infilling of burgage plots, some of which had remained open until the mid 18th century, was one indicator of this; the transition to higher density building forms was another. In Liverpool, two dwelling types, the cellar dwelling and the court house, symbolised this greater intensity of internal and external space usage.

A. Cellar Dwellings

The Liverpool cellar appears to have had its origins in the demand for storage and warehouse space below merchants' houses.¹²¹ The habit of providing cellars in houses became common and its uses extended to the storage of humans.

" The houses of the mediocrity have also cellars which give residence to families and are generally let out by the

¹²⁰ Herdman, 1857.

¹²¹ Wallace, 1797, p. 63, refers to "large and extensive cellaring built to afford warehouse room for merchandise...".

owners of houses to many people following trades."¹²²

Judging by the distribution of such dwellings enumerated in 1789 - 1790 by Simmons (Figure 2.5), houses having cellars appear to have been built from the 1760s onwards, though a number of older houses also undoubtedly had inhabited cellars.¹²³

The earliest literary reference to them has been traced to 1764 by which time it is probable that this form of habitation was not uncommon.¹²⁴ A description of a cellar dwelling was given in 1814 by a visitor who almost dropped into one.¹²⁵ The interiors of these 'frightful caverns' were enveloped in 'darkness and humidity', and apparently frequently utilised by provision dealers, menders of clothes and shoes.¹²⁶ Many of the town's numerous dram-shops were also in cellars where they were frequented by "vast numbers of half-naked human beings".¹²⁷

122 ibid.

123 The town rate book of 1705 lists eight cellars separately assessed on the south side and five are mentioned in the rate book of 1708 (Peet, 1908).

124 Moss, 1784, p. 25.

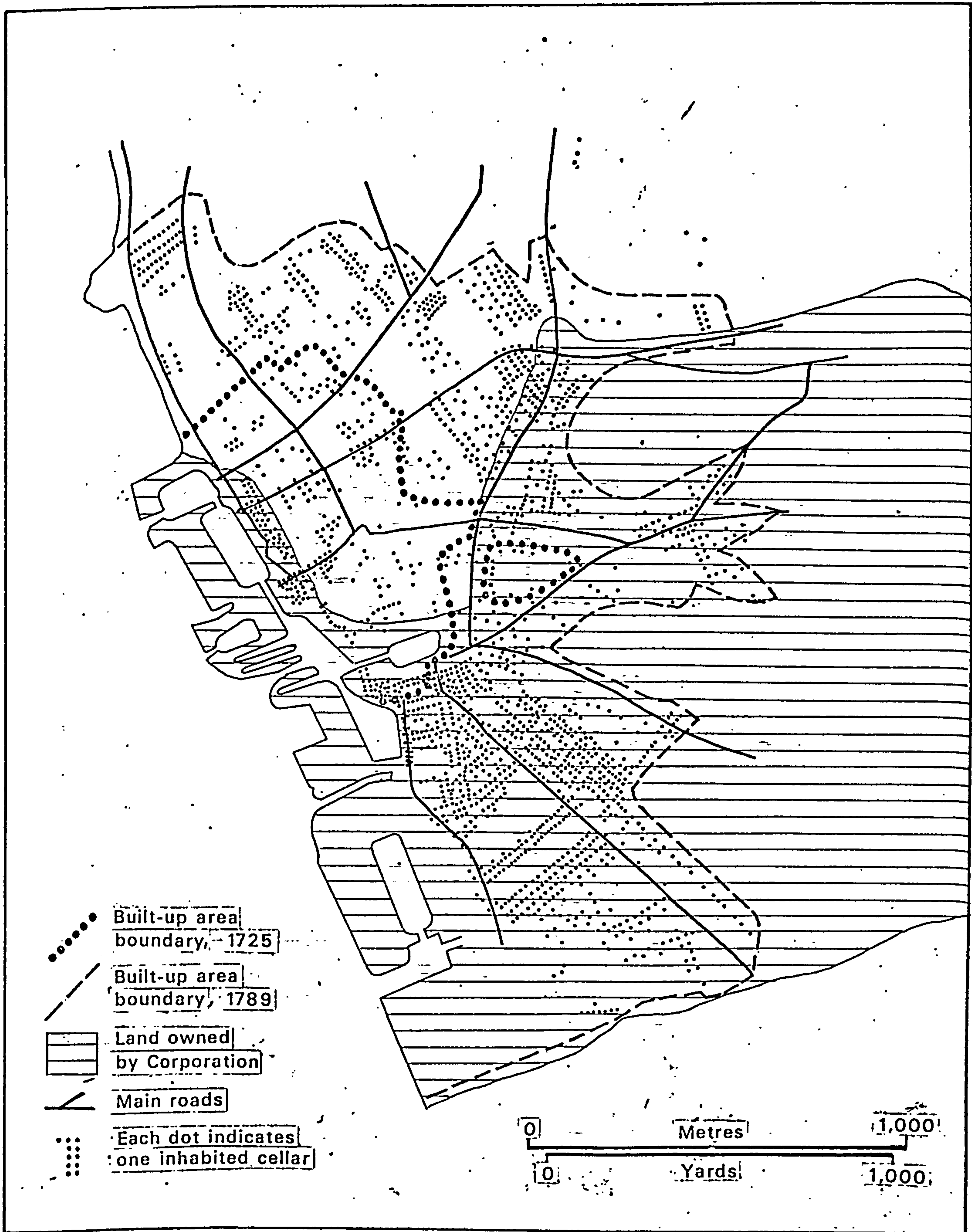
125 The danger lay in entrances which encroached on the pavement. At night, they were often not covered and presented "a dangerous trap to catch the inebriated passenger, or even a person in his most sober senses may disappear in a moment" ('O.U.', 1814, p. 15); see also Wallace, 1797, p. 273, who commented that "none but a jury of surgeons would wish [such an evil] to continue in its present state".

126 who slept surrounded by an "assemblage of the heterogeneous mixture of coals, potatoes, tallow candles, salt and pickled herrings, rusty pork and bacon, putrified vegetables, eggs, butter, eggs, butter, groceries, buttermilk, hog's puddings, snuff and tobacco, gingerbread, toys and grey-pease" ('O.W.', 1814, p. 14).

127 ibid.

FIGURE 2.5

Liverpool Parish. Cellar Dwellings, 1789-90



The visitor's comments and local criticisms¹²⁸ were not ~~giving~~^{drawing} attention to isolated instances, for the Simmons census of 1789 - 1790 (see Appendix 1) indicates how common cellar dwelling had become in Liverpool. By 1790, 19.4 per cent of the town's houses had cellar dwellings which provided shelter for 12.6 per cent of its population (Figure 2.6). 1,728 occupied cellars were enumerated occupied by 6,780 inhabitants and these numbers may have risen to 2,306 cellars (20.1 per cent of all houses) with over 9,000 inhabitants by 1801 (11.6 per cent of the population).¹²⁹

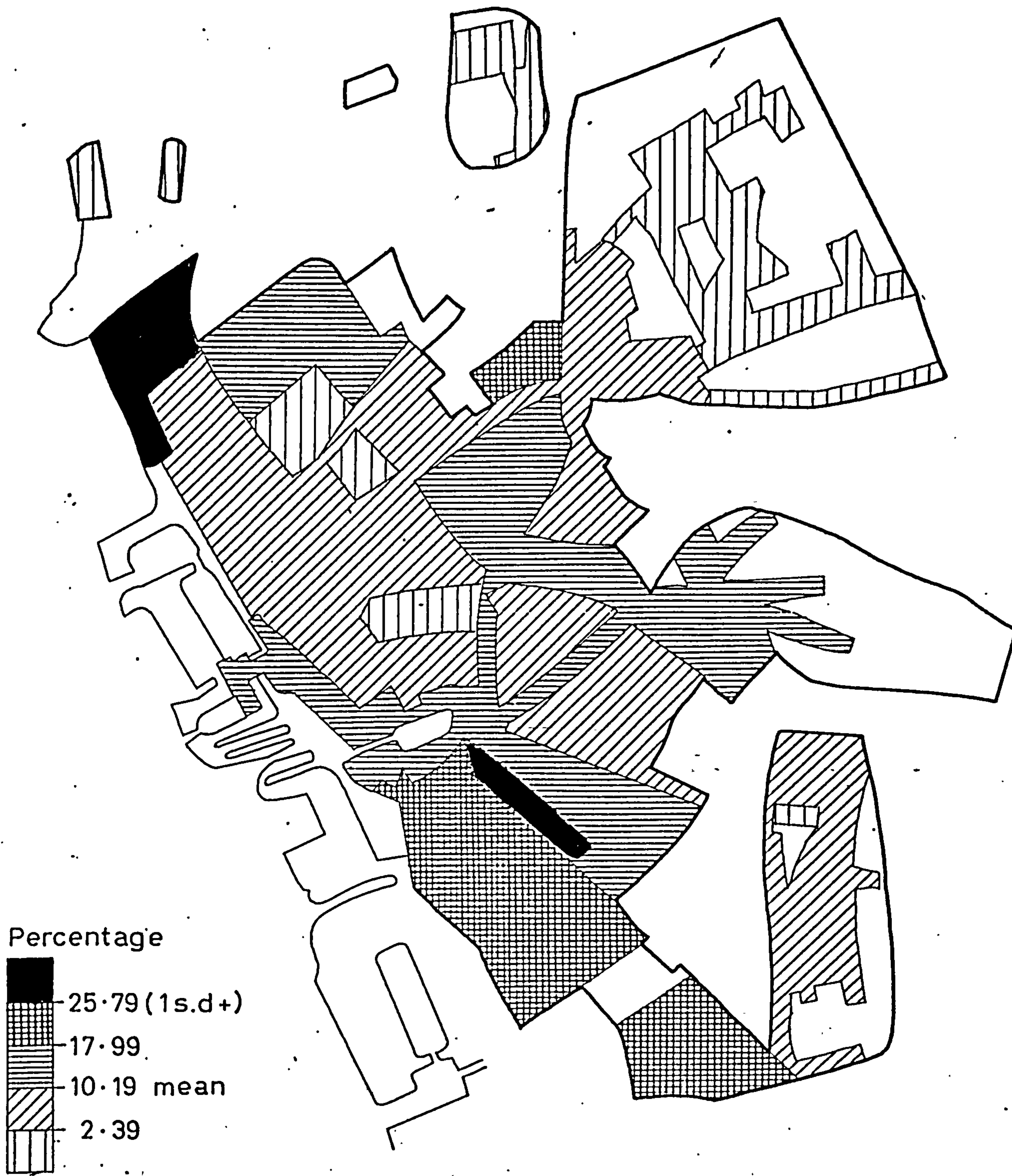
The distribution of these cellar dwellings gives several clues to their developmental history (Figure ~~X~~^{2.6}). They lay largely outside the limits of the town built before 1725. Few were found in the St. Peter's and St. Paul's middle class areas described above (Section 2.2A) or in the Tithebarn-Whitechapel working class district which was largely built up by 1760. The greatest concentrations were to be found in the accretions to the town which occurred in the second half of the 18th century. Many were built in the Corporate Estate south of

128 Smithers, 1825, p. 201.

129 The latter estimate is based on Smithers' reference to a cellar 'population' of 2,306 "which is rarely seen in other towns of England" (Smithers, 1825, p.201). This must be a misreading of the numbers of occupied cellars rather than inhabitants. The figure itself is not contained in the printed census and must have been derived from the local returns of the 1801 enumeration.

FIGURE 2.6

LIVERPOOL 1790



0 900
Metres
0 1000
Yards

PERCENT POPULATION
IN CELLARS
OF TOTAL POPULATION

the Pool after this area had been opened for building.¹³⁰ The cellars of houses of the 'failed' middle class area of St. Thomas quickly became separate dwellings occupied by the poor.¹³¹

But the occupation of cellars cannot be attributed solely to the process of house subdivision; even the small houses south-west of Park Lane had many cellar dwellings. Cellars in houses built on the reclaimed land around the Pool and river foreshore were perhaps the worst conditioned. Heavy rains or high tides often exceeded the capacity of the common sewer built along Whitechapel-Paradise St. and these low lying cellars became flooded. In 1787, the council ordered an investigation which reported that:

"The inhabitants of the cellars in those streets are reduced to great distress and it is a lamentable truth that many people were not acquainted with their situation till they found the water coming into their beds."¹³²

The occupancy rate of the cellars themselves varied from district to district (Figure 2.7) and it is probable that these variations reflected pressures to locate close to employment. The cellars around the Old Dock, for instance, were occupied on the average by more than four persons and, in general, cellar crowding diminished with distance from the dock.

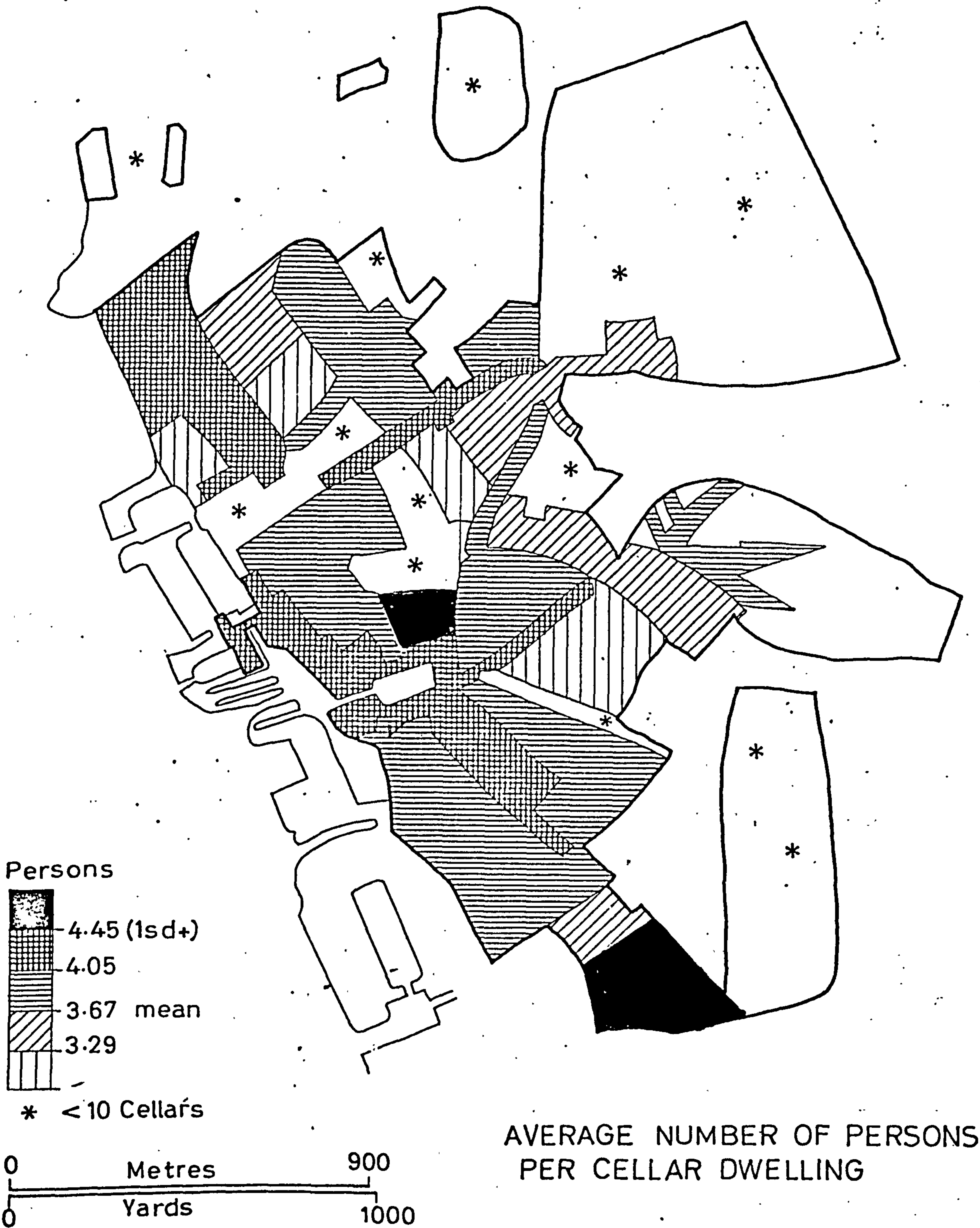
¹³⁰ This was probably not due to any encouragement but the result of the area's development at a time when cellar building became common. A decision in 1786 "to make void the lease of tenants who shall let or demise the cellars as separate dwellings" (Town Book, Vol. 12, p. 463) was apparently never enforced.

¹³¹ In Pitt St., for instance, in 1790, 34.6 per cent of all houses had cellar dwellings.

¹³² Picton, 1886, p. 260; [Wallace], 1797, p. 274, also refers to the "unhappy troglodites ... in constant danger of drowning".

FIGURE 2.7

LIVERPOOL 1790



B. Court Housing

Greater intensity in the use of dwelling space in the late 18th century was also reflected in increasing housing densities. Initially, this took the form of infilling within the existing urban fabric. The erection of back houses on the 'backsides' (as the rear gardens were called) of existing street houses commenced in Liverpool in the early 18th century. The rate book of 1708 lists eight such houses,¹³³ which, by 1778, had grown to 34 on the north side of the town alone.¹³⁴

These back dwellings were small, one storey buildings of the type depicted in Herdman's view of Fewler's Court, Chapel St.¹³⁵ The houses were usually built singly or in small groups because of the limited size of property parcels. By mid-century, most of the available land had been filled and the constraints to outward expansion overcome. In the new areas, changes occurred in the construction and layout of the 'back-house'. They were no longer later additions but structurally integrated with the front houses. The building form also changed from a one storey cottage to a cellared, three storeyed brick 'back-to-back' built 'side to back' with the street houses. The new court housing was usually arranged in groups of, at first 4, later 6, 8 or even 10 houses approached beneath the front house

¹³³ Peet, 1912. They appear in Rose Mary Lane (Fazakerley St.) "a little house in ye backside"; in Dale St. - "a back house backwards", as well as Castle Hill and Thomas St.

¹³⁴ Liverpool Parish, Assessments for Rates, 1778. Perry's map of 1769 appears to indicate back houses behind Dale, Tithebarn and Chapel Streets.

¹³⁵ Herdman, 1857, plate 3.

by a covered passage or 'tunnel' (Plates 3, 5, 6, 7 and 8).

Court construction of the form adopted in Liverpool in the late 18th century enabled a maximum ground-level housing density to be achieved without resorting to the high and costly structures that characterised the continental or Scottish tenement. The plan of the layout (in a sense only a more spatially efficient group of back houses) required no great innovation in design principles. In Leeds, for instance, a direct link can be traced between the early inn-yard courts and the late 18th century back to backs.¹³⁶ In Birmingham, early court housing was built in the back gardens of 18th century merchants.¹³⁷ A similar continuity can be seen in Liverpool, in the transition from the small back house to the new grouped blocks of late 18th century court houses.

Early cartographic evidence gives some indication of the timing of court construction. Perry's plan of 1769 (the town's first large-scale survey) reveals only one named court, (Wyke's Court, Dale St.)¹³⁸ and several narrow alleys off Chapel, High and Castle Streets and some small 'courts' (in most cases, pairs of back houses) in Preston (Plate 3), Thomas, Grayson and Maghull Streets. In contrast, 20 years later (1789 - 1790), court property was common in the north, north-east, and southern parts of the town (Figure 2.8). The prosperous 1780s

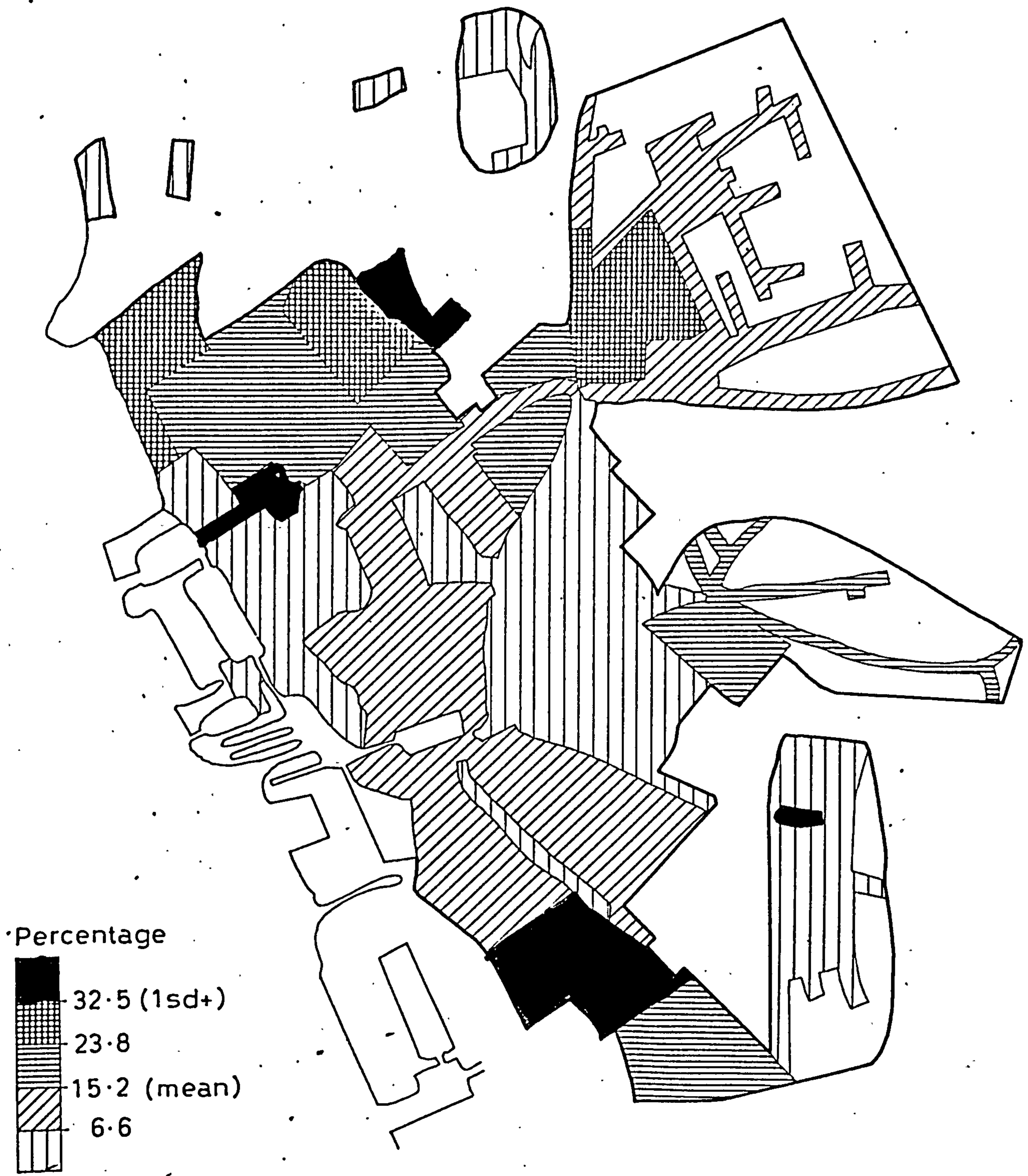
¹³⁶ Beresford, 1971, p. 98.

¹³⁷ Chapman and Bartlett, 1971, p. 224.

¹³⁸ This type of court, layed out as a small square was not to be typical. It was more like some common Birmingham courts (see Chapman and Bartlett, 1971, p.228).

FIGURE 2.8

LIVERPOOL 1790



PERCENT POPULATION
IN 'BACK HOUSES'
OF TOTAL POPULATION

0 Metres 900
0 Yards 1000

were apparently largely responsible for this increase of court property.¹³⁹ In the peripheral districts built in the 1780s, as much as one-third of all housing was in the form of court houses and in Crosbie St. and Bridgewater St., it reached the highest proportions - 47.6 per cent and 52.8 per cent respectively. In 1789 - 1790, the 1608 court houses which accounted for 20.4 per cent of the town's housing stock provided shelter for 14.8 per cent of the population (Table 2.1). Thirteen years later the total had grown to 2021 dwellings¹⁴⁰ and represented about a fifth of the town's housing stock.

2.4. The Court Building Process: Crosbie and Jordan Streets, 1770 - 1803

"Q - Can you form any conjecture of the number of alleys and courts in Crosbie [sic] Street?

A - No, I cannot.

Q - Are they very numerous?

A - I should say they are."¹⁴¹

There is no systematic, contemporary investigation into housing quality and standards in 18th century Liverpool. To gain some insight into these aspects, it was decided to reconstruct the developmental history of a small area

¹³⁹ Lewis, 1965, p. 22; Chalkin, 1974, p. 276. This boom lasted until 1793.

¹⁴⁰ Counted in the Horwood plan of 1803.

¹⁴¹ Witness, Select Committee, Liverpool Borough Elections P.P., 1833, X, p. 206.

TABLE 2.1
 Liverpool Parish, 1789-90
 Housing and Population Ratios

<u>Total Houses</u>	<u>Occupancy Per:</u>			<u>Percentage of Total Houses</u>		<u>Percentage of Total Population</u>		<u>Average Population Density Per Acre</u>
	<u>Front Houses</u>	<u>Back Houses</u>	<u>Cellar</u>	<u>That are Back Houses</u>	<u>With Cellars</u>	<u>In Back Houses</u>	<u>In Cellars</u>	
6.59	5.97	4.9	3.92	20.39	19.44	14.78	12.59	109.82

Source: Simmons Census, tabulations. (See Appendix 1)

of such housing.¹⁴² While the representativeness of this area is uncertain, it is probable that its character and history would not differ greatly from other such areas (though further studies will be required to substantiate this).

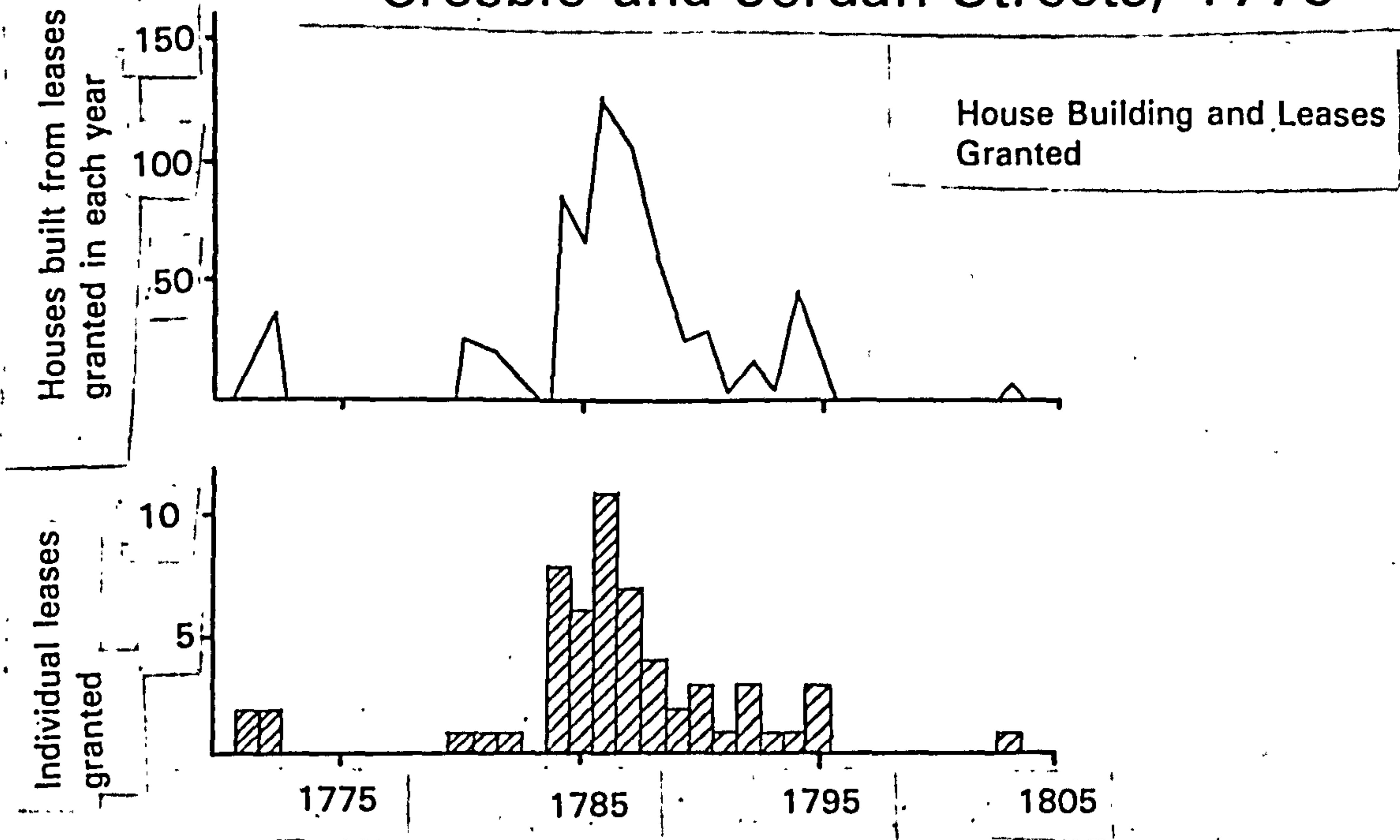
The area under study lay within the Corporate Estate in the south-west corner of the Parish and was formerly part of the medieval town heath.¹⁴³ The streets were laid out between 1770 and 1803 when 58 building leases were granted to 50 parties (Figure 2.9). According to Okill's plan of 1822, 680 houses were built of which 412 were court houses. The date of the lease is not necessarily the date of construction, but building was not long delayed, for in 1780 - 1790, Simmons enumerated 301 court houses (73 per cent of the final [i.e., 1822] total). Of these, 66 were unoccupied, indicating that building was probably still in progress at that time. Building halted early in the Napoleonic Wars and did not commence again until 1815. In 1822, Okill indicated 71 courts, compared with the 45 estimated from the Simmons' enumeration 32 years previously. In 1848, the Ordnance Survey plans indicated only 8

142 No detailed history of the development of working class housing in Liverpool has been written, though there have been several studies of middle class housing, notably Mathias, 1957 and Hough, 1950. Chalklin, 1974, included Liverpool in a general study of Georgian urban development and traced the building history of a series of sample properties, both working and middle class.

143 The developmental history of this area can be traced in Okill's 'Lease Registers', Vols. 3/3 and 3/4 and Vol. D 'Streets Register', also the 'estate maps', 1822, which are keyed to the Registers. The nature of this monumental survey into the complex history of the Corporate Estate by Charles Okill is outlined in Stewart-Brown, 1930.

FIGURE 2.9

Crosbie and Jordan Streets, 1770 - 1803



new courts and the disappearance of several others¹⁴⁴ (Plates 1 and 29). Most of the remaining courts in the district survived until the 1880s when they fell to commercial redevelopment and street improvement.¹⁴⁵

The court developers (i.e., owner/investors) themselves were listed by Okill and can usually be traced in contemporary directories. The range in their social and economic status is considerable for they included not only the ordinary tradesmen often cited as the main group responsible for building working class housing¹⁴⁶ but also wealthier classes (see Table A2.1). For instance, the property of Sir Foster Cunliffe on Crosbie St. was held by his estate until purchased in 1883 by the London North Western Railway Company¹⁴⁷. At the other extreme, Thomas Denton, a tailor, built three street houses on Crosbie St. and subsequently lived in one of them. Table 2.2 indicates the occupational/social groups concerned in developing the area. It shows that while the lower economic groups made up the majority of individual entrepreneurs, the building companies and upper class entrepreneurs built most of the houses.¹⁴⁸

144 These were demolished for the building of the Wapping terminal of the Liverpool-Manchester railway opened in 1830. This was certainly one of the earliest examples in the country of the demolition of urban working class housing for railway development.

145 The main devourers of court property in this area in the 1880s were the warehouses, street improvement of Jamaica St., and the expansion of the L.N.W.R. Goods station. Many of these buildings have themselves recently been or are soon to be demolished.

146 Treble, 1971, p. 192; Gauldie, 1974, p. 182.

147 Deeds (Park Lane Railway Station bundle), Conveyancing Section, Dept. of Property Services, Liverpool Corporation.

148 The 'unknown' groups were either Liverpool non-residents or were unimportant enough persons to be omitted by the Directory.

TABLE 2.2
Crosbie-Jordan Streets District, 1770-1803
Builders by Occupational/Social Group

<u>Number of Builders</u>	<u>Number of Houses</u>	<u>Average Number of</u>		<u>Occupational/Social Group*</u>
		<u>Houses Per Builder</u>	<u>% of Houses Built</u>	
8	269	33.6	36.9	Upper Class
6	150	25.0	20.6	'Builders'
3	37	12.3	5.1	Middle Class
13	120	9.2	16.5	Building Artisans
7	59	8.4	8.1	Tradesmen
13	93	7.1	12.8	Unknown
50	728	14.6	100.0	TOTAL

* Occupational/Social Groups included:

Upper Class: Baronet, lady, gentleman, merchant
 Middle Class: Captain, linen draper
 Building Artisans: Joiner, bricklayer, plumber, slater and plasterer, carpenter
 Tradesmen: Cooper, ship's porter, shoemaker, clockmaker, tailor, smith
 For details, see Table A2.1.

The term 'builder' is used in the sense of the provider of investment capital.
 Some would have done the actual building themselves, others would have employed professional builders.

If a business address is used to identify 'large' builders, the small tradesmen and building artisan group were even smaller in number (building 24.6 per cent of all houses).¹⁴⁹ The results will need to be investigated more widely but there is the possibility that Liverpool's late 18th century town development was, in part at least, the responsibility of the same merchant entrepreneurship so successfully applied to overseas trade.¹⁵⁰

Standards

The standard of court housing in this area was generally typical of the working class housing built in Liverpool between 1780 to 1820.¹⁵¹ In 1848, the 11.2 acres between Crosbie and Jordan Streets¹⁵² contained 9.45 acres of housing. Captain Yolland's men surveying for the Ordnance Survey Five Foot plans encountered a bewildering maze of courts, passages, and houses (Figure 2.10) which are often difficult to

149 The findings in this sample area seem at variance with those of Chalklin, 1974, pp. 180-2, who concluded that craftsmen were the most frequent 'building-owners' in Liverpool, especially after 1780. It is not clear what was the size or representativeness of Chalklin's sample but the matter could be solved by a study of Okill's registers. These would provide the basis for a more systematic and less time-consuming study of many aspects of housing development in Liverpool than the necessarily 'hit and miss' approach of generalising from unsystematically preserved individual title-deeds adopted by Chalklin.

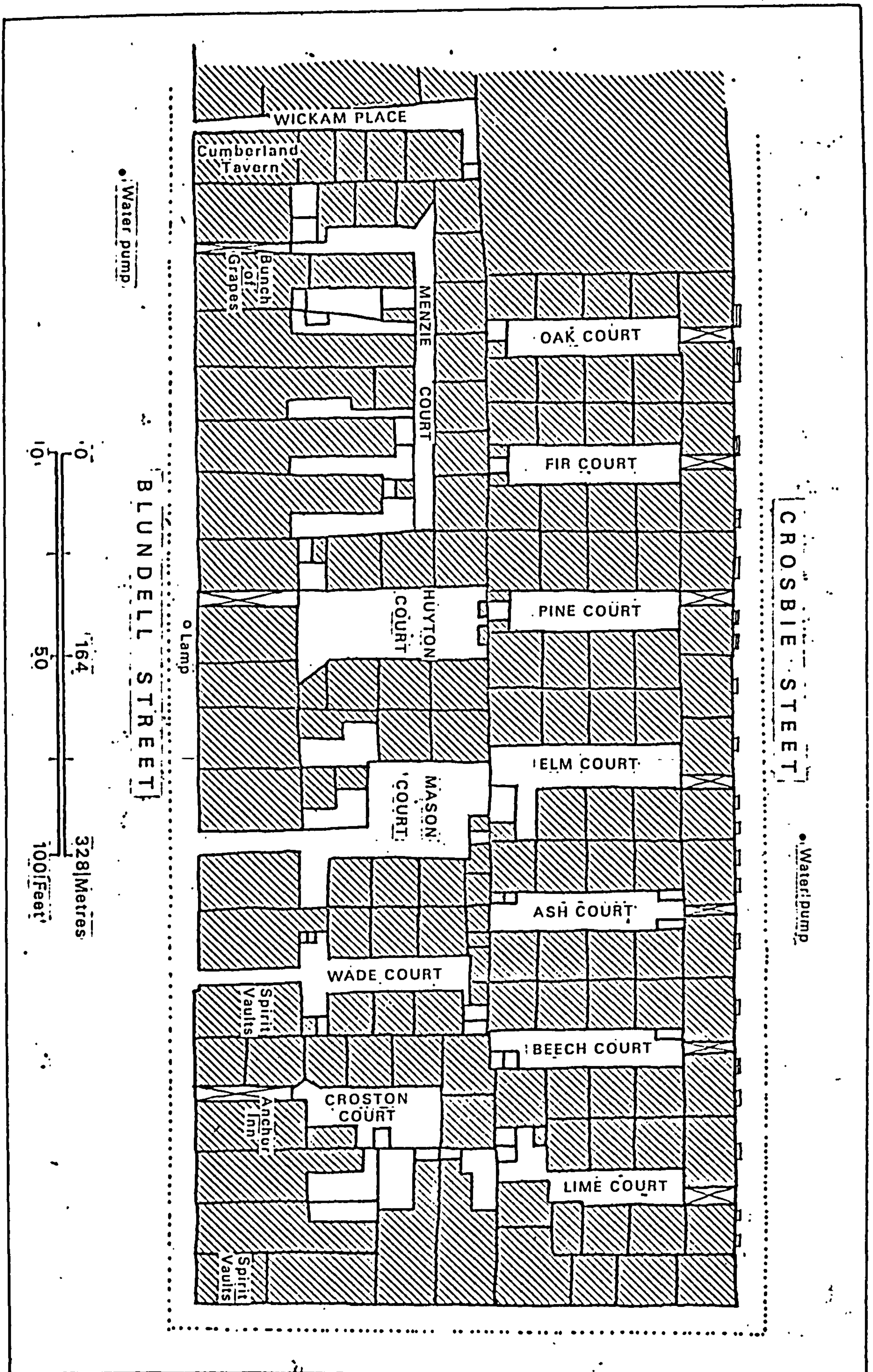
150 Yates and Cunliffe were both merchants and slave traders (Williamson, 1753) who would no doubt have spread their investments wherever there was the possibility of profit.

151 A conclusion based on cartographic evidence.

152 The area of the streets was not included.

FIGURE 2.10

Crosbie - Blundell Court District, 1848



identify even at this generous scale (Plates 1 and 29).¹⁵³ A total of 1,067 houses are shown on the plans of which half were in the 89 courts identified. The overall housing density was 113 per acre but this figure was somewhat depressed by blocks where courts were absent (Table 2.3).

Population densities varied according to the occupancy rate prevailing at different times. Simmons's rate for this area in 1789 - 1790 was 6.2 inhabitants per house (7.7 in street houses, 5.2 in court houses) producing a probable population density of about 500 persons per gross acre.¹⁵⁴

Some idea of the physical arrangements of the area's courts is possible from a detailed inventory undertaken in 1863 (Table 2.4). The facilities present at this time, while not abundant, were probably better than they were in the late 18th century.¹⁵⁵ Two-thirds of the courts were entered through tunnels as narrow as two feet in width and twelve feet in length. Some even continued after a second tunnel.¹⁵⁶ Inside the courts, the yards were usually 10 - 12 feet in width.¹⁵⁷ As houses were three storeys (30 feet) high and two-third's of the

153 Engraving the final product was so taxing that pecked lines marking party walls are often absent and in one case even the court entrance was omitted (Chapel Court, Brick St.).

154 It is not possible to compute net densities as the residential acreage at this time is unknown.

155 Newlands, 1863. Some sanitary clearance of houses may have begun in 1862 but, on the whole, the physical layout had changed little since their erection.

156 Railway Court, Crosbie St. and Cumberland Court, Brick St., for instance. In Railway Court, two houses were actually entered from inside the second 35 foot tunnel. For a vivid description of this property, see Shimmin, 1864, p. 47.

157 With a range between 30 feet in Bailey Court, Kitchen St. to 6 feet in Maxwell Court, Worthington St..

TABLE 2.3
Crosbie-Jordan Streets District, 1847
Housing Densities

	<u>Blocks</u>	<u>Residential Area In Acres</u>	<u>Number of Houses</u>	<u>Houses Per Acre</u>
A	Crosbie-Blundell (South)	0.91	122	134
B	Crosbie-Blundell (North)	0.75	165	220
C	Blundell-Kitchen	1.32	89	67
D	Kitchen-Bridgewater	1.14	78	68
E	Bridgewater-Watkinson	0.70	52	74
F	Watkinson-Norfolk	1.57	161	102
G	Norfolk-Brick	1.79	234	131
H	Brick-Jordan	<u>1.29</u>	<u>166</u>	<u>129</u>
	TOTAL	9.45	1067	113

Source: Housing and residential acreages calculated from Ordnance Survey 5 foot plans, Nos. 34, 35.

A large number of structures not counted may have been dwellings.

TABLE 2.4
Crosbie-Jordan Streets District
Court Conditions

	Number of Courts	Width of Entrance	Entrance		Privies (WC's)	Upper End		Total Houses	Houses Per Court										Houses Per Privy				
			Open	Arched		Entrance	Side		End	Open	Closed	1	2	3	4	5	6	7		8	9	10+	
Blundell	13	2-6"-4-6"	4	8	3	7(2)	13	4	8	4	2	1	1	1	1	1	2						2.5
Brick	10	2-1"-3-9"	3	7	1	6	11(1)	2	8	2	2	1	2	2	1								2.9
Crosbie	12	2-1"-3-8"	*	11	2	-	12	3	8	3	-	1	2	3	5								5.5
Jordan	7	3-0"-13-0"	2	5	1	6	15	1	6	1	2	1	2		1								1.9
Kitchen	15	2-9"-4-3"	6	9	3	14	17	4	11	4	1	6	4	2	1								1.9
Norfolk	11	2-10"-12.0"	6	5	11	20	8	5	6	5	1	1	3	-	-								2.3
Watkinson	16	2-1"-15.2"	5	11	2	17	14	4	12	4	2	4	2	1	2	1	-						2.5
TOTAL	84	2-1"-15-2"	26	56	23	72	91	23	59	474	6	7	14	10	7	8	7	10	2	10			2.6

Note: Although this survey was conducted 80 years after court construction, the physical conditions had changed little in the intervening years, apart from the conversion to water closets. There were no courts off Bridgewater Street.

* No. 7 Court had apparently been closed by the Health Committee.

Source: Newlands, 1863.

end walls of the courts were blocked by buildings of similar height, the courts were permanently shrouded in gloom.¹⁵⁸

The houses too were of diminutive dimensions. Court houses had ground floor plans of between 10 - 12 feet square and street houses, 12 - 14 feet square. With three storeys (including a low garret) the total floor plan area for court and street houses amounted to 500 and 550 square feet. Street houses (and some court houses) also included habitable cellars.¹⁵⁹

No estimates of the cubic capacity of rooms in these streets have been traced but those measured in houses with a similarly-sized ground floor plan exist.¹⁶⁰ Cubic capacity of street houses averaged about 2,300 cubic feet and average largest room sizes about 1,000 cubic feet, smallest rooms about 650 cubic feet. Court houses were even smaller, with their largest rooms about 800 cubic feet and smallest rooms about 550 cubic feet (Figure 6.3). Parts of these spaces were occupied by the open internal staircases, cutting down further the usable interior space.

Later sanitary legislation (itself the bare

158 Even south-facing doorways in a court 15 feet in width would never have been exposed to direct sunlight. Court widths of 30 feet would have been required to allow four and one-half month's sunlight at noon on south facing ground floors. These narrow courts were stagnant airwells, virtually immune to the wind, retaining the smells from the rotting organic matter which accumulated within them.

159 Simmons enumerated 100 inhabited cellars in 250 street houses.

160 Letter from M.O.H. Trench to Board of Health, 18 Sept., 1866.

minimum) recommended 450 cubic feet of living space per person.¹⁶¹ At these standards, the average house built in the district could barely accommodate a normally sized family which utilised every room for sleeping purposes. At the two persons to a room standard,¹⁶² the average three-room house should not have contained more than six persons. If the cellars are excluded as habitable, on average all the street houses can be considered as overcrowded in 1789 - 1790. If the cellar is counted as a habitable room, three of the seven streets in the district had overcrowded street houses. Court housing was rather less overcrowded at this time, only one street had court housing with an average of more than six inhabitants.

The majority of houses in the Crosbie-Jordan area were less than 10 years old and 18.9 per cent of the housing was new enough to be vacant, yet already the incidence of cellar occupation and overcrowding provided unmistakable signs of housing pressure.

2.5. Eighteenth Century Dwelling Characteristics: Statistical Analysis

Section 2.2 examined the largely qualitative

161 Children 1 - 9 years counted as one-half and infants under one year were excluded. The modesty of this standard is apparent from the comparison with the standards set for troops in barracks - 700 to 800 cubic feet (Commission on Warming and Ventilating Dwellings P.P., 1857, XLI, p. 309). Liverpool began enforcing a 450 cubic foot standard in a cautious manner after 1864.

162 A standard adopted by the Census of 1891 and widely used thereafter as the upper limit of satisfactory dwelling space (see, Hole and Poutney, 1971, p. 5).

evidence which indicated a growing internal differentiation in the residential geography of 18th century Liverpool. The present section examines more systematically the statistical and geographical relationships of some dwelling characteristics as revealed by the Simmons Enumeration of 1789 - 90 (see Appendix 1). The ten variables derived from the Simmons data related either to house occupancy or housing development. Scores were computed for 49 'districts' by aggregations of the 413 'streets' individually enumerated by Simmons (Figure A1.1). A correlation matrix was derived which statistically interrelates the ten variables under examination (Table 2.5).¹⁶³ The analysis points to strong statistical and geographical distinctions between the areas where court housing, and areas where cellar dwellings predominated: no statistical relationship exists between the two. Areas of heavily occupied cellar dwelling were negatively correlated ($R = -0.56$) with areas where court housing predominated. Cellar dwelling occupancy was heaviest in heavily occupied front (i.e., street) houses ($R = 0.64$). The relative frequency of cellar occupation and the number of cellar dwellers was (as might be expected) correlated with occupancy rates of the whole house ($R = 0.80, 0.51$). Incidence of cellar habitation was highest in areas of overcrowded housing and the cellars themselves were most fully occupied in these areas ($R = 0.46$).

In the court ('back house') districts, cellar

¹⁶³ Two correlation programs were run, one for all 49 districts, the second for the 31 districts having more than ten cellars and ten back houses, but it was found that the latter eliminated too many inner areas from analysis resulting in a weakening of statistical relationships.

TABLE 2.5
Parish of Liverpool
Simmons Census, 1789-90
Statistical Correlations

		Correlation Co-efficients Variable Number									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
49 District Correlations	<u>1</u>	1.0	.15	.16	-.18	.27	.71	-.25	.10	.07	-.16
	<u>2</u>	-0.2	1.0	-.03	-.02	.08	.18	.04	.03	.04	-.02
	<u>3</u>	.64	.02	1.0	-.16	.26	.35	-.26	.39	-.21	-.47
	<u>4</u>	-.36	.32	-.24	1.0	-.03	-.22	.98	.10	.19	.41
	<u>5</u>	.27	.25	.39	.04	1.0	.84	-.18	.94	.31	-.01
	<u>6</u>	.66	.09	.51	-.25	.80	1.0	-.37	.73	.18	-.17
	<u>7</u>	-.70	.22	-.56	.87	-.14	-.44	1.0	-.07	.16	-.44
	<u>8</u>	.20	.27	.46	.15	.96	.72	-.07	1.0	.17	-.08
	<u>9</u>	.16	.27	.16	.23	.36	.23	.05	.29	1.0	.89
	<u>10</u>	-.03	.25	-.06	.41	.09	-.07	.26	.06	.92	1.0

Statistical Confidence Limits: Probability

95% - 0.25
99% - 0.35
99.9% - 0.45

Statistical Confidence Limits: Probability

95% - 0.35
99% - 0.45
99.9% - 0.58

- Variables:**
- 1 Average number of inhabitants per front (street) house (excluding cellar).
 - 2 Average number of inhabitants per back (court) house (excluding cellar).
 - 3 Average number of inhabitants per cellar.
 - 4 Proportion of back houses to all houses.
 - 5 Proportion of cellars to all houses.
 - 6 Average number of inhabitants per occupied house.
 - 7 Proportion of back house population to total population.
 - 8 Proportion of cellar population to total population.
 - 9 Density of population per acre.
 - 10 Density of houses per acre.

Note: The upper matrix considered only the 31 districts which had more than both 10 cellars and 10 back houses.

occupancy was not nearly so common. By and large, districts with high proportions of court population and court housing (these two variables were themselves of course highly inter-correlated, $\bar{r} = 0.87$) were not areas of the greatest intensity of house occupancy ($\bar{r} = -0.25$). Housing size was probably an important factor here: court house occupancy tended to be higher in areas where court housing was in greatest numbers, though the correlation was a weak one ($\bar{r} = 0.37$). Areas of high population density were weakly correlated with the frequency of cellar dwellings ($\bar{r} = 0.36$). As a broad generalisation, population density appears to be relatively independent of any one variable but a reflection of all.¹⁶⁴

The statistical relationships bear out the history of housing development in the town described earlier. Cellar dwellings were becoming common around mid-century and the houses built beyond the Pool were supplied with habitable cellars. It was not until a generation later, however, that the court dwellings began to dominate the supply of working class housing. These houses were smaller and only in the adjoining street houses were cellars as frequently occupied as in the inner districts.

These characteristics tended to express themselves spatially and the resultant patterns give some

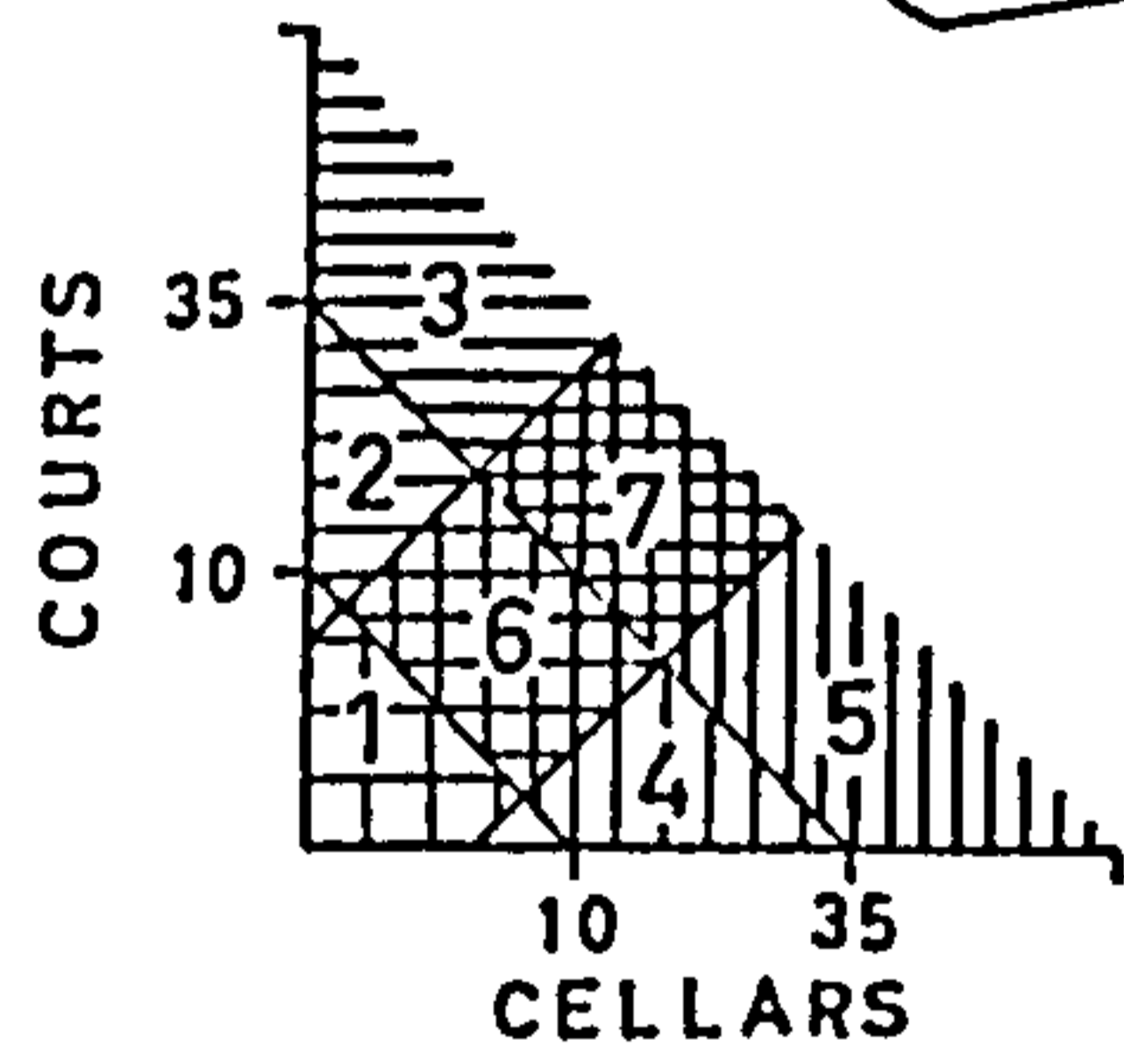
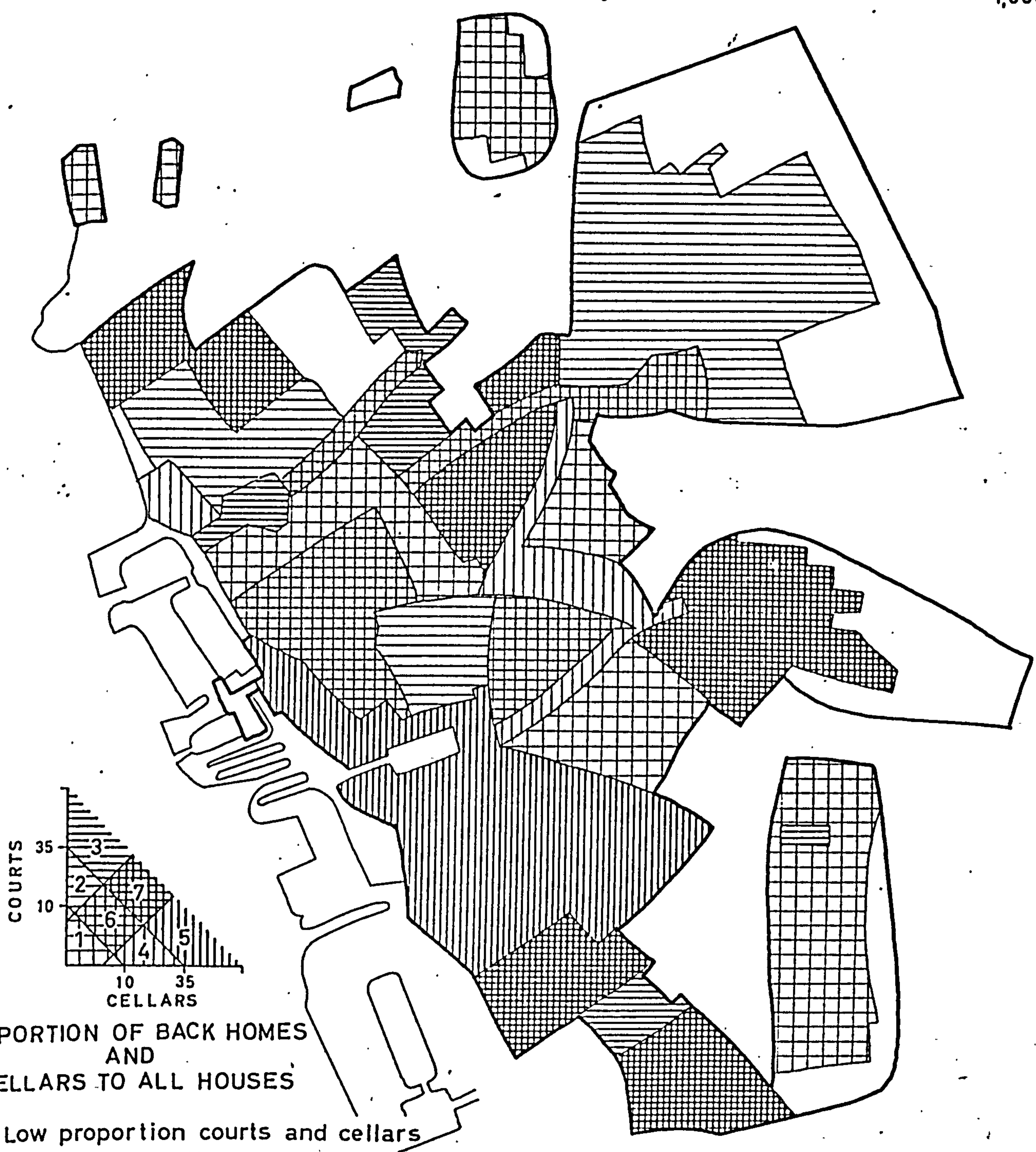
¹⁶⁴ This may be a reflection of the use of gross densities as opposed to net residential densities.

insight into the emerging urban morphology of the town.¹⁶⁵ At its simplest, the morphology of the town can be depicted cartographically according to district scores along two axes - the proportion of back houses and the proportion of cellars to all houses. Figure 2.11 indicates that the central core had few of either type of dwelling as did the middle class districts, St. Paul's, and St. Peter's, St. Anne's, and Rodney St. A large exclusively cellar district predominated in the area around the Old Dock, St. Thomas, and south along Park Lane. In the outer areas of working class housing, court and cellar populations mingled, indicating that while cellar dwelling may have preceded court housing, it continued to be provided after the building of court housing became common.

By including more variables in the analysis, a more comprehensive picture emerges. The ten variables were divided into two sets, five expressing measures of occupancy and five measures of dwelling characteristics. The statistical grouping procedure employed was an analysis of variance that groups items (districts) by an iterating comparison of values

¹⁶⁵ It should be underlined at this point that the analysis is of housing not social characteristics. We have no direct information on the characteristics of the occupants of court or cellar dwellings, only that they were of the 'lower orders'. We cannot indicate, for instance, whether these dwellings were occupied largely or exclusively by the unskilled labourer compared to the artisan. Such an analysis would require a study of demographic data such as can be found only in church registers.

LIVERPOOL 1790



PROPORTION OF BACK HOMES AND CELLARS TO ALL HOUSES

- 1 Low proportion courts and cellars
- 2 Medium proportion courts only
- 3 High proportion courts only
- 4 Medium proportion cellars only
- 5 High proportion cellars only
- 6 Medium proportion cellars and courts
- 7 High proportion cellars and courts

COURT AND CELLAR DISTRICTS

(Figure 2.12).¹⁶⁶

Figure 2.13 summarises the main dimensions of urban morphology.¹⁶⁷ Court and cellar dwellings/high population densities, were mainly located in the south and north-east sectors, low ranking regions could be found in a south-easterly wedge of better class housing and also in the older, early 18th century lower class districts (where court and cellar dwellings had not been built at that period).

These sectoral distinctions are largely confirmed by the groupings of occupancy characteristics (Figure 2.14). The southerly and northern-most areas of working class housing (crowded both on the ground and inside the dwellings), are clearly apparent, as are the less crowded suburbs of St. Anne's

166 The first pair linked has the lowest 'within-group variance', the values of the first pair are averaged, a new value assigned and the combination treated as a single item. The array is searched again for the next closest pair and the procedure continues combining each new item (or grouped items) until the final iteration when only two values remain. The values at which the linkages take place is an expression of the relationship between the total variance of the data set before and after extract^{ion} of the paired items. Expressed graphically, these linkages have been termed 'dendograms' and can be used to 'optimally regionalise' data-sets consisting (in this instance) of up to five variables. The number of regions selected is a function of how far down the dendogram the cut off is taken. Average scores on each of the five variables for the districts in the various regions were calculated. The scores ('regional means') were ranked and the combined ranking score used to place the region on the dendogram (high scores to the left, low scores to the right.) In mapping these regions, the shadings chosen reflect a 'ranking of combined rankings'. High ranking regions (i.e., those with high scores on court or cellar dwellings, high population density, etc.) have the darkest tones and vice-versa. For applications of this technique, see Abler, Adams, and Gould, 1971, Ch. 6.

167 Thirty-one districts only were considered in this analysis, the eighteen districts with low court and cellar totals omitted from the analysis are indicated as such.

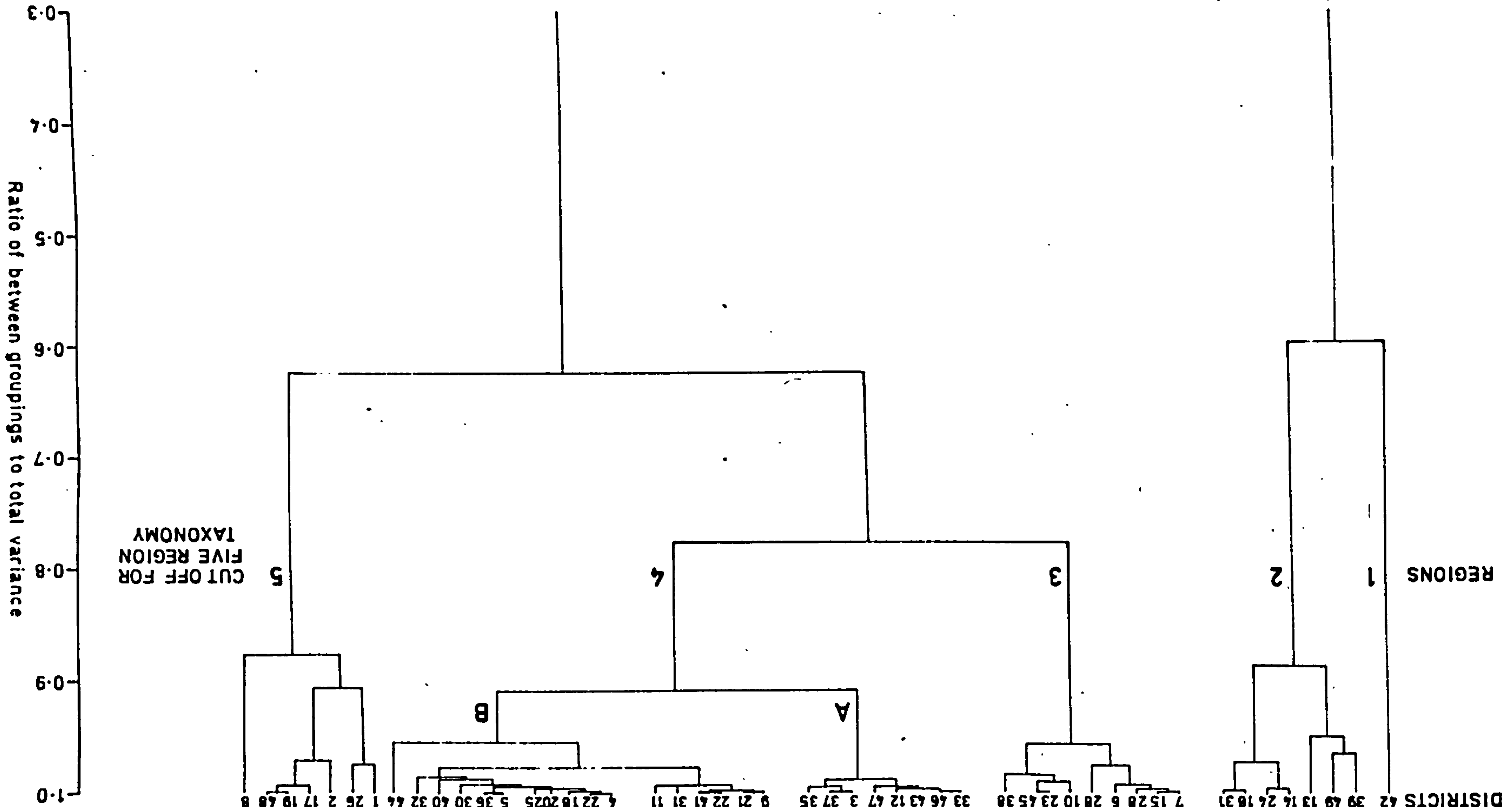
OPTIMAL REGIONALIZATION OF OCCUPANCY CHARACTERISTICS 1789-90

LOW SCORES (By regional mean)

HIGH SCORES (By regional mean)

DISTRICTS 42 39 49 13 16 24 18 31 7 15 28 6 28 10 23 45 38 33 46 43 12 47 3 37 35 9 21 22 41 31 11 4 22 18 20 25 5 36 30 40 32 44 1 26 2 17 19 48 8

CUT OFF FOR FIVE REGION TAXONOMY



(See map for explanation of variables used)

FIGURE 2.12

LIVERPOOL, 1790

Regionalization of dwelling characteristics



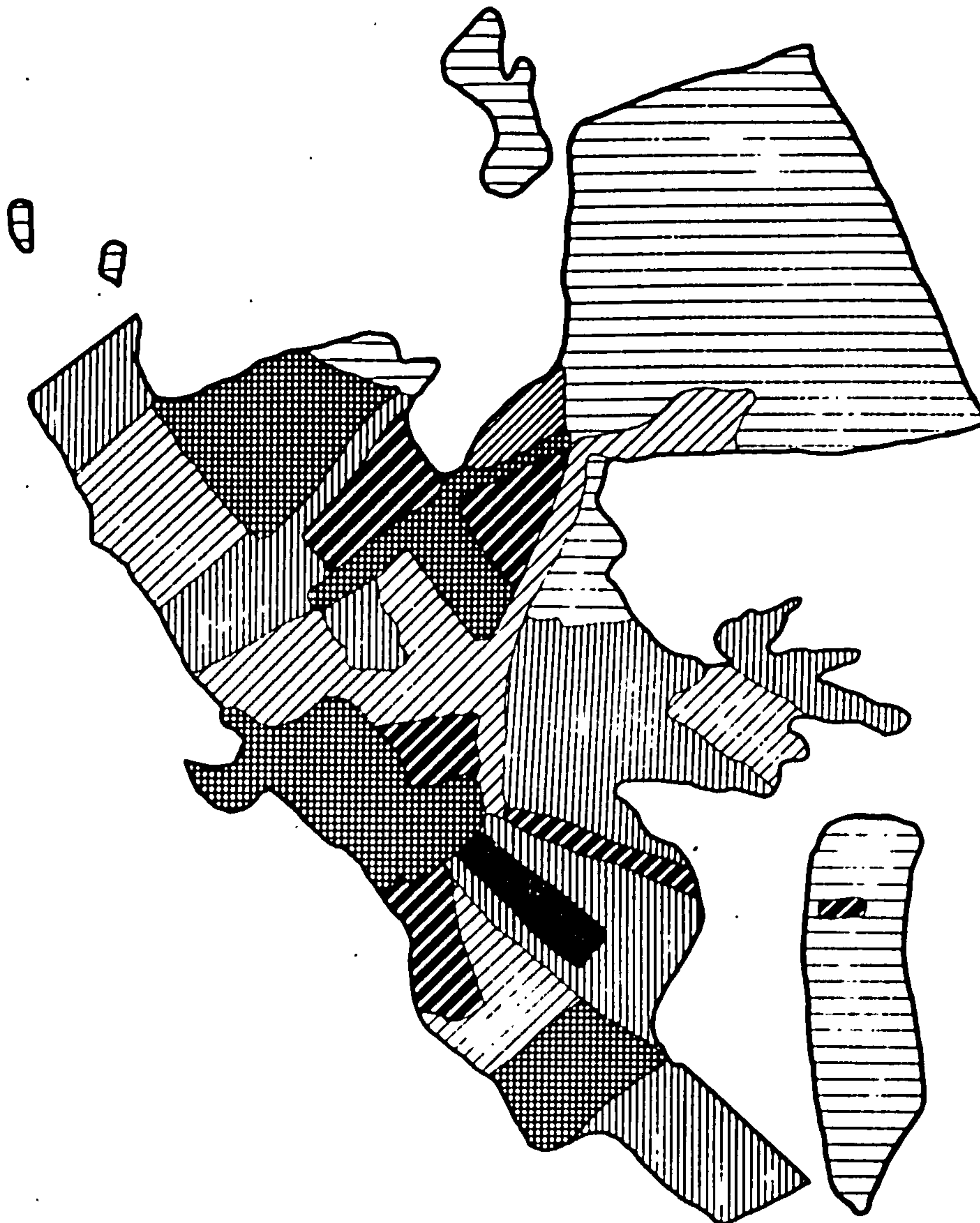
RANKING OF SCORES
(Mean of district values)

HIGH RANKINGS	REGION	VARIABLES							No.D.	VARIABLES
		1	2	3	4	5	T			
	1	3	2	3	3	2	13	4	1 Percent dwellings which are back houses	
	* 2*	2	3	2	1	8	16	11	2 Percent houses with inhabited cellars	
	3	6	1	7	2	1	17	2	3 Percent population living in back houses	
	4	1	9	1	9	5	25	2	4 Percent population living in cellars	
	* 5*	5	6	5	6	3	25	1	5 Housing density	
	6a	4	5	4	5	7	25	3	7 Total	
	6b	7	8	6	8	4	33	13	No.D Number of districts	
	7	8	4	8	4	6	30	4		
	* 8*	9	7	9	7	9	10	1		
	C B	Less than 10 back houses or 10 cellars							8 5	
	.	Less than 10 back houses and 10 cellars							5	
LOW RANKINGS										

Regions derived from a stepwise grouping of 5 variables and the 49 districts

LIVERPOOL, 1790

Regionalization of occupancy characteristics



RANKING OF SCORES
(Mean of district values)

A									B (Sub-division of Region 4)								
REGION	VARIABLES					T.	CR.	HIGH RANKING	REGION	VARIABLES					T.	CR.	LOW RANKING
	1	2	3	4	5					1	2	3	4	5			
1	5	1	1	1	1	10	1	1	6	2	2	1	1	12	1		
2	1	2	4	2	2	11	2	2	1	3	6	2	2	14	2		
3	3	3	3	3	3	15	3	3	3	4	3	3	3	16	4		
4	4	4	2	1	4	15	3	4a	4	1	1	4	5	15	3		
5	2	5	3	5	5	20	5	4b	5	5	5	5	4	24	6		
								5	2	6	3	6	6	23	5		

- 1 Average number of persons per front house (excluding occupied cellars)
- 2 Average number of persons per back house (excluding occupied cellars)
- 3 Average number of persons per cellar

- 4 Average number of persons per house (all houses including cellars)
- 5 Population density per urbanised acre
- T. Total
- CR. Combined Rank

Regions derived from a stepwise grouping of 5 variables and the 49 districts

and Rodney St. (grouped in region 5).

Together, the two maps aptly summarise the residential morphology of 18th century Liverpool. By 1800, the town had already a high degree of internal characterisation in terms of its urban environment and this increasingly diverse morphology was a spatial reflection of Liverpool's evolving economic and class structure.

2.6. Public Health to 1803

This section will attempt to assess the general movement of mortality rates in the 18th century, together with the impact of the changes in Liverpool's urban environment on the health of its residents in the 18th century.

A. Death Rates

Appendix 3 outlines the available evidence for overall movements in mortality in 18th century Liverpool and Figure 2.15 summarises its main trends. The first half of the 18th century was a period of extreme fluctuations in annual mortality, largely brought about by the epidemic effects of smallpox, "the most widespread and fatal disease throughout 18th century Britain".¹⁶⁸

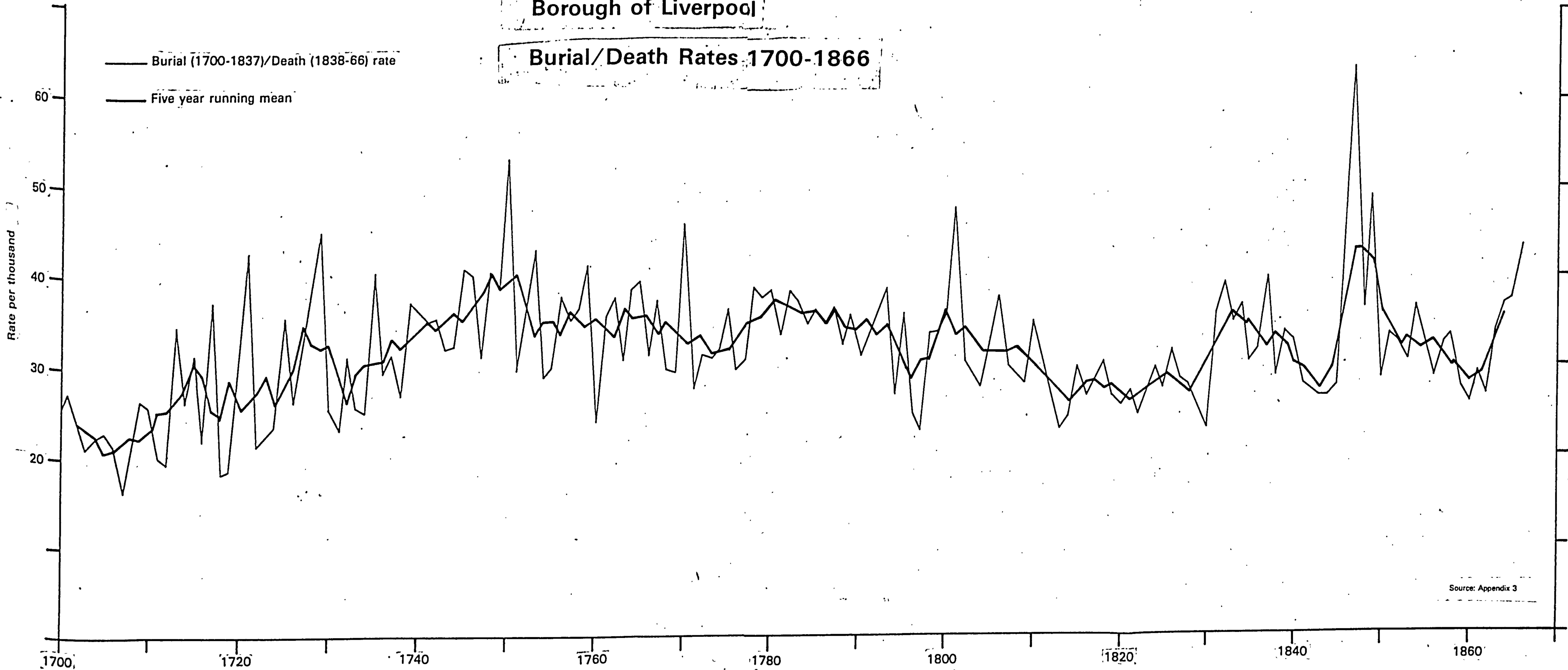
In Liverpool, death rates rose to over 30 per thousand in 13 smallpox epidemic years which occurred at

¹⁶⁸ Howe, 1972, p. 143.

FIGURE 2.15

Borough of Liverpool

Burial/Death Rates 1700-1866



Source: Appendix 3

comparatively regular 5 yearly intervals.¹⁶⁹ These epidemic years were followed by 'healthy' years when rates dropped to the low 20s per thousand.¹⁷⁰ The trend line of mortality was generally upwards until the 1760s when mortality rates flattened and even declined somewhat (Table 2.6).¹⁷¹

The reasons for these changes were probably many and complex and are currently receiving the attention of a number of historical demographers.¹⁷² One explanation of the late 18th century secular downturn in English mortality rates has pointed to the effects brought about by the practice of inoculation against smallpox after the year 1760.¹⁷³ Haysgarth stated inoculation began in Liverpool in 1781 and 12 years later he was able to comment in the past tense about a disease that had "raged in the town with much violence and was very fatal".¹⁷⁴ If Haysgarth's dating was correct, however, there must have been other unknown factors operating to reduce Liverpool's mortality, for the fall in rates apparently began before the 1780s.

169 1715, 21, 25, 29, 35, 39-40, 45, 50, 53, 59, 62, 65, and 1770. Peak years in London for smallpox also occurred every 5 years (Howe, 1972, p. 143).

170 A not unusual occurrence after uncontrollable epidemics. Disease carries off the weakest and most susceptible members of the population leaving the 'healthier' population behind.

171 The 1780s were apparently an exception to this generalisation.

172 Good selections of papers on some of the viewpoints are contained in Drake, 1969 and 1973.

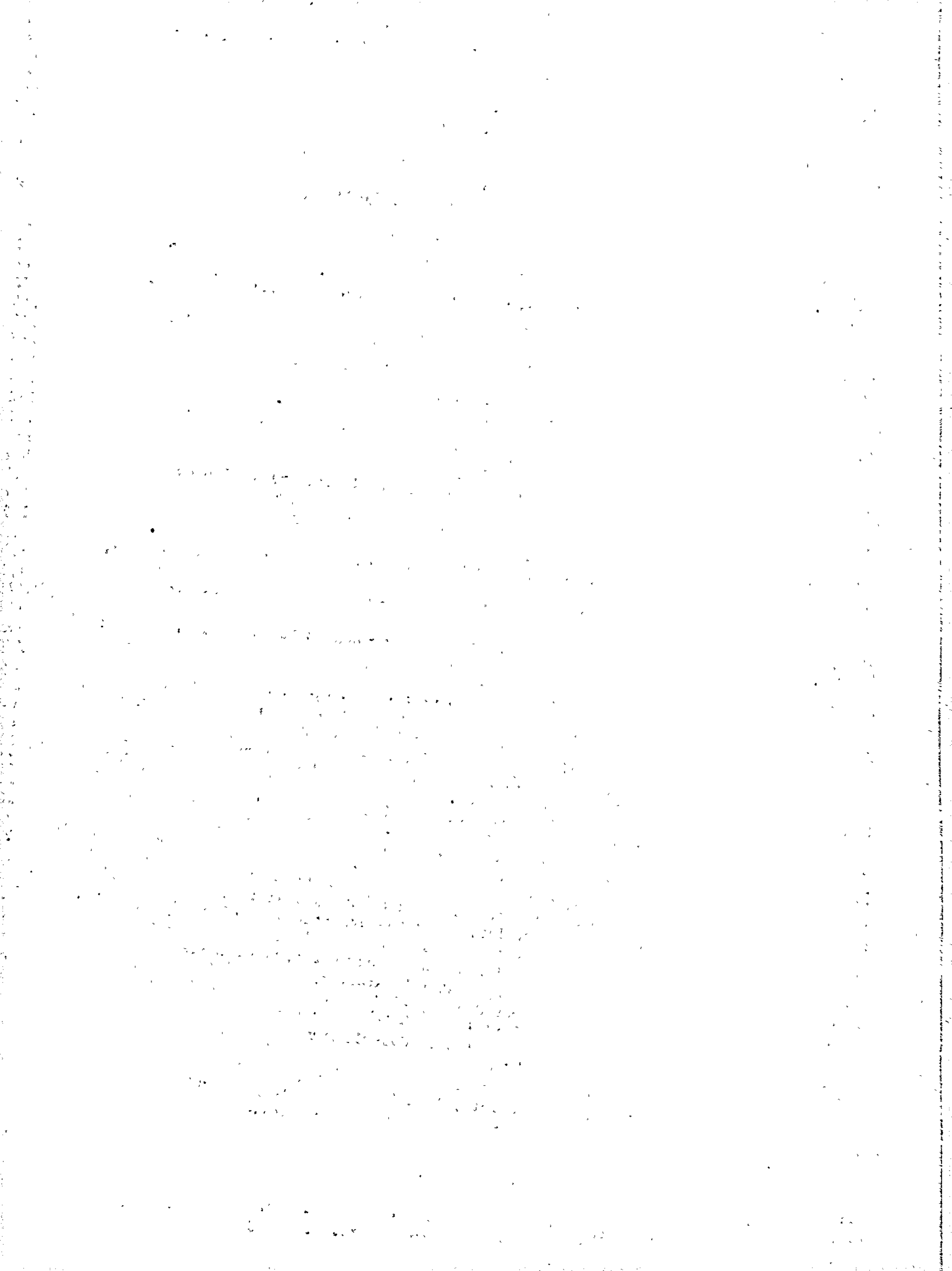
173 Razzell, 1969. Razzell no longer claims that the elimination of smallpox could have been responsible for the entire decline in late 18th century mortality (see Razzell, 1974, p. 42).

174 Creighton, 1894, Vol. 2, p. 453. The decline could be dramatic. In Maidstone, Kent, smallpox deaths declined by 70 per cent in the first decade after inoculation commenced (Razzell, 1969, p. 148).

TABLE 2.6
Parish of Liverpool, 1700-1800
Crude Burial Rates by Decade

<u>Date</u>	<u>Rate Per 1000</u>
1700-9	22.7
1710-9	25.5
1720-9	31.1
1730-9	29.8
1740-9	36.5
1750-9	37.3
1760-9	33.6
1770-9	34.1
1780-9	35.7
1790-9	32.7

Source: See Appendix 3.



The importance of mortality due to smallpox is indicated by a surviving bill of mortality for 1772 (Table 2.7) which indicates that smallpox accounted for a fifth of all deaths.¹⁷⁵ The fact that death rates did not drop by the proportion of deaths accounted for by smallpox has to be explained by other factors. The lives saved by inoculation must have been lost to deaths caused by other diseases.

Typhus was a far less spectacular disease than smallpox. The 'fever' as typhus was called (in fact, an undifferentiated group of diseases that included typhoid, typhus, and relapsing fevers) was the disease of the poor, the unwashed, and the louse-ridden. It was an 'unerring index of destitution' that proved to be a remarkably sensitive indicator of the state of the poor in times of distress and scarcity.¹⁷⁶

In 1772, 'fever' accounted for 8 per cent of the deaths in Liverpool (Table 2.7). Six years later, the Dispensary opened and it is apparent from the records kept by a physician there, Dr. Curry, that 'fever' was becoming an increasingly important disease of the poor. In the period 1780 to 1796,

175 Enfield, 1773, p. 31, drawn up by a Dr. Bostock. It is not clear whether this return was connected with the Parish Bills of Mortality, though Haysgarth apparently had access to a bill in 1772. The oldest bill extant is for 1774.

176 The disease is one that affects the small blood vessels when attacked by the micro-organism rickettsia. Vessels of the brain and skin are particularly vulnerable producing the stupor, delirium, and spotted rash characteristic of the disease. The disease is transmitted to man by body-lice and infection takes place when rickettsia-laden lice faeces enter small lesions such as scratches or lice bites. Lice are easily transferred in crowded dirty domestic conditions and to those coming into contact with sick and dead.

TABLE 2.7
 Liverpool, 1772
 Bills of Mortality

<u>Cause of Death</u>	<u>Number</u>	<u>Percentage of All Deaths</u>
Consumption	358	35.5
Smallpox	219	21.7
Convulsions	120	11.9
Fever	83	8.2
Chincough (Whooping cough)	<u>45</u>	<u>4.5</u>
	825	81.8
 TOTAL (All causes)	 1007	

Source: Enfield, 1773, p.31.

213,305 patients were admitted of whom 22.6 per cent were suffering from fever (proportions varied between 18.0 per cent in 1782 to 28.2 per cent in 1787).¹⁷⁷ Chapter 20 of Curry's treatise is entitled "Population of Liverpool, Prevalence of Fever" and in it he points to the growing and widespread nature of the disease. Only once affected by its ravages in the previous 20 years, the upper classes did not realize it was "constantly present among the poor".¹⁷⁸ This 'narrow sphere of contagion' was both social and spatial. The disease thrived among poor people and in poor areas which were characterised by "a want of cleanliness and ventilation" (the latter comment reflecting the influence of the prevailing miasmatic school of thought) where the disease's "influence is prompted by damp, fatigue, sorrow and hunger".¹⁷⁹

Curry's warnings about the unhealthy nature of the working class parts of the town were underlined by the epidemic of 1801 and the effect of the Irish migrations (see Section 1.3 above). In that year, Curry put forward a motion to the Parish Vestry to establish "a house for the reception of paupers labouring under fever and other contagious diseases".¹⁸⁰ In 1801, death rates rose to 47.3 per thousand and the following year Council determined to make application to Parliament to obtain an act that would 'contribute to the health and comforts of the inhabitants'.

¹⁷⁷ Currie, 1804, pp. 350 and 354.

¹⁷⁸ *ibid.* p. 345.

¹⁷⁹ *ibid.* p. 358.

¹⁸⁰ Vestry Minute Book, 1801, p. 27.

It should be added that Curry's analysis of Liverpool's health was not shared by many of his less informed contemporaries. Enfield¹⁸¹ mentions the overcrowding and gives a life expectancy of 24 1/2 years yet concludes that the town "may with confidence be pronounced a healthful place". Smithers,¹⁸² finding the proportion of burials to population was higher in Liverpool than in the kingdom as a whole expressed grave doubts over the accuracy of the returns also arguing that, if they were correct, they could be explained by "extraneous causes", such as the attraction

"to the town of several industrious classes ... particularly from the neighbouring kingdom being poorly provided and their views frustrated fall victims annually to disappointment, disease and poverty. These serve to swell the number of burials."¹⁸³

He pointed to the charities of the town which attracted old people who "spent their last days in Liverpool". Finally, he referred to the prevalence of cellar dwelling, "rarely seen in other towns of England and is injurious to health" and concluded with quaint logic that,

"All these circumstances combined, account for the too great ratio of mortality in Liverpool, without at all impugning the doctrine of the healthfulness of the place".¹⁸⁴

Liverpool certainly appears to have been relatively healthy

181 Enfield, 1773, p. 27.

182 Smithers, 1825, p. 200.

183 *ibid.*

184 *ibid.* p. 201.

compared to York in the first half of the 18th century¹⁸⁵ but later Liverpool's mortality appeared to move ahead of York's. By the end of the 18th century, the Liverpool rates were above those of Carlisle (1779 - 1787) but similar to Manchester's (1770 - 1779).¹⁸⁶

However health-giving Liverpool's climate appeared to its biographers, it was apparent to those having daily contact with the poor, that municipal action was needed to remedy a worsening situation. "... surely the health of the inhabitants deserves particular attention" argued Moss in 1784¹⁸⁷ and a deputation of doctors to the council agreed.¹⁸⁸

The physical condition of the town's housing, the lack of any piped water supply ("a gallon of wholesome water is not often to be had from the inhabitants of a whole street."¹⁸⁹) or sanitary sewers (see Appendix 7), the apparent increasing pauper and semi-pauper class, had created conditions ideal for the generation and spread of particular 'urban' diseases such as typhus, tuberculosis, and respiratory diseases such as bronchitis.¹⁹⁰

185 Armstrong, 1974, p. 110. This is, however, difficult to judge on the basis of comparison with the single years for which York's data is available.

186 Razzell, 1969, p. 124, Table 1. As the statistics in these other towns (except Carlisle) only rely on the much-criticised census abstracts, there are difficulties in any comparisons.

187 Moss, 1784, p. 51.

188 White, 1951, p. 33. I have been unable to trace his original source.

189 Wallace, 1797, p. 88.

190 Tuberculosis "thrived in deprived bodies; its allies were undernourishment, debilitation, unventilated homes and working accommodation and squalor" (Howe, 1972, p. 180). Bronchitis was precipitated by atmospheric pollution and dampness.

The connection between living conditions and health was pointed out at the time. The 'new' back houses of the late 18th century,

"... have an imperfect ventilation especially in the new streets on the south side of the town where a pernicious practice has been introduced of building houses to let to labourers in small confined courts which have a communication with the street by a narrow aperture but no passage for the air through them. Among the inhabitants of the cellars and of these back houses, the typhus is constantly present."¹⁹¹

Moss had also found the houses

"in general much too small and the rooms almost throughout too low ... this error may perhaps be attributed to builders who erect most of the new houses on their own account upon speculation for sale and who have no other views than such as are strictly economic and directly profitable".¹⁹²

Overcrowding was rife "many hundreds of houses that do not rent for four to six pounds per annum have 18 to 20 crowded together from cellar to garret under one roof".¹⁹³ Under these conditions, even a cellar was considered "a more healthful residence than a room in houses in which every room is tenanted".¹⁹⁴ The first sanitary revelations were made by doctors such as Dr. Curry who witnessed the relationships between overcrowding, inadequate housing, and infectious diseases and it was they (as did their colleagues a generation later) who pressed for legislative solutions.

191 Currie, 1804, p. 347.

192 Moss, 1784, p. 57.

193 [Wallace], 1797, p. 70.

194 Moss, 1784, p. 116.

B. Legislative Action

The work of Dr. Curry in revealing the growing environmental problems in the town stimulated action. On 6 Jan. 1801, the Council moved

"to consult the Physicians of the Liverpool Infirmary and Dispensary in respect of any proposed alteration on the extent of the Improvement Act that may in any degree contribute to the health and comfort of the inhabitants."¹⁹⁵

The recommendations of Dr. Curry and the other physicians made in response to this request were extremely far-sighted. The proposals were conceived in terms of 18th century urban enlightenment. A general plan was needed for

"both the individual houses and their arrangement as to each other, that they may unite healthfulness and convenience, and serve not only for the present use but for future example. Such a plan when perfected would contribute not merely to the healthfulness but to the beauty and regularity of the town while at the same time it would be of great advantage to the corporate estate. It would be favourable to industry and good morals. In the dwellings of the poor which at present too frequently exhibit distress and confusion might be introduced cleanliness and good order."¹⁹⁶

Within the context of a town plan, if courts were to be built at all

"it should be on condition that they be made of a certain width, that the entrance should not be through an archway, that the houses should not be above two storeys high; that the upper end of the court should be kept open ... Every court should have two or three necessaries according to its size and a plentiful supply of water."¹⁹⁷

The report also reviewed the causes of the recent epidemics and expressed the hope that the plan referred to above

195 Liverpool Town Book, Vol. 13, p. 559.
 196 Curry, 1804, p. 378.
 197 ibid. p. 377.

together with the removal of noxious industries, draining of land, the banning of cellar dwellings and better sewerage and street cleansing would reduce the frequency of contagion in poor areas.

Perhaps these suggestions arrived too late. The Improvement Committee of Council approved the heads of the bill on 4 January 1802, which contained none of these clauses and appeared before Parliament primarily as a dock and street improvement bill of the type Liverpool had already had enacted on several previous occasions. The bill¹⁹⁸ was referred to a parliamentary committee 17 February, ordered 13 May and read 17 May, 1802. A petition was received from church wardens, overseas and "owners and occupiers of houses and lands of the said Parish" who argued that the bill if enacted would "materially affect their real property therein considerably injured in its value".¹⁹⁹

In the following year, the bill was again presented in amended form, although the Parish expressed its "surprise ... to find the same bill with many of those clauses which were offensive".²⁰⁰ It also contained new regulations apparently inspired by the physicians' report. No cellar was to be occupied with a ceiling lower than three feet above the

198 A copy is contained in Holt and Gregson Papers , Vol. 7, No. 4.

199 Journal of the House of Commons, 1801 - 1802, Vol. 57, pp. 127, 447-8, 487, 501, 516-7. These objections it should be noted were directed against the corporation's powers of compulsory purchase for public works.

200 Parish Vestry Minute book, 1803, p. 38.

street level or without a flue, window, and whitewashed walls. No court was to be built less than eighteen feet across, and an entrance nine feet wide which had to be open above. No building was to be more than thirty feet or three storeys in height (a storey higher than the Physicians recommended). Cellars in certain streets within the bed of the former Pool and along the reclaimed strand were to be left unoccupied because of the danger from damp and flood.²⁰¹

The bill of 1804 was introduced to the House 4 February and following petitions against, was apparently abandoned some time after 8 May.²⁰² The Vestry Clerk, Edward Blackstock, "on behalf of himself and many other inhabitants of the said Parish, owners and occupiers of houses and lands in the said parish", had again objected. He was joined by Elias Joseph, silversmith, and "owner of certain houses and buildings in Lord St. and Whitechapel [who] will be very materially affected and his said houses and buildings considerably injured."

A pamphlet published at the time set out the major objections against the bill. While it would have been 'a desirable measure' in theory, to prevent the habitation of cellars, the streets in question contained 320 cellars (about a fifth of the town's total). Alternative accommodation for the

201 The original of this bill has not been traced, but it is quoted in Mathias, 1957, p. B102. Mathias does not give his original source. The streets named were: Paradise St., Whitechapel, Byron St., Strand, New Bird St., Wapping, Frederick St., Pitt St., and either side of the Old Dock and the streets between the Old Dock and Salthouse Dock.

202 Journal of the House of Commons, 1803, Vol. 58, p. 124; 1804, Vol. 69, pp. 69 - 70, 122, 177, 200, 211, 218 - 9, 267.

poor would not be easy to find, rents having "at least doubled within these few years".²⁰³ The pamphlet's author was not against the banning of future courts and cellars, for this "certainly will contribute to the comfort of the inhabitants"²⁰⁴ but any prospective provisions were to fail with the bill. The opposition aroused had been too great: the first era of public health agitation came to an end. Voices of protest were not to be revived for another 30 years by which time the problem of unsanitary court and cellar dwellings had - far from disappearing - multiplied many fold.

2.7. Conclusion

The statistical evidence of changes in the town's death rates probably disguises a changing pattern of mortality cause. Reductions in mortality due to a lessening importance of smallpox which might have been anticipated, were more than made up by increased virulence of typhus and other zymotic diseases. Evidence presented earlier has argued that structural changes within the economy were contributing to the growth of a semi-indigent working class population (Section 1.4). The rapid economic growth in the last 30 years of the 18th century had also drawn large numbers of migrants into the town in search of work. The resultant population pressure on available housing stocks led to widespread use of cellar dwelling and the

203 [Wilckens], 1803. Wilckens was an eccentric proprietor of considerable salt works in Cheshire who had been born in Bremen in 1751. He had also opposed the earlier bill ([Wilckens], 1802).

204 ibid. n.p.

development of new high density building forms. The new urban environment in which the burgeoning population found itself, became an important contributory factor in maintaining high mortality rates among the poor. The failure in 1803 to obtain an Improvement Act which would have regulated the worst excesses of environmental mismanagement, allowed the lessons of the 18th century to be forgotten by the town builders of the early 19th century.²⁰⁵ The delay in achieving adequate controls on housing form was to affect the health and comfort of hundreds of thousands in the next century and, Duncan maintained, to cut short the lives of nearly 40,000 people in the next 40 years.²⁰⁶

205 Curry's findings on cellars were rediscovered and reprinted under the heading of 'Town Improvement' in Porcupine, 1 Aug. 1868.

206 Duncan, 1844, p. 537.

Chapter 3

LIVERPOOL'S 19TH CENTURY POPULATION STRUCTURE: A TOWN OF
IMMIGRANTS

"I had a conversation last week with an Irish labourer, named Christopher Shields; he said that the reason of his leaving Ireland was, that in the county Wexford, his own county, he could only get 6d. a-day and his own meat; that at one time he rented a small cabin with a potato patch, and worked for the landlord. He then got 1s. a-day, but the landlord charged him 3 pounds a-year for his holding. He told me that there was a general impression among his countrymen that if they came to England their fortunes would be made, wages are so much higher here. He told me that he could get his clothing as cheap here as at home, and generally all the things he wanted. He now gets 16s. a-week. He stated likewise that it was a great inducement to come here that they can get situations for their children, which they could not do at home. He told me likewise that he could more easily get his children educated here than in Ireland. This man lives in a cellar. He will never return to Ireland; he has no wish to go back.²⁰⁷

Liverpool's rate of population increase had quickened in the 1780s and thereafter its growth exceeded 20 per cent for each decade until the 1860s (Figure 3.1). In absolute terms, the average annual increments of population were impressive (Table 3.1). Smithers commented that the "rapidly progressive increase" of the population was "equal to if not exceeding many of the United States"²⁰⁸ and the 1831 census described Liverpool's population growth as attributable to "the

207 Holme, 1836, p. 503 (MS. Number).

208 Smithers, 1825, p. 199.

FIGURE 3.1

Liverpool and District, 1801-71 Rates of Population Change

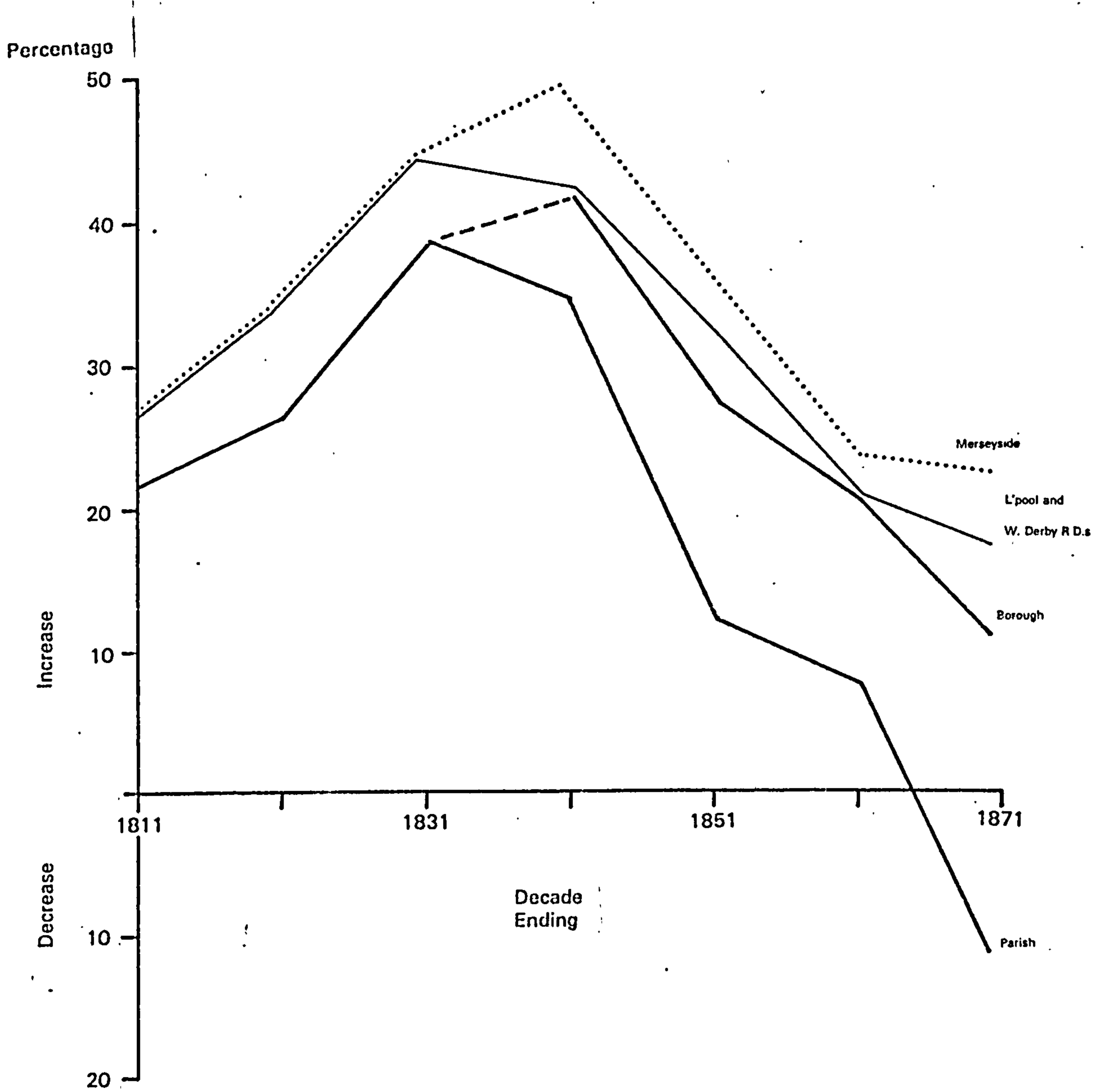


TABLE 3.1
 'Five Townships' Average Annual
 Growth of Population 1801-1871

	<u>Number</u>	<u>Percent</u>
1801-11	2,226	2.7
1811-21	3,597	3.4
1821-31	6,447	4.6
1831-41	8,822	4.3
1841-51	8,570	2.9
1851-61	8,286	2.2
1861-71	6,807	1.5

Note: The 'Five Townships' are Liverpool, Kirkdale, Everton, West Derby and Toxteth Park.

Source: Census.

salubrity of the air and the progressive improvement in its trade, steam-navigation and railroads". Of the first part of this statement, more will be said later, but the 'progressive improvement' referred to, was certainly operating to transform a thriving 18th-century commercial town of regional importance into a 19th-century city-metropolis of world significance. In 1850, with a population of about 380,000, the town was the fourteenth largest in the world (outside of China and Japan). By 1890, with over half a million inhabitants, it still ranked eighteenth in the world league.²⁰⁹ The exponential growth rates which had characterised the 18th century continued, doubling the population every 20 - 25 years and, by 1860, the population of the Parish and its surrounding area was six times larger than it had been at the century's commencement.

The growth in numbers was accompanied by a tremendous extension of the urbanized area and this was reflected by two expansions of municipal boundaries in 1835 and 1895. The Parish of Liverpool, which had accommodated 93.3 per cent of the region's²¹⁰ population in 1801 (Table 3.2) was by 1820 being outgrown to the east and south. By 1851, one third of the Borough's inhabitants lived outside the Parish, and the

²⁰⁹ Weber, 1899, p. 450.

²¹⁰ That is, east side of the Mersey. The Wirral became increasingly part of a functional conurbation only in the second half of the 19th century. Even then, the separation of the river ensured that full integration never took place in the 19th century. Unlike the other river, or estuarine urban regions (e.g., Tyneside, London, Glasgow, etc.), the water could never be crossed with ease. A separate economic structure, labour market, housing supply market, and even fragmented union organisation emphasised these differences.

TABLE 3.2
Suburbanization of Population
Liverpool
1801-1891

Liverpool Parish	As a Proportion of The Five Townships Liverpool and West Derby Registration Districts	1801	1811	1821	1831	1841	1851	1861	1871	1881	1891
		P E R C E N T A G E									
Parish	The Five Townships Liverpool and West Derby Registration Districts	93.3	89.4	84.4	80.2	75.6	65.9	58.3	37.0	35.2	27.2
Borough (Post 1835)	The Five Townships	* ...	...	...	97.7	97.2	96.8	95.9	92.9	92.6	89.8
Borough (Post 1835)	Liverpool and West Derby Registration Districts	...	...	...	92.3	91.8	89.3	89.6	84.9	80.5	71.0
P O P U L A T I O N I N T H O U S A N D S											
Parish		77.6	94.4	119.0	162.2	222.5	250.2	269.7	243.1	210.2	157.0
Borough		...	...	...	201.3	286.0	367.7	444.0	493.4	552.5	518.0
Five Townships		83.2	105.5	141.5	206.0	294.2	378.0	462.8	530.8	596.3	576.7
Liverpool and West Derby Registration Districts		89.6	113.4	151.3	218.2	311.7	411.5	495.6	581.3	686.5	730.0

* ... Not applicable

Note: Five townships include Liverpool, Everton, Kirkdale, West Derby, Toxteth Park.

Source: Censuses

Parish's share of the conurbation population continued to decline throughout the century until, by 1891, it had been transformed into an inner core accommodating only one quarter of the urban area's inhabitants.

The newly enlarged borough of 1835 could accommodate all but a small proportion of the region's population. After 1881, its share of the urban region's population, too, began to fall off substantially. The decline in the borough's population between 1881 and 1891 (which apparently shocked the town's citizenry)²¹¹ was arrested by the boundary extensions of 1895, 1902, and 1905. These trends are reflected in the steep rises associated with suburban growth in the four 'out-townships' and the stagnation and declines in the inner urban area (Figure 3.2).

The town centre achieved its maximum censal population in 1841, although St. Peter's Ward had barely grown in the previous decade. Between 1841 and 1851, five inner borough wards (three registration sub-districts) decreased in population (Figure 3.3). These changes were closely associated with changes in the urban fabric being wrought by the 'improvements' referred to earlier. The Lancashire and Yorkshire railway's new terminus at Exchange Station, reconstruction of Salthouse Dock, and overall losses to business uses, led to the disappearance of 878 houses in Exchange, Lime Street, Castle Street, and Great George Wards in the 1840s. Such losses of

²¹¹ Drake, 1972, p. 8.

Liverpool and District, 1801-1861

Population Growth

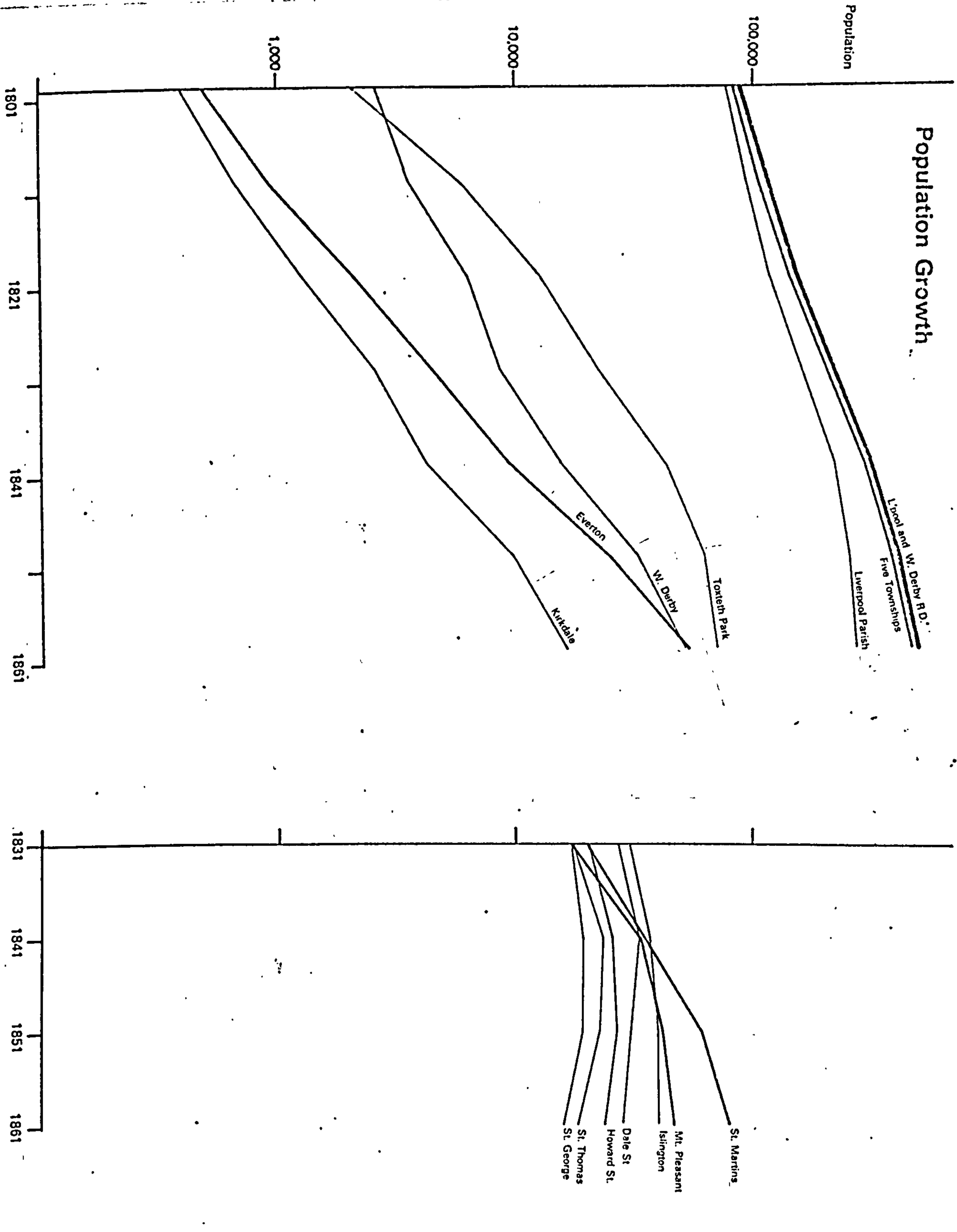
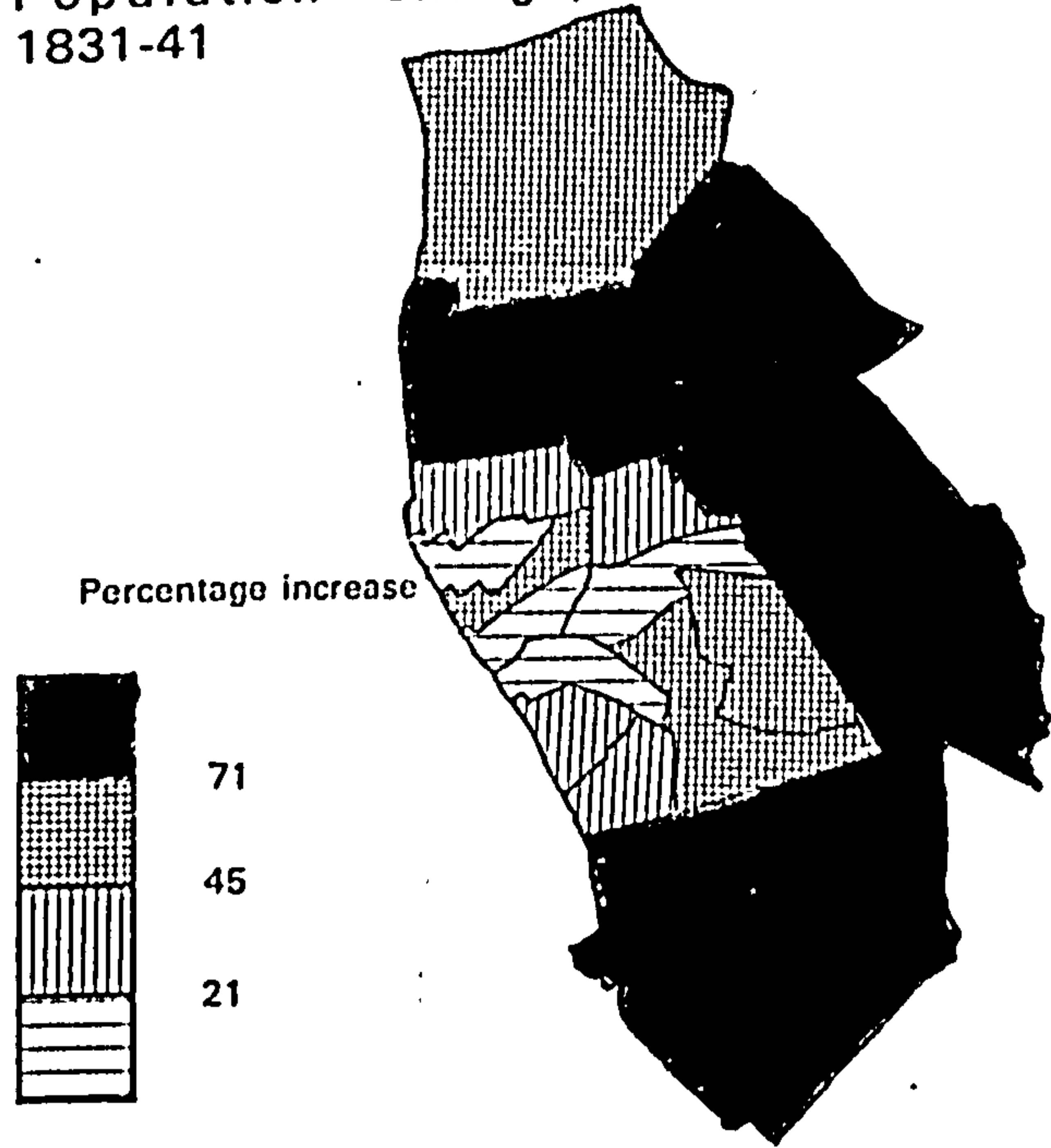


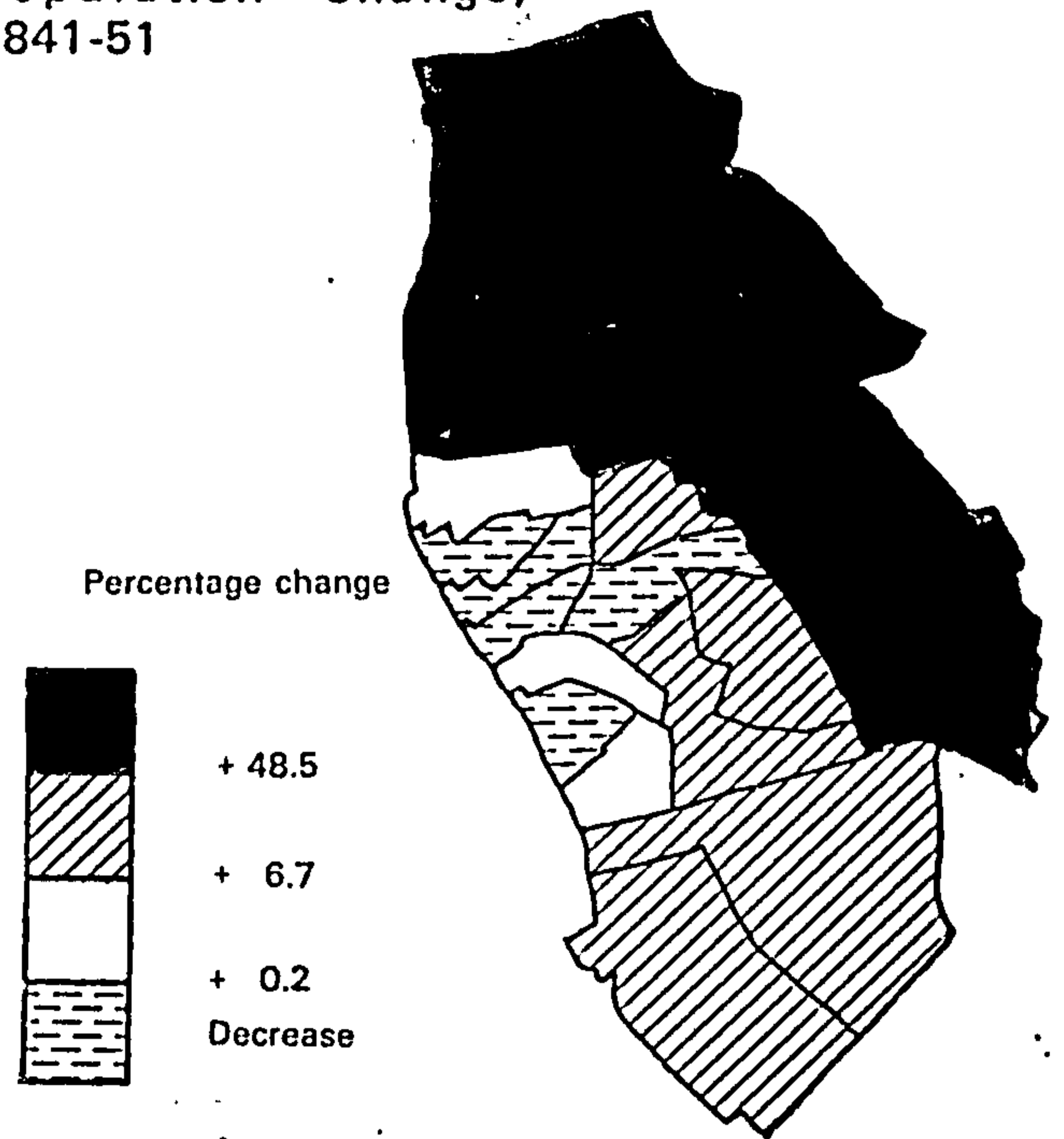
FIGURE 3.2

Liverpool Borough, 1831-51: Urban Growth

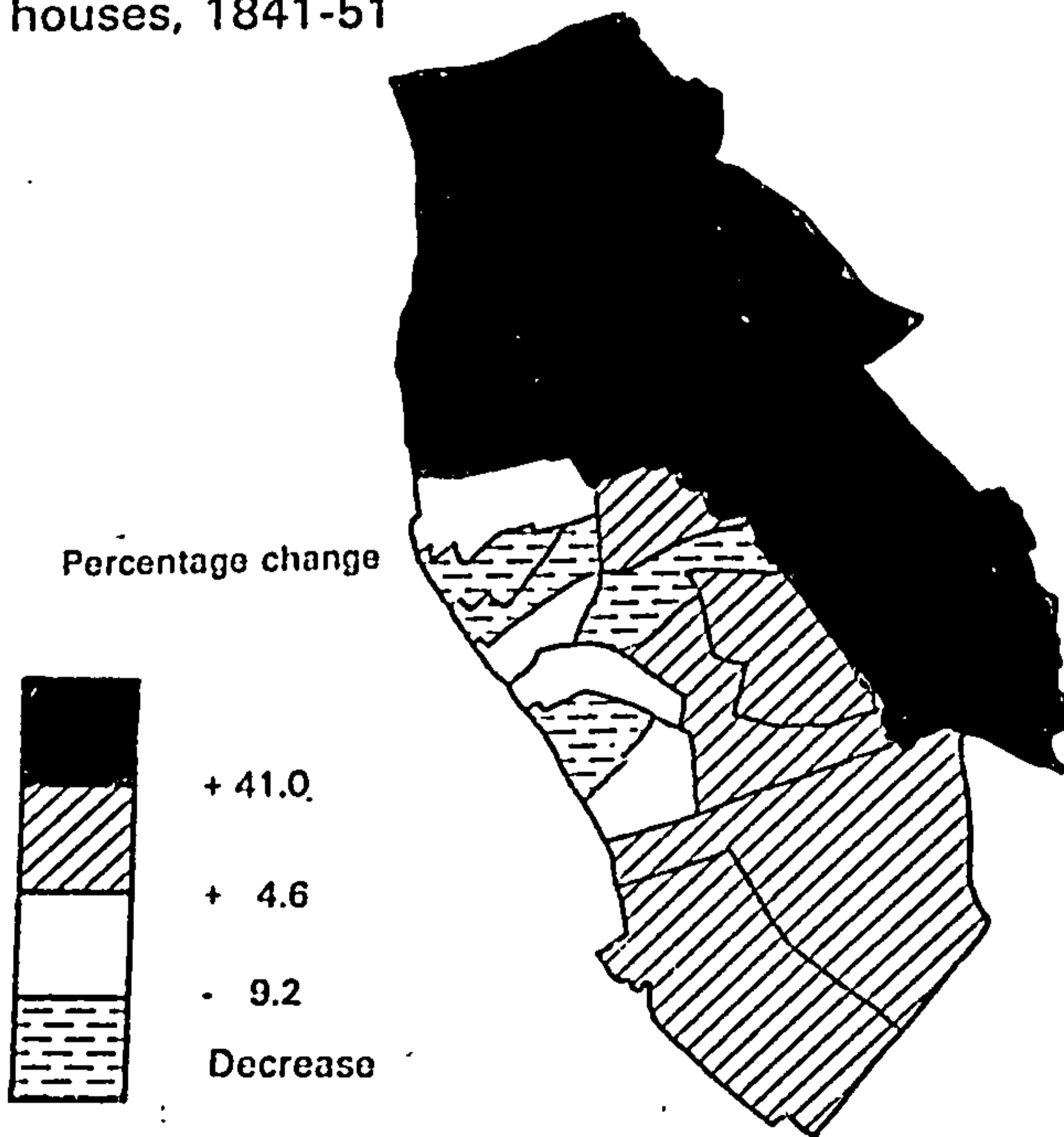
Population Change, 1831-41



Population Change, 1841-51



Change in number of houses, 1841-51



residential land and housing²¹² to other land uses, were associated with the sorting and sifting processes of the urban land market. Redevelopment of inner borough land rarely resulted in the replacement of old by new housing but rather by the warehouses and shops in the expanding business district or by the new communication facilities of docks and railways (Plate 29).

3.1. Migration

As with other 19th-century towns, the growth of Liverpool's population was largely attributed to in-migration²¹³. The census of 1841 (Table 3.3) indicated that 45.0 per cent of the Borough's population was born outside Lancashire. This figure was over double that for the county as a whole and in sharp contrast to the still largely agricultural townships of the surrounding district.²¹⁴ By 1851, the proportion of migrants from outside Lancashire had risen to 49.7 per cent in the Borough (53.2 per cent in the Parish). If the population born outside the Borough (i.e., including those from the rest of

212 The four inner borough sub-districts lost a further 1,247 houses in the following decade.

213 Natural increase played some part though its precise contribution is difficult to determine, especially before 1841. The difference between christenings and burials (a rough approximation of the rate of natural increase) indicates natural growth rates of around 13 per 1000 in the period 1821 - 1823 (Smithers, 1825, p. 101). But this would have accounted for less than one-third of the total increase in that decade.

214 The non-Borough parts of Toxteth Park, West Derby and the townships of Litherland, Bootle, Allerton, and Garston, showed above-average proportions of in-migrants probably reflecting the increasing number of villas and small country houses inhabited by the Liverpool wealthy.

TABLE 3.3
Liverpool and District, 1841 and 1851
Persons Born Within and Outside Lancashire

	1841		1851		1841		1851	
	Persons Born In <u>Lancashire</u>	% <u>Migrants</u>	Persons Born In <u>Scotland</u>	% <u>Ireland</u>	Persons Born In <u>Lancashire</u>	% <u>Migrants</u>	Persons Born In <u>Elsewhere</u>	% <u>Migrants</u>
Liverpool	120002	46.2			120755	53.2	137481	
Toxteth Pk. (pt.)	23073	42.6						
Everton	5607	39.2						
Kirkdale	3043	28.7						
W. Derby (pt.)	6023	38.3						
Borough	157748	45.0	11088	3.9	49639	17.3	189150	49.7
Great Crosby	1452	25.4						
Litherland	1079	32.0						
Bootle	1430	27.1						
Kalton	1399	20.5						
W. Derby (pt.)	5359	24.6						
Wavertree	1922	28.0						
Childwall	151	18.8						
Toxteth Pk. (pt.)	644	39.2						
Garston	1331	29.5						
Allerton	317	29.0						
Much Woolton	1795	19.0						
Outer District	16879	26.0						
W. Derby R.D. *	474212	31.1	12276	2.0	55198	8.9	93075	39.3
W. Derby Hundred (including Liverpool)	147478							
Lancashire	1323424	20.6	21747	1.3	105916	6.3	60204	

* W. Derby Registration District is not directly comparable to the townships included in the Outer District. It includes some northern townships near Crosby, but does not include a number of townships in the southern part of the parish of Childwall which were far more closely associated with Liverpool's outer-urban expansion

Source: Census of 1841.

Lancashire) is considered, the migratory proportion of the total population rises to 57.6 per cent.

Children are more likely to be born in the locality in which they are enumerated than are adults and 68.6 per cent of the under 20 group were Liverpool born, so if the adults are considered separately, the real migratory nature of Liverpool's working population becomes apparent. Of the population over 20 years old, 77.4 per cent were newcomers to the town during some period of their life.²¹⁵

The census does not tell us when these life-time migrants arrived, but other evidence does. The length of residence of two working class population samples was obtained in the early 1840s. Dr. William Duncan, who made a habit of collecting detailed medical records at the South Dispensary, provided length of residence statistics to Lyon Playfair (Table 3.4).²¹⁶ Of the total patients treated by Duncan, 50.7 per cent were migrants to Liverpool (rather higher than the figure for the Parish in 1841). Of these, 10.9 per cent had arrived in the previous year, 50.7 per cent in the previous ten years (i.e., in the 1830s), 28.6 per cent had arrived in Liverpool in the 1820s and 16.4 per cent in the 1810s.

In Vauxhall Ward, one of the main reception areas

²¹⁵ Contrast this with the situation found in a rural parish, Cardington, Bedfordshire in 1851. Only 25.5 per cent of the household heads had been born outside the parish and a mere 6.5 per cent outside the County of Bedfordshire (Tranter, 1973, p. 100).

²¹⁶ No date is given, but the records probably relate to seven months in the year 1840 or 1841.

TABLE 3.4
 Liverpool, 1840-42
 Two Surveys of Working Class Population
 By Period of Residence

<u>Period of Residence</u>	Vauxhall Ward Finch 1842		S. Dispensary Duncan 1840-41(?)		S. Dispensary Duncan 1840-41(?)		<u>Period of Residence</u>
	#	%	#	%	#	%	
Less 6 months	94	2.6	69	7.6	459	50.7	Less 10 Years
6-12 months	74	2.0	30	3.3	259	28.6	10-20 Years
1-3 months	413	11.2	90	9.9	149	16.4	20-40 Years
3-5 months	463	12.6	106	11.7	39	4.3	Over 40 Years
5-10 months	917	24.9	164	18.1			
10+	1715	<u>46.6</u>	447	<u>49.3</u>			
		99.9		99.9			
TOTAL	3676	73.5	906	50.7	906	100.0	
	1376	27.5	880	49.3			
TOTAL	5002	100.0	1786	100.0			

Source: Finch, 1842, Table XII.
 Playfair, 1845, p.78.

for immigrants, a survey in 1842 indicated that migrants accounted for 73.5 per cent of the Ward's population.²¹⁷ Despite the higher numbers of migratory residents, their relative times of arrival were similar to those considered in Duncan's survey; 46.6 per cent had lived in Liverpool over ten years (49.3 per cent Duncan) and 24.9 per cent had arrived between five and ten years previously (18.1 per cent Duncan). Unfortunately, Finch did not give any more detailed analysis of the longer term residents.

The census figures and the two surveys highlight the rapidity with which the town had grown by in-migration. Nineteenth-century Liverpool had a massive concentration of recently arrived strangers and it was made unique among other English towns in that almost half (45.2 per cent) of its adults had come from another country (^{Table} ~~Figure~~ 3.5). Liverpool's expansion was fuelled by a long-distance 'Celtic' migration from the Irish Sea littoral. With Cumbria and the Isle of Man, the 'Celtic' countries were linked to Liverpool by numerous maritime ties, which made the town a natural 'local' growth centre for these areas.²¹⁸ Section 1.3 has traced the places of birth of Liverpool's population to 1830 and the following short section continues the discussion through the succeeding two decades.

Irish

217 Finch, 1842, p. 39.

218 Not all Welsh, Scottish or Cumbrian migrants arrived by boat but the extensive coastal trade made Liverpool as close as the nearest port for those able to pay the modest fare.

TABLE 3.5
 Liverpool, 1851
 'Celtic' and Foreign-Born Adult Population

<u>'Celtic' and Foreign</u>	<u>Borough</u>		<u>Parish</u>	
	#	%	#	%
Irish	61089	28.6	51319	34.2
Welsh	17212	8.0	10789	7.2
Scottish	10996	5.1	7269	4.8
'Islands in the British Seas'	3384	1.6	2386	1.6
Cumbria	7267	3.4	4450	3.0
Foreign and at Sea	4139	1.9	3447	2.3
TOTAL 'Non-English'	104087	48.6	79660	53.1
TOTAL Adults	213767		150185	

Source: Census, 1851.

The Irish formed the most numerous and important group of migrants to Liverpool. The migration of the Irish to Liverpool increased rapidly in the last years of the 1820s and continued at very high rates through the 1830s when annual average net migration of Irish-born to Liverpool numbered about 3,000 per annum.²¹⁹ Such migration was assisted by Liverpool's maritime ties with all Irish ports.²²⁰ Thus, the movement to Liverpool was already running at a rapid pace long before the notorious years of Irish migration in the 1840s. The story of the great Irish famine has been eloquently told by Miss Woodham-Smith who details a human tragedy probably greater in scale than any other of the 19th century. In Britain, Liverpool, and, to a lesser degree Glasgow, were first to receive the impact of the Irish paupers. Later, as the human tide crossed the ocean, it was the turn of Quebec, Montreal, and the Atlantic seaboard ports, and even far away, Sydney and Melbourne.

The outline of the famine migration as it affected Liverpool can be briefly stated. It commenced soon after the disastrous harvest of 1846 and the first noticeable increase in Irish migrants to Liverpool was observed in November.²²¹ The numbers were increasing so much that, on

219 This figure disguises massive flows of people to and from the country which averaged 30,000 per annum from 1830 to 1833 (Cornwall Lewis, 1836, p.10).

220 In 1847, the fare to Liverpool from Dublin was 2/6d, Belfast and Derry 3/-, Limerick and Cork 5/-, and Sligo 10/- (Rushton, 1847, p.58).

221 Magistrate Rushton appears to have been the first to take action having noted an "increase in Irish vagrants" in the town (Rushton, 1847, p. 56).

January 13th, Rushton ordered a count to be made of the daily arrivals of the Irish poor. By 19 April, 131,402 Irish had arrived in Liverpool, of whom 43,146 later emigrated from the port.²²² Twelve to fifteen thousand Irish continued to land every week until, by June, 1847, some 300,000 Irish had landed in Liverpool, of whom Duncan estimated 60,000 - 80,000 remained in the town at least for a few months.²²³ The rest who moved inland in search of shelter and employment were to form the ghettos of poor Irish noted in many towns at the time of the 1851 census.²²⁴ The migration continued for six years, though never at the pace of 1847. Between 1850 and 1853, 295,674 arrived in Liverpool, "apparently paupers exclusive of the numbers who came to Liverpool en route for America".²²⁵

The conditions of passage on a voyage across the Irish Sea that could last as long as 20 - 30 hours were appalling. The decks were jammed with passengers in one instance, 1,300 of them "in an erect posture" unable to move to perform "the common offices of nature". In winter, the police stated they had seen persons frozen to the deck having made the passage without any cover at all.²²⁶

222 *ibid.* p. 57.

223 Duncan, 1851, p. 5.

224 The number of Irish in England and Wales increased by 79 per cent between 1841 and 1851 (Lawton, 1959, p.43). Prescott, Lancashire - 15 miles from Liverpool on the main road inland - had 25 per cent of its population Irish born in 1851, but only 14 per cent in 1861 (Williams, 1973). Eight per cent of the population of central Burslem (Stuart, 1973, p. 19) and 6.4 per cent of York's population were Irish-born in 1851 (Armstrong, 1974, p. 91, table 4.7).

225 Burke, 1910, p. 117.

226 Denham's Report, 1849, p. 402.

The scale of human suffering implied by these cold statistics can be judged from contemporary accounts written by those responsible for relief of the Irish in Liverpool - officials usually well used to the normal scale of misery. The high price of food, severity of the winter and lack of work produced,

"a state of things in the lower sections of the town which I have seen nothing like before and hope to see nothing like again. The common tidal waves do not differ more in magnitude from those of the tempest than the visions of awful wretchedness which we have this winter had to encounter. The waves of ordinary suffering swelled at once into billows and day after day and week after week they rolled and broke upon us with the same tumult of wild expectancy till the heart of pity was sick and the hand of relief was weary."

wrote John Johns, Domestic Missionary, who was himself to lose his life among the poor in the typhus epidemic that followed the Irish migration.²²⁷

The effect of these events on Liverpool was to produce the worst series of epidemics experienced in a British town in the 19th century. It also led to further overcrowding of already packed houses and to the reoccupation of cellars which had been closed by the Health Committee. However, it is easy to overestimate the permanent importance of the famine migration on Liverpool. Its impact on health and housing served more to heighten and exaggerate the town's already severe environmental problems rather than create them (as casual observers have often assumed). Of perhaps equal significance, in a negative sense,

²²⁷ Liverpool Domestic Mission Report, 1846 - 1847, p. 6.

the famine migration drained much of the seemingly bottomless reservoir of Ireland's surplus population that for 60 years had spilled over into Liverpool. Within seven years, the enormous emigrant flood dropped to a trickle. In the years 1854 - 1855, only 5,153 Irish arrived in the port and while the town continued to receive Irish migrants, their numbers were small alongside the increasingly Liverpool-born Irish community.²²⁸

Other Migrant Groups

The 1851 census enumerated 7.2 per cent of the Parish of Liverpool and 8.0 per cent of the Borough's adult population as Welsh-born, the second largest 'foreign' born group after the Irish (Table 3.5). The north Welsh provided the largest portion of these and they constituted 4.9 per cent of the Parish and 5.8 per cent of the Borough's adult population.

The increasing presence of the Welsh (whose growth at first paralleled that of the Irish) in the early decades of the century has been noted in Section 1.3. No statistics of the Welsh-born were given in the census of 1841, but in 1851 the Borough contained 20,285 and the Parish, 12,538 Welsh-born inhabitants. If Smithers's figures can be relied upon, this represented a growth of one-third in 25 years, while the Irish-born population had multiplied more than five times in the same period.

²²⁸ The peak census year for Irish-born in England and Wales was 1861 when 600,000, or 3 per cent, of the country's total population was of Irish birth (Lawton, 1959, p.38).

In 1851, the Scots represented 4.8 per cent of the Parish and 5.1 per cent of the Borough's population. Their presence gave rise to little social comment and not so much is known about the timing and size of their migration to Liverpool. By 1841, the number of Scottish-born in Liverpool Borough amounted to 11,088 persons and this grew by 27 per cent in the following decade to 14,059.

The Isle of Man and Cumbria also sent large numbers of migrants to Liverpool, though their numbers were proportionately more important in their place of origin than they were in Liverpool.

Alongside these 'Celtic' national groups were the numerous migrants from England itself who formed almost exactly half the adult population of the town. 'Local', short-distance migration from neighbouring Lancashire and Cheshire made up the largest single component of English migration (10 per cent and 4.5 per cent of the adults respectively) but were proportionately fewer in numbers than in many other 19th century towns.²²⁹ For instance, 82.7 per cent of York's population were born in the County of Yorkshire in 1851²³⁰ and 88 per cent of Oldham's population was drawn from a 20-mile radius.²³¹ These two towns no doubt for different reasons were more liable to draw local migrants than other centres but both were also

229 Ravenstein, 1885, pointed out the predominantly short distance migration streams to most 19th century towns.

230 Armstrong, 1974, p. 89.

231 Foster, 1974, p. 77.

growing rapidly at this time.²³²

The origins of other English-born migrants were well scattered, only Yorkshire, Staffordshire/Shropshire and London provided more than 2.0 per cent of the adult population in 1851. Most other regions of the country were represented in Liverpool's population with southern and eastern England sending fewest migrants.

3.2. Conclusion

Liverpool at mid-century was a rapidly burgeoning town, drawing to it strong migration streams from around the Irish Sea. Over three-quarters of its adults were newcomers, almost evenly divided between English and non-English elements. The English migrant population was itself almost equally divided between those from Lancashire and Cheshire and those from further afield. Of Liverpool's non-English adult population, 72 per cent were Irish-born and they formed the largest and most distinctive single birthplace group in the town. Theirs was a migration most subject to the expulsive forces of rural poverty which culminated in the catastrophic mass migrations of the late 1840s. Scottish and Welsh newcomers to Liverpool were to complete the representation of British nations. As a boom town, Liverpool acted as a magnet to the ambitious as well as to the desperate and its bright lights looked especially promising when seen from distant dimmer horizons.

²³² In the decade 1841 - 1851, York Borough's population grew by 26 per cent and Oldham's by 21 per cent.

Chapter 4

AN ECONOMIC PROFILE OF LABOUR IN MID-NINETEENTH CENTURY

LIVERPOOL

"The demand for unskilled labour is always greater at seaport towns, but has been peculiarly so in Liverpool....Now the interests of unskilled workmen are not protected either by restrictions imposed by the duration of apprenticeship, or by the dexterity of knowledge and experience; nor are they guarded by those roles and trade combinations which check competition and enhance wages. The consequence of this is that the unemployed...seek in the great marts of unskilled labour the means of occupation and of maintenance, and hence also as a result, not merely accidental or theoretical, but absolutely constant and practically demonstrable, the supply of such labour is ever beyond the demand."²³³

"In Liverpool, almost alone amongst the provincial cities of the Kingdom, the intercourse between masters and men, between employees and employed, ceases on payment of wages."²³⁴

Liverpool was the main distribution centre for many of the goods produced in the industrial heartland of the 'workshop of the world'. Between 1835 and 1870, the tonnage registered at the Port of Liverpool increased from 1.8 to 5.7 million and by the end of the century a third of British and a seventh of the world shipping was of Liverpool origin.²³⁵

The occupational and social structure of the town at mid-century reflected the characteristics and problems of a port which employed tens of thousands of unskilled labourers

233 Medical Officer of Health Trench, to the Liverpool Mortality Sub Committee, 1866, p. 15.

234 Simey, 1951, p. 12. quoting an authority in 1871.

235 Muir, 1907, p. 298.

needed to move its cargoes through docks, warehouses, and along road and rail. Section 1.2 has already discussed the decline of formerly important craft industries and the rise of the unskilled work force in the pre-1830 period. From 1831 onwards, the era of 'bluebooks' and statistical surveys is entered and we are better able to detail the nature of Liverpool's labour force.²³⁶

Four classes (Industrial Service/Transport, Manufacture, Dealing, and Building) made up about eight out of every ten male jobs in Liverpool between 1831 and 1851 (Table 4.1). This grouping to some extent disguises the real dependence on the port function. Occupational groups directly connected with the port provided about one-third of all the male jobs. But we must add to this most of the manufacturing sub-groups which were either 'personal service' (such as clothing) or marine service (for instance, the manufacture of marine equipment).²³⁷ The 'Dealing' occupations were also concerned either with commercial transactions or smaller scale shop-keeping and street trading. Finally, the building sector was largely dependent on the demands generated by a growing town. These 'multipliers' of

236 Appendix 5 contains the detailed occupational tables 1831-1851, discusses the procedures and classifications adopted by the Census 1801 - 1861, and provides a description of the Booth classification scheme used here to adapt the census returns to a comparable format.

237 An 1861 census listing of locally important industries indicates that among the manufacturing occupations of national significance in Liverpool and West Derby Registration Districts many were port-oriented. In terms of absolute numbers, the two districts had more shipwrights and shipbuilders, rope and cord makers, soap boilers, boiler makers than any other Registration District in the country.

TABLE 4.1
 Liverpool, 1841 - 1851
 Most Prevalent Occupational Classes and Sub-Classes
 Males 20 Years and Over

BOROUGH 1841		BOROUGH 1851		PARISH 1851	
Classes	% Total Occupied	Classes	% Total Occupied	Classes	% Total Occupied
Manufacture	31.3	Manufacture	28.5	Manufacture	27.9
Industrial Service	24.3	Transport	23.8	Transport	26.9
Transport	11.2	Industrial Service	14.0	Industrial Service	14.1
Dealing	11.2	Dealing	12.1	Dealing	12.2
Building	10.5	Building	9.4	Building	8.3
TOTAL	88.5	TOTAL	87.8	TOTAL	89.4
<u>Sub-Classes</u>		<u>Sub-Classes</u>		<u>Sub-Classes</u>	
General Labour	20.2	Ocean Navigation	16.0	Ocean Navigation	18.5
Building-operative	10.3	General Labour	11.4	General Labour	12.0
Manufacture - Dress	8.7	Building-operative	9.1	Manufacture - Dress	8.1
Ocean Navigation	6.4	Manufacture - Dress	7.2	Building-operative	7.9
Banking, Insurance, etc.	4.1	Warehouse and Docks	4.4	Warehouse and Docks	4.9
Manufacture - Iron & Steel	3.3	Dealing in Food	3.1	Dealing in Food	3.2
Warehouses and Docks	3.0	Manufacture - Iron & Steel	2.8	Road Transport	2.5
Dealing in Food	2.8	Shipbuilding	2.6	Manufacture - Iron & Steel	2.4
Unspecified dealing	2.6	Banking, Insurance, etc.	2.6	Manufacture - Wood	2.1
TOTAL	61.4	TOTAL	59.2	TOTAL	61.6

income generated by the port and trans-shipment functions created 'non-basic' employment opportunities. However, the town's wealth flowed from its trade. This dependence was underscored during times of commercial distress when the effects rippled through the whole urban economy.

Employment was concentrated in a very limited number of occupations. In 1851, one in every four adult men in the Borough and one in every three in the Parish, were employed as seamen or general and dock labourers. The 25 commonest occupations accounted for 64.7 per cent of the Borough's adult work force and among these were porters, clerks, carters, warehousemen, and shipwrights who accounted for a further 10 per cent of the labour force.

4.1. Child and Female Occupations

Liverpool was also virtually lacking in manufacturing industry that in other parts of Lancashire employed female or child labour: for instance, there was only one cotton mill in the town. In 1851, 36 per cent of adult females were in employment (compared with a national average of 45 per cent): 23.8 per cent of the males under 20 years were employed while only 14.9 per cent of females of the same age were. The type of work available for women was also extremely restricted; 71.1 per cent of adult females were engaged in either domestic service or dressmaking (Table 4.2).

Lacking manufacturing employment, women and children had to turn to the most menial occupations, often

TABLE 4.2
 Liverpool, 1841 - 1851
 Most Prevalent Occupational Classes and Sub-Classes
 Females 20 Years and Over

BOROUGH 1841		BOROUGH 1851		PARISH 1851	
Classes	% Total Occupied	Classes	% Total Occupied	Classes	% Total Occupied
Domestic Service	63.5	Domestic Service	47.9	Domestic Service	45.4
Manufacture	20.0	Manufacture	27.9	Manufacture	29.7
Dealing	<u>10.6</u>	Dealing	<u>18.0</u>	Dealing	<u>20.1</u>
TOTAL	94.1	TOTAL	93.8	TOTAL	95.2
<u>Sub-Classes</u>		<u>Sub-Classes</u>		<u>Sub-Classes</u>	
Indoor Domestic Service	57.1	Indoor Domestic Service	36.4	Indoor Domestic Service	34.7
Manufacture - Dress	15.3	Manufacture - Dress	23.1	Manufacture - Dress	23.7
Extra Domestic Service	6.3	Extra Domestic Service	11.6	Extra Domestic Service	10.7
Public Service - Education	2.5	Dealing in Food	4.6	General Dealing	5.1
Lodging and Coffee Houses	2.5	General Dealing	4.4	Dealing in Food	4.8
General Dealing	2.4	Lodging and Coffee Houses	3.4	Lodging and Coffee Houses	4.0
Dealing in Food	2.2	Wines, Spirits and Hotels	3.1	Wines, Spirits and Hotels	3.5
Wines, Spirits and Hotels	<u>1.8</u>	Public Service - Education	<u>2.4</u>	Public Service - Education	<u>1.2</u>
TOTAL	90.1	TOTAL	89.9	TOTAL	88.3

becoming street sellers who lived on the few pennies difference between the cost of buying and selling fruit, fish, and small wares, oakum picking, 'gritmaking', chip bundling.²³⁸ Such home-based 'industries' had the advantage that even the smallest children could be employed in labour,²³⁹ but the returns (as readers of Her Benny²⁴⁰ will recall), were minimal. Working as a family, chip-makers might make 6 shillings a week from 36 dozen bundles.²⁴¹ Boys were also restricted to a small number of jobs, the greatest opportunities were in work as clerks and messengers.²⁴²

4.2 Wages and Living Standards

Liverpool's narrowly based occupational structure had fundamental effects on the town's economic and social life. The commonest wage rates were those of the semi- and unskilled labour force; these rates determined the prevailing standards of

238 Morning Chronicle, June 17, 1850; Hawthorne, 1856 pp. 36, 40. Most 19th century cities had their street populations of the type described by Mayhew. Observers seem to agree that Liverpool streets were overly-thronged with petty dealers of all types.

239 These occupations exacted a toll on domestic conditions. "Many of [the Irish] businesses, such as picking oakum, splitting chips and breaking grit are utterly unreconcilable with the cleanliness of the apartment in which they are carried on." (Domestic Mission, 1843/4, p. 12). Oakum picking went into decline once iron-ships began to replace those of wood (Mortality Sub-Committee, 1864, p. 226).

240 Hocking, 1879.

241 Morning Chronicle, June 17, 1850.

242 For instance, 23.7 per cent of the clerks and 46.2 per cent of the messengers were under 20 years. Young men were also common as dock and general labourers, apprentice carpenters, painters, watchmakers, shipwrights, and 'mechanics'. The latter vaguely defined occupation was heavily stocked with young men. (Census enumerators appear to have been more rigorous in their classification of adults.)

diet, accommodation, and general living conditions (all of which in turn were directly related to the health of the community).

There is no comprehensive survey of wage rates before the 1860s.²⁴³ Workmen earning over 30 shillings per week in 1865 were drawn from the ranks of the apprenticed craft industries largely in the engineering and building trades. Semi-skilled workers earned 25 to 30 shillings per week, as did some skilled occupations open to penetration by workers with lesser skills (e.g., painters, carpenters).²⁴⁴ Also included in this wage category were the physically demanding unskilled jobs of coal-heaving and sugar panning. The 20 to 25 shilling group was the norm for the regularly employed, unskilled labourers in a variety of industries, together with a few barely (or questionably) semi-skilled occupations such as iron striking and carting (one or two horses). In the 15 to 20 and 10 to 15 shilling per week categories were labourers in less demand, the worst paid of whom were porters and stone breakers.²⁴⁵ Barely overlapping the wage levels of the worst-paid men were the earnings of apprentices and female occupations, most of whom earned between 5 and 10 shillings per week. At the very bottom of the wage-earning pyramid were the 'little girls' - the match box fillers and machine minders - who, understandably, so

²⁴³ Liverpool Mortality Sub-Committee, 1866, pp. 333-52. McCabe, 1974, p. 148, calculates wages in 1864 as 12 per cent below their 1850 level. Food prices he calculates as 14 per cent higher (p. 147) indicating that purchasing power had declined over the period.

²⁴⁴ See also Jones, 1971, pp. 59-60.

²⁴⁵ Porters may have been particularly badly off at the time of the survey because of the cotton famine.

captured Victorian philanthropic imagination.

While these figures give a general idea of occupational ranking within the working classes, they are less useful as guides to actual average earnings. Casual, unskilled workers were paid by the day or even half-day. The rates given in the 1865 survey were based on a full week's employment. However, as Edward Heath, Secretary to the Central Relief Society stated:

"dock porters whose wages per week are from 21 to 24 shillings do not on average earn perhaps more than 14 or 15 shillings throughout the year. Taking into account the increased rent and the increased cost of living in Liverpool, the dock porter is not much better off than the agricultural labourer with 10 shillings per week."²⁴⁶

More important for the present analysis is an estimation of the living standard that was attainable with these rates. Foster has recently calculated mid-century subsistence levels which can be used to establish a 'poverty line'.²⁴⁷ Assuming a rental of 3 shillings per week²⁴⁸ and a weekly coal bill of 1 shilling, families would require between 16/8d to 22/8d per week, depending on the size of the family.²⁴⁹ If these were subsistence wage levels, it can be seen that as late as 1866, only the 'constantly employed' skilled workers were

246 Liverpool Mortality Sub-Committee, 1866, p. 193.

247 Foster, 1974, p. 256. Based on Manchester prices in 1849, he calculates a minimum weekly food cost per adult male of 4s 6d with an additional 8d per week for clothing. Weightings for others are: boy over 14 = 85; women over 16 = 80; girl over 14 = 70; child over 5 = 50; child under 5 = 33; all over 60 = 60.

248 Liverpool court houses were 2s 6d to 3s 3d and street houses 3s 6d to 4s 6d.

249 A family with two children under 5 years would require 16/8d; one with one child under and one over 5 years, 17/7d; one with one over 8 and two under 5 years, 19/3 1/4d; one with three, a girl over 14 and two children over 5 years, 22/8d.

earning wages that would keep a family above the poverty line. The semi- and unskilled occupations whose members made up about half of the labour force were paid wages which, if constant, would have provided only the barest means of subsistence for a family. Several occupations were actually paying regular wages that can only be considered below the poverty line.²⁵⁰

Wage rates for the unskilled in Liverpool were probably no lower than for similar groups elsewhere. Armstrong concludes that in York all married labourers with children and some craftsmen's families might have been in poverty all the time.²⁵¹ The difference in Liverpool was that so much greater a proportion of its labour force lay in those groups most likely to be at or below subsistence level wages.

4.3 Unemployment and Underemployment

A major factor in an assessment of average earnings was the question of 'constancy' of employment. The unskilled were particularly subject to short-time work and layoffs in times of trade depression.

The effects of a severe slump is well illustrated in Finch's detailed analysis of employment conditions in Liverpool at the time of the great depression of 1842.²⁵² The extensive survey of 4,387 families (17,548 individuals) painted

²⁵⁰ McCabe's figures indicate that living costs were probably lower in the 1860s (McCabe, 1974, p. 148).

²⁵¹ Armstrong, 1974, p. 54.

²⁵² Finch, 1842.

a stark picture of "great distress principally arising from want of employment".²⁵³

Average earnings of 70.9 per cent of all families in the Ward fell below the poverty line of 15 shillings per week and a third of all families had no visible means of support.²⁵⁴ Expenditure on food among a sample of 50 labouring families dropped to 6s 9³/₄d per week (about 3s 3d per individual)²⁵⁵ and though the amount spent on food was only slightly less than it had been in 1835, (7 shillings), the diet had deteriorated. Oatmeal and potatoes were commonly substituted for meat and bread.²⁵⁶ Expenditures on medicine, coal (sold in pennyworth amounts), and children's shoes virtually ceased and everything of any value was pawned until the stores were choked with unredeemed articles.²⁵⁷ One investigator wondered how the unemployed managed to exist at all.²⁵⁸ The extent and intensity of this distress was closely related to the fortunes of particular trades (Table 4.3). The most fully employed were the

253 *ibid.* p. 23.

254 It is not clear from Finch's paper, but the estimate of average earnings per week probably related to the period immediately prior to the survey in February (?), 1842.

255 *ibid.* Table 8, p. 35.

256 Despite the same expenditure on food, therefore, standards of nutrition had fallen severely. "Offal and the coarse parts of the carcass" (p. 49) were popular; meals were taken once a day consisting sometimes of "only potatoes and salt; and some even with nothing more than a Swedish turnip...for a family of 6." (p. 50)

257 *ibid.* p. 47 *passim*.

258 *ibid.* p. 53, "I visited many families of this description in houses, rooms, and cellars; the children almost in a state of nudity, and it was impossible to look upon them without seeing hunger and starvation depicted in their countenances. Their habitations, completely destitute of bedding, or any other kind of furniture and sleeping on shavings or straw, covered by an old wrapper or a couple of sacks...".

TABLE 4.3
 Vauxhall Ward, Finch Inquiry, 1842
 Extent of Unemployment
 Among the Labouring Classes

<u>Trade Group</u>	P E R C E N T A G E		
	<u>Unemployed</u>	<u>Employed Less Than 4 Days/Week</u>	<u>Fully Employed</u>
Machinery and Merchandise	31.7	6.8	61.4
Shipping	27.4	11.8	60.7
Articles of Domestic Use	30.3	9.2	60.5
General Labour	47.4	13.2	39.4
Building Operations	55.4	8.6	36.0
Articles of Clothing	49.1	22.9	28.0
Female Occupations	75.9	9.2	14.8
TOTAL	49.4	12.3	38.2

Source: Finch Inquiry, 1842, Table 5.

machinery/merchandise, shipping and 'articles of domestic use' groups, though even in these occupations over one-third of the workforce was unemployed or on less than full time. Unemployment was worst among women, and those employed in the general labour, building, and clothing groups. Three-quarters of all working women were unemployed and in the case of general labourers (who made up over half of the labour force) only one-third were fully employed.

1842 was a particularly hard year but it was not unique, coming as it did at the end of a depression that had lasted since 1837.²⁵⁹ To a lesser extent, every year had a seasonal ebb and flow in employment caused by the seasonal movement of various commodities. These slack periods were periodically accentuated by adverse weather,²⁶⁰ such as prevailed in the winters of 1854 - 1855, 1858, and 1862 when spring easterlies delayed the arrival of the new shipping.²⁶¹

4.4 Labour Supply

259 Later severe trade slumps occurred in 1847 - 1848, 1852, 1858, 1861 - 1863, 1867 - 1869.

260 Jones, 1971, pp. 44-6, has noted the importance of the seasonal cycle of employment in the lives of London's poor in the 19th century. In Liverpool, the busy cotton season extended March to May and the Quebec timber ships arrived August to December. A porter commented in 1850 that "the timber porters are idle about 6 months out of the twelve; and they then try the cotton portage or any other work that is to be got." (Morning Chronicle, June 17, 1850).

261 Hawthorne's diary for February 21, 1855 comments on work people coming to his house to beg. They "submit to starvation meekly and patiently as if it were an everyday matter with them, or, at least, nothing but what lay fairly within their horoscope". And of course it was. February 1862 saw 46,000 apply for outrelief (Buchanan, 1865, p. 482).

The spasmodic demand for labour was a major cause of poverty in the port. But it was an over-abundant supply of new labour competing for work, that maintained the casual labour system and continually operated against any amelioration.

"I do not state", said the Medical Officer of Health, "that labour is underpaid, for that might bear an interpretation unjust to employers; but that I think that there are too many men for the work to be done and that thereby wages are reduced to the very lowest scale compatible with the maintenance of life."²⁶²

An overabundant labour pool maintained a casual labour system paid at subsistence wages. A major factor was Ireland. It was "the great depot for labourers of every sort...a resource to draw upon in times of emergency"²⁶³ and witness after witness in the Cornwall Lewis inquiry attested to the value Liverpool business gained through access to this seemingly bottomless well of cheap labour.

"The great demand for labour in Liverpool, owing to a rapid and vast increase of wealth, would not have been satisfied by the English and Welsh, except at a higher rate - such a rate as would probably have materially interfered with profits, and therefore tended to diminish production. The English...are less locomotive than the Irish, less disposed to look out for work at a distance, and their habits being higher, they will not condescend, except for a higher remuneration, to the lowest and most slavish departments of drudgery."²⁶⁴

Another witness (at the same inquiry) stated:

"many of the Irish are employed as the auxiliaries or drudges of the steam-engine; and were it not for their influx, which creates competition, in times of emergency, wages of labourers would rise to a height which tradesmen, manufacturers, merchants and even agriculturalists could

262 Liverpool Mortality Sub-Committee, 1866, p. 16.

263 Cornwall Lewis, 1836, p. 39.

264 Cornwall Lewis, 1836, p. 37.

not afford to pay."²⁶⁵

Simply stated, the Irish would work for half the price of the English²⁶⁶ and the difference was often attributed to the lower quality of food consumed.²⁶⁷ This 'healthy' competition that the Irish migrants maintained in the labour market severely depressed the living standards of the unskilled workforce, native and immigrant alike, but it was the lowest end that felt the brunt of the migrations. Occupations which required more 'training than the use of needle'²⁶⁸ were relatively sheltered from its effect.

The Welsh, too, were cheap labour, though their numbers were smaller and their skills somewhat higher. The building industry was especially affected by this cheaply-got but hard-saving labour force. Soon there were many Welsh small masters, sober and thrifty, self-made men who were "very hard upon their work people" and who skimped on materials.²⁶⁹

The thousands of migrants who arrived in the town annually often came expecting "there was no end of work in Liverpool, but soon [found] out their mistake..."²⁷⁰ and they stayed to pack the garret sweatshops and crowd the street

265 ibid. p. 36.

266 ibid. p. 26.

267 "An Irishman can live a great deal harder, that is, a great deal lower, and on commoner food, than the English", ibid.

268 Morning Chronicle, Sept. 16, 1850.

269 An architect accused the Welsh jerry builders of employing as few grown men as possible and of running up "the lightest manner" of houses. (Morning Chronicle, Sept. 16, 1850)

270 Morning Chronicle, June 10, 1850.

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corners in search of a half-day's portering.²⁷¹ To the resident worker, they depressed the wages of the pool of unskilled labour in which he competed. Their presence and continued arrival maintained the system of short time, casual labour²⁷² and the result was a working population "but little removed above pauperism in daily danger of sinking into it...- living precariously at most times - dependent upon the wind for the chance of procuring a subsistence."²⁷³ .8

4.5 The Pauper and Semi-Pauper Class

'Distress' (below poverty line living) was endemic to large sectors of the port's population. The entire economic structure produced and, in turn, depended upon the maintenance of a casual labour market that could rarely provide an adequate living wage to its members. "In Liverpool, the exception is to find [unskilled labourers] in anything like constant employment."²⁷⁴

Periodic unemployment had the effect of institutionalising poverty. Ways of life and behaviour were

271 Hocking used a North Welsh labourer's migration to Liverpool in search of work as the basis for his melodramatic novel, Cricket. (Hocking, 1860s(?))

272 A dock porter commented "I have very good employment compared with some men; I have at least 3 days a week. I should have more if it were not for the system of importing 'Grecians' to keep down the cost of labour." ibid.

273 Morning Chronicle, May 20, 1850.

274 Liverpool Mortality Sub-Committee, 1866, p.15. A sample page of the Central Relief Committee report shows 5 out of the 15 people who applied for relief giving 'want of work' as an excuse. One was a widow, one reported being out of work for 8 weeks, another for 3 months. Average relief given amounted to 2s 6d worth of food (ibid. Appendix 16, n.p.).

shaped by it,²⁷⁵ economic and social mechanisms adapted to it. Liverpool's 129 pawnbrokers in 1855, for instance, accepted an average of 50,000 pledges each; the Borough's total for that year amounted to 557,493. Sixty per cent of the objects pawned were worth less than 5s and 61.6 per cent of the articles were redeemed within a month. The widespread and regular pawning of clothes, bedding, and furniture functioned as a primitive banking system which acted to smooth somewhat the irregularity of wage receipts.²⁷⁶

Other causes of poverty, such as old age, desertion, and widowhood, were only indirectly related to Liverpool's economic structure. The lack of employment other than that demanding hard physical labour exacerbated the poverty of such 'incidental' poor. Thrown into the hands of the charitable and parochial agencies, their plight and numbers often outweighed that of even the most casual labourers. The town's widespread ill-health often reduced earnings for long periods at a time and gave rise to an annual crop of widows and orphans with little hope of winning enough wages to keep themselves from hunger.²⁷⁷

The size of this total undernourished pauper and

275 There is a huge literature on drunkenness and crime which can be related directly to economic and social conditions in Liverpool.

276 Liverpool Trade Association for the Promotion of Pawnbroking Reform, 1860.

277 The Central Relief Committee's page of entries shows eight of fifteen applicants sick - two had been ill for six months, one for five months, one for ten weeks (Liverpool Mortality Sub-Committee, 1866, Appendix 16, n.p.).

semi-pauper class was (and is) difficult to gauge by the usual yardsticks of Victorian poverty. Due to a combination of Vestry philanthropy and a recognition of the impossibility of applying 'the workhouse test' to numbers many times larger than the accommodation in even the town's commodious poor law institution, outdoor relief was unusually common in Liverpool. Therefore, the figures for those admitted to the workhouse represent only a small proportion of the town's poor and the numbers on outdoor relief is a far better indicator.

Buchanan mentions some 13,000 relieved weekly in the Borough in the early 1860s, a number 'perhaps about one third' of those relieved at some time of the year.²⁷⁸ In a normal year, therefore, it is probable that some 39,000 individuals were given out relief, to which should be added a further 10,000 who might have spent some time in the workhouse: Buchanan points out this included only those who had applied for and received relief. There were also large numbers having family incomes of less than 10s per week²⁷⁹ who would "endure privations very much greater than what are expressed by half a crown per head per week [earnings] rather than receive assistance from any charitable source".²⁸⁰ These earnings of 10s per week (above which the Vestry declined to offer relief)

278 Buchanan, 1865, p. 481. Medical Officer of Health Trench in 1865 gives a figure of 16,877 which included both indoor and outdoor relief recipients (Mortality Sub-Committee, 1866, p. 29).

279 This was the half a crown per head earnings level apparently considered the level above which "no family would come on the rates for relief..." (Buchanan, 1865, p. 481).

280 Buchanan, 1865, p. 481.

should be compared with the 18 shillings per week wage calculated earlier to be the poverty line for a small family.

To the 39,000 given out relief and the 10,000 housed in the workhouse should perhaps be added this additional 50,000 who were eligible for relief but never approached the authorities for assistance.²⁸¹ If these estimates are correct, the Borough of Liverpool may well have had 80,000 to 100,000 persons eligible for relief at some^{TIME} during a typical year in the 1860s - that is, 20 per cent of the population of the Borough and 30 per cent of the population of the Parish of Liverpool could be considered to be in the pauper or semi-pauper class. Were the poverty line standard applied, as opposed to the Vestry's standard, the proportion of the population living below subsistence could easily have been twice this figure.

²⁸¹ The pawnbrokers' figures quoted earlier seem to indicate that this figure would not be unreasonable.

Chapter 5

SOCIAL STRUCTURE OF THE POPULATION

"Liverpool is Liverpool; it has numbers of Irish there, simply because it is Liverpool; that is to say Liverpool is a place exceedingly attractive to all classes, rich and poor; Liverpool will always have Irish poor, Welsh poor and English poor and Irish beggars, Welsh beggars and English beggars and it will have thieves of all three nations and Liverpool will be an agreeable and profitable and promising place of action for them because it is so to all classes of persons whatsoever, rich and poor, industrious or idle, good or bad."²⁸²

Following the examination of Liverpool's industrial and occupational structure in the previous chapter, this chapter will analyse the social and economic characteristics of Liverpool's population, utilising the records of the Census of 1851²⁸³ and contemporary social documents. In particular, it will investigate the main interrelationships between selected key social variables - birthplace, class and occupation - in order to analyse Liverpool's underlying social structure at mid-century. In this chapter, the analysis will be at the level of the entire Parish, the geographical variation at these characteristics of the ward level will be examined in Chapter 8.

Several recent United States and British studies on 19th century cities have found important distinctions in occupational and social characteristics between migrant groups

282 Coode, 1855, p. 199.

283 See Appendix 5 for details of sample.

having different geographical origins.²⁸⁴ Both British and New World 19th century cities were the demographic creation of the migrant - immigrant and in-migrant alike. The cultural baggage and occupational skills carried by the migrants apparently suited them for varying tasks in the expanding labour markets of 19th century cities on both sides of the Atlantic. It can be supposed that the differential occupational structure of birth place groups led to concentrations in particular social classes and thence to varying standards of living, housing, and health. The present chapter will investigate the first part of this linkage, the connections between these social variables with those of housing and health will be examined later.

5.1. Occupational Characteristics of Birthplace Groups .2

The first county of birth statistics are provided .2
 in the Census of 1851. However, Finch's survey of Vauxhall Ward
 in 1842 provides us with a glimpse of the major occupational .6
 distribution by birth place (Table 5.1). Tables 5.2 and 5.3
 indicate the distribution of occupational groupings by

284 Among others are Hershberg, et al. 1974; Armstrong, 1974, p. 91; Anderson, 1972, p. 157.

TABLE 5.1
VAUXHALL WARD
FINCH INQUIRY, 1842
Place of Birth of Household Heads of the Labouring Classes,
Whether Labourer, Artisan or Female¹

Birthplace	NUMBER AND PERCENTAGE BY ROW			N=	INDEX OF SPECIALIZATION (I.S.) AND PERCENTAGE BY COLUMN						
	Labourers %	Trades %	Females %		Labourers I.S.	Trades I.S.	Females I.S.	Total %			
1. Liverpool	36.2	42.2	21.6	1326	0.69	18.3	1.33	35.4	1.38	36.9	26.6
2. Ireland	64.3	21.7	14.0	2443	1.22	55.0	0.68	30.8	0.90	40.5	45.1
3. Welsh (North)	55.2	31.7	13.1	366	1.06	7.7	1.0	7.3	0.85	6.2	7.3
4. Scotland	34.4	52.5	13.1	160	0.65	2.1	1.65	5.3	0.84	2.7	3.2
5. Isle of Man and Foreigners	34.9	52.8	12.3	106	0.66	1.4	1.66	3.5	0.80	1.7	2.1
6. Lancashire (except Liverpool)	59.4	33.2	7.4	367	1.12	8.3	1.04	7.7	0.47	3.5	7.4
7. Cheshire	50.4	35.1	14.4	111	0.95	2.1	1.13	2.5	0.95	2.1	2.2
8. Shropshire and Staffordshire	58.0	28.0	14.0	50	1.10	1.1	0.90	0.9	0.90	0.9	1.0
9. Cumberland and Westmoreland	34.2	35.5	30.3	76	0.66	1.0	1.13	1.7	2.00	3.0	1.5
10. Remainder	44.2	43.6	12.2	172	0.85	2.9	1.38	4.8	0.79	2.7	3.5
TOTAL	52.7	31.7	15.6	4977	99.9	99.9	99.9	100.0	99.9	99.9	99.9

Source: Finch Inquiry, 1842, Table XI.

TABLE 5.2

Parish of Liverpool, 1851
Occupational Group of Sampled Household Heads: Index

<u>N=</u>	<u>Booth Occupation Group</u>	<u>Liverpool</u>	<u>Ireland</u>	<u>Lancashire and Cheshire</u>	<u>Rest of England</u>	<u>Scotland</u>	<u>Wales</u>	<u>Rest</u>	<u>Total %</u>
43	1 Agriculture	0.90	1.7	-	0.80	-	-	-	1.0
8	2 Mining	-	-	-	-	-	-	-	0.1
367	3 Building	1.20	0.69	0.99	0.77	0.74	1.68	1.46	8.2
1218	4 Manufacture	1.28	0.89	0.88	0.86	1.21	0.81	0.80	27.2
859	5 Transport	0.86	1.21	0.92	0.85	0.87	1.19	0.74	19.2
883	6 Dealing	0.76	0.90	1.23	1.42	0.79	0.97	0.76	19.7
430	7 Industrial Service	0.81	1.61	1.06	0.37	0.74	0.80	0	9.6
183	8 Public and Professional	0.68	0.51	1.36	2.07	0.76	0.85	1.15	4.1
182	9 Domestic Service	1.24	0.88	0.93	1.05	-	1.39	0.66	4.1
70	10 Independent	1.37	0.25	1.56	1.31	2.50	-	0.87	1.6
236	11 [Dependent]	0.94	1.04	0.58	1.26	0.94	1.00	0.13	5.2
4479	<u>N=</u>	951	1459	621	780	227	288	153	4479
	<u>Total</u>	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	<u>% Total Pop.</u>	21.2	32.6	13.9	17.4	5.1	6.4	3.4	100.0

Index: A location-quotient ratio (see text).

Source: 1851 Census Sample.

TABLE 5.3
 Parish of Liverpool, 1851
 Birthplaces of Household Heads With
 Selected Occupations: Index

<u>N</u>	<u>Occupation of Head</u>	<u>Liverpool</u>	<u>Ireland</u>	<u>Lancashire and Cheshire</u>	<u>Rest of England</u>	<u>Scotland</u>	<u>Wales</u>	<u>Rest</u>
126	Dressmakers, etc.	1.20	0.97	0.80	1.27	1.39	0.12	-
248	Building Trades	1.24	1.00	0.78	0.65	1.74	1.08	-
87	Clerks, etc.	0.92	0.74	0.91	1.78	1.57	0.53	0.32
940	Labourers, etc.	0.78	1.82	0.70	0.33	0.47	0.80	0.32
204	Manglers, etc.	1.43	1.14	0.95	0.53	0.39	1.00	0.44
140	Carters	1.85	0.31	2.78	0.33	0.14	0.56	0.41
73	Coopers	1.61	1.18	0.49	0.39	1.88	0.42	0.41
133	Lodging House Keepers	0.82	1.61	0.43	0.77	0.16	0.94	0.68
252	Shoemakers	0.50	1.95	0.43	0.57	0.23	0.94	0.35
181	Tailors	0.86	1.76	0.44	0.48	0.86	0.34	0.97
<u>N = 2384</u>		494	1151	264	227	85	116	47
	<u>Total</u>	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	<u>Parish Total %</u>	21.2	32.6	13.9	17.4	5.1	6.4	3.4

- Not statistically significant.

Source: 1851 Census Sample.

birthplace in 1851.²⁸⁵

Chi-square tests of difference were conducted on this and other tables and indicated that, providing the low value occupational groupings (agriculture, mining) were consolidated to form larger groups, all but three possible comparisons (Scottish with Lancashire and Cheshire; Scottish with Welsh; Welsh with Lancashire and Cheshire) were statistically sound at the 99.9 per cent level. The other three comparisons were statistically sound at the 95.0 per cent level.²⁸⁶

There is clearly considerable variation between birthplace groups and tendencies for particular groups to

285 The 'index' utilised is a form of 'locational quotient' which expresses the degree of relative concentration of a particular birthplace group within a particular occupational group. If the index equals 1.00, the birthplace group had neither more nor less than its share of that occupational group than its population would indicate. If the index is more/less than 1.00, the birthplace group had more/less occupations of that group than the population would lead one to expect. The original percentage value for any element in the table can be obtained by multiplication of the figure in the total per cent column by the 'location quotient'. For example, the proportion of Irish in the building group can be obtained by $8.2 \times 0.69 = 5.6\%$.

The ten occupations selected were the commonest in Liverpool and together made up 54 per cent of the occupations of sampled household heads. More than one occupation was included in the group where the occupations were similar. The groups were: dressmakers and seamstresses; brick layers, painters and joiners; manglers, washerwomen and charwomen; commercial and law clerks, post office workers; general and agricultural labourers and porters.

286 It was apparent that the sample size (4,479 households) was more than adequate to obtain statistically meaningful comparisons for the major breakdowns utilised in this chapter's tables.

concentrate in particular occupations.²⁸⁷

Liverpool-born

Household heads born in Liverpool were over-represented in the building and manufacturing groups and as artisans (Index of Specialization in Vauxhall Ward of 1.33).²⁸⁸ .5

In particular, there appeared to be some tendency towards a concentration in skilled trades; carters, coopers, and building tradesmen, for instance, having indices above unity. The excess of Liverpool-born female household heads (28.7 per cent compared with a sample average of 17.4 per cent) probably produced the Liverpool-born over-representation in the dressmaking and mangling occupations. The Liverpool-born were noticeably under-represented as lodging house keepers, shoemakers, tailors, clerks, and labourers, occupations which tended to draw the unskilled migrant or (in the case of clerks) the long distance literate migrant.

Irish-born

287 It should be recalled here that the analysis was performed for household heads only and any tendency for other members of the family to be concentrated in particular occupations may not emerge (Irish in dealing and domestic service, for instance). Categorisation of families by the occupation of the household head is a normal if somewhat inexact practice. For our purposes, the economic character of a family is probably most easily defined with reference to the occupation of the household head (see Anderson, 1971, p. 50).

288 The Index of Specialization (I.S.) is a location quotient-type measure that indicates relative concentration in that occupational category. An index of unity shows that the birthplace group was as represented in that occupational group in the same proportion as it was in the entire population.

We know a great deal about the Irish in Liverpool, for unlike inhabitants of English origin, the Irish posed a recognisable 'problem' to Victorian society. The lack of skills possessed by Irish immigrants combined with their apparent eagerness to work for any wage at the most menial of jobs, created in many 19th century towns an Irish 'lumpen-proletariat' of distinctive character. In Liverpool, their concentration in the unskilled occupations was the greatest of any birthplace group.²⁸⁹ In this, Liverpool's Irish were little different from their countrymen in other cities affected by the Irish migrations,²⁹⁰ save perhaps in one respect. Liverpool was the first to receive and the last to lose these migrants. Those who stayed were the ones who had the least to offer elsewhere. According to one Catholic priest who spent his lifetime among the Liverpool Irish, the town retained "the dregs":

"people who had no means to emigrate to America and therefore they must have been from the lowest strata and the kind of people who are only fitted for the ruder form of labour."²⁹¹

All accounts testify to the unusually low levels of skill and high incidence of casual labour among the Irish workforce. They were heavily over-represented as labourers (I.S. in Vauxhall of 1.22) and in the 'sweated' occupations such as tailoring and shoemaking.²⁹² They were heavily over-represented,

289 The large number of Irish agricultural labourers returned in the 1851 Census probably represented Irish workers newly arrived in Liverpool who were yet to find employment.

290 See, for example, Engels, 1844; Katz, 1973; Keep, 1950; Lees, 1969; Stuart, 1973; Treble, 1969; Vinyard, 1973; Werly, 1973.

291 Nugent, 1870, p. 155.

292 See Morning Chronicle, July 1, 1850.

too, as lodging house keepers, bearing out the frequent reference to 'low Irish' lodging houses managed by, and catering for, Irish inhabitants. Semi-skilled occupations such as carting²⁹³ and those requiring literacy, such as that of a clerk, were heavily under-represented by Irish.

Other information about the Irish in the 1830s underlines this lopsided occupational structure. The Irish-born population of Liverpool in the mid-1830s was approximately 30,000; of the half in the labour force, Holme estimates 7,500 "of the lowest sort" were employed in various occupations (Table 5.4) and an additional

"1000 Irishmen who have no ostensible means of earning a living, who live by mendicity, who form part of the numerous committals for vagrancy...some of this class of men in seasons when employment is plentiful earn a few day's wages...".²⁹⁴

Holme's estimate of loafers and casual labour is unverified by the census as no information was collected about the regularity of employment, recording a man's supposed 'occupation' even if he had not worked for a year. The statement is, however, born out by extensive fragmentary evidence including a statistical return from three districts in Vauxhall. These areas were among the poorest and most 'immoral' and probably indicate the worst examples of casual labour (Table 5.5) but the very high percentages of pauperism and irregular employment in these crowded districts gives an impression of the extent of the Irish

293 The Irish presumably had little experience with the agricultural use of horses.

294 Holme, 1836, p. 29..

TABLE 5.4
 Liverpool, 1834
 Holme's Estimate of 'Low Irish' Labour

	<u>Number</u>	<u>Percent</u>
Mechanics of various sorts	780	10.4
Brickmakers	270	3.6
Sugar-boilers	200	2.7
Mason's labourers	350	4.7
Bricklayer's labourers	850	11.3
Chemical works and soaperies, etc.	600	8.0
Sawyers	80	1.1
Labourers employed in smithies, limekilns, plaster's yards and by paviors	340	4.5
Lumpers about the docks	1700	22.7
Porters in warehouses	1900	25.3
Coal heavers and sundry other	<u>430</u>	<u>5.7</u>
TOTAL	7500	100.0

Source: Holme, 1836, p.29.

TABLE 5.5
 Three Districts in Liverpool, 1847 and 1854
 Employment Regularity of Irish-born

<u>District</u>	<u>Regularly</u>	<u>Irregularly</u>	<u>Paupers</u>	<u>'Bad Characters'</u>	<u>Date of Survey</u>
	P E R C E N T A G E				
Vauxhall	23.4	33.4	17.9	25.3	1847
St. Thomas	6.1	28.3	22.6	43.0	1854
St. James	7.2	63.8	12.1	16.9	1854

Source: Campbell, 1854, pp.369-70.

'problem'.²⁹⁵

Michael Whitty,²⁹⁶ made several interesting observations.

"The Irish are employed in this town not because they are necessary, perhaps because they are here. There are not English enough to supply the demand; the English from the country parishes could not be suited to the work of the town...But at the same time employment [of Irish] is very uncertain and they seldom get into constant work."²⁹⁷

He felt that this uncertainty of employment fitted the Irish character - though it could be argued that this 'character' was certainly reinforced by the casualness of work. The feast and famine regime of uncertain paydays encouraged a short-term view of life and there are many references to the bad management and drunkenness of Irish households. Jobs requiring strong physical labour, especially those paid by piece work, such as dock excavation, were also popular with the Irish. The labour was often difficult and dangerous, "working up to their knees and often waists in mud".²⁹⁸

Again, national 'character' (a short form description for the skills and attitudes of a population from a rural society almost completely without industry and trade) was cited for the Irishmen's inability to acquire trade skills.

²⁹⁵ These districts were not numerically small. Their total population in 1861 was 26,841 of whom about half would have been of Irish origin.

²⁹⁶ Himself an Irishman and son of a (Protestant?) Wexford farmer, Whitty was, for four years, editor of the Liverpool Journal and later became superintendent of the night watch and the town's first chief constable.

²⁹⁷ Whitty, 1836, p. 21.

²⁹⁸ ibid. p. 25.

Finch's Vauxhall Ward survey showed a marked deficit of Irish as artisans (I.S. of 0.68). A stone mason, Mr. Tomkinson, felt they had no "mind or capacity for anything that requires thought in the nicety of work".²⁹⁹ John Johnson, a builder, who employed 50 to 100 Irishmen in the brickfields and lime works commented "They never seem to attempt to rise or to become bricklayers or mechanics".³⁰⁰ Samuel Holme, also a builder who employed large numbers of Irish as brickmakers, attributed their inability to become skilled to the "difference of natural powers". They rarely, he felt, made good mechanics, millwrights, engineers or bricklayers as "their knowledge is quick but superficial...If a plan is put in an Irishman's hands, he requires looking after continually; otherwise he will go wrong, or, more probably not go on at all".³⁰¹

There were a few Irish in business, indeed many of the witnesses to the Liverpool Appendix of the Commission on Irish Poor were themselves Irish-born. These were almost certainly Anglo or Protestant Irish who made up the 'invisible seventh' of Irish migration to Liverpool. With considerable social distance between themselves and the 'low Irish', their skills were higher and resources greater and after arrival, this group faded quickly into the Liverpool 'melting-pot'. In contrast to the low Irish who one witness (a woollen draper formerly from Newry) declared had never to his knowledge started

299 *ibid.* p. 30.

300 *ibid.* p. 31.

301 Holme, 1836, p. 28.

a business or 'got on' in his trade,³⁰² were "the resident upper class of highly respected Irish.... Their number last year [1833] was about 400 or 500... nearly all handicrafts men, work men and masters".³⁰³ In this group may be placed James Muspratt, born in Dublin 1793 who emigrated in 1822 and set up the first important alkali works in Britain.³⁰⁴

For the most part, however, the Liverpool Irish formed a large pool of unskilled casual labour, a proletariat who dominated the unskilled occupations at the bottom of the occupation and social hierarchy.

Lancashire and Cheshire and Rest of England

Both these groups of English-born migrants were over-represented in the commercial and professional occupations, the migrants from outside the neighbouring counties being especially well represented (in clerking jobs, for instance). The migrants from Lancashire and Cheshire were heavily over-concentrated in the carter's occupation - a nice illustration of the re-use of rural skills in an urban environment.³⁰⁵

Scottish-born

Scottish migrants could be found over-

302 ibid. p. 27.

303 ibid. p. 26.

304 Roderick and Stephens, 1974, pp. 44-5.

305 This confirms Mr. Whitty's comment "All the carters are English, and all the nightmen; being countrymen they are fitted for this kind of work" (Whitty, 1836, p. 21).

concentrated in the same occupational groups as the Liverpool-born - building, manufacturing, and independent. The Scottish skilled mechanics and artisans found a strong demand in Liverpool for their skills. In Vauxhall Ward in 1842 the Scots were strongly concentrated in artisanal occupations (I.S. of 1.65) and absent from general labour occupations (I.S. of 0.65). Scottish-born coopers for instance were very common. The migration was noticeable in the 1830s when Duncan³⁰⁶ noted recently arrived Scottish engineers. The Scottish Kirk went so far as to establish an agent in the town to look after the spiritual and wordly needs of the emigrants. In his 1838 report, he mentioned a doubling of the Scottish presence in three years to a figure of 5,704 Scots identified by him. This increase was presumably in response to "an unusual demand for the better class of Scottish operative; a circumstance which with the higher amount of wages offered has tempted many to leave the land of their birth".³⁰⁷

There was also indirect mention of the availability of dispossessed Highlanders for menial work³⁰⁸ but comparative absence of Scots requesting Poor Law relief suggests their numbers were not large. Not all the Scottish migrants were of the working classes, however, for despite the relatively low concentrations in the public and professional occupations, Scottish-born clerks were more common than would be anticipated.

306 Duncan, 1840, p. 146.

307 Scottish Agent, 1838, p. 6.

308 Whitty, 1836, p. 20.

Welsh-born

The Welsh appeared to lie between the Irish and Scottish in the general level of occupational skills possessed. Like the Scots, they were over-represented in the building trades but could also be found in various forms of domestic service and in the transport group. Documentary evidence on the Welsh indicates that they were often very poor³⁰⁹ and their children could be found begging.³¹⁰ With an "over-abundance" of labour in N. Wales³¹¹ they would work for as little as the Irish. Their numbers were such that one witness advocated "getting rid" of both the Irish and Welsh "and prevent more from coming".³¹²

Many gravitated towards labouring jobs especially in the docks where "all the dock-cleaning and muddy work" was done by the Welsh.³¹³ There were also many Welsh warehousemen³¹⁴ who according to one witness gave the best portering jobs to their own countrymen.³¹⁵ But unlike the Irish, Welsh dock labourers in time of distress were reluctant to apply for relief.³¹⁶

As a comparatively self-reliant and sober labour

309 ibid. p. 14. Welsh made up 12.6 per cent of the applicants for poor relief in 1832 and many were 'removed' as paupers, an operation made difficult by their "similarity of names"!
(Rushton, 1847, p. 64).

310 Shaw, 1836, p. 15.

311 ibid. p. 38.

312 ibid. p. 27.

313 ibid. p. 26.

314 ibid. p. 31.

315 ibid. p. 28.

316 Trevor, 1854, p. 279.

force who held to their Non-Conformist beliefs and attitudes, they were mentally equipped for 'getting on' in the Smilesian tradition.³¹⁷ Picton, a generation later, could comment that "the Goshen of the Cambrian race", Everton, had also been largely created by Welsh builders, "several of whom have succeeded in amassing considerable property by their exertions".³¹⁸

'Foreign'-born

Liverpool also had appreciable numbers of persons born outside the country including those born on 'the islands of the British Seas', foreign-born aliens and foreign-born British subjects. This diverse group included foreign seamen temporarily in port; Many residents of Liverpool, whose occupational distribution displayed some similarity to that of the Welsh (labouring and building trades);³¹⁹ Channel Islanders in maritime trades; upper class merchants and professionals whose work took them and their families to British colonies and British interests around the world.

Certain generalizations about the relationship between occupational groupings and birthplace seem to emerge

³¹⁷ "If a Welshman earns only 10 shillings a week, he will save 5. A good many of the small masters in Liverpool are Welshmen, who have saved a little money while journeymen." (Morning Chronicle, Sept. 16, 1850).

³¹⁸ Picton, 1875, Vol. 2, p. 353. He concluded with satisfaction that "no part of the town [is] more orderly, more free from beggary and squalid poverty than this district".

³¹⁹ The newspaper editor and author Hugh Shimmin was born in the Isle of Man of poor parents and came to Liverpool as a boy to become a book-binder's apprentice.

from this discussion. Liverpool (and one suspects that this is generalizable to other 19th century towns) was not a single labour mart but an amalgam of many. To the Liverpool-born, residence in a boom town meant the possibility of work in the apprenticed trades of building and manufacturing. In the United States, this has been termed an 'uplifting effect' whereby native labour appeared to have benefited directly by the increasing employment opportunities from which they took fullest advantage.³²⁰

The town's demand for labour exerted attraction of varying strengths in varying directions. The differing character of the migrants who responded to this attractive force was determined to a considerable degree by the economy and society prevalent in the areas from which they were drawn. The Irish, like their countrymen on the other side of the Atlantic, occupied the lowest rung in the occupational scale.³²¹ Long distance English migration on the other hand was a response to a labour demand of a different kind and with higher skills for sale, professional and white collar workers could be drawn from across the country.³²²

5.2. Social and Household Characteristics of Birthplace Groups

320 Hershberg, et al, 1974, p. 212.

321 Indeed, without a non-white community, the Irish were relatively lower down the social and economic scales than were their North American counterparts.

322 A similar situation was apparent in York where 35.9 per cent of the in-migrants from non-northern counties were in social classes 1 and 2, compared with 21.3 per cent for all household heads (Armstrong, 1974, p. 92, table 4.8).

With some exceptions, the social characteristics of birthplace groups tended to follow the pattern of their economic characteristics (Table 5.6). The presence or absence of lodgers and servants was related to class and economic status. Lodgers, in particular, were a common feature of the Victorian urban pattern.³²³ Demand for shelter from migrant workmen and their families combined with the need on the part of the poor for money to pay the rent.³²⁴ The frequency with which lodgers were accommodated was a general indicator of economic status. As we saw in the previous section, economic status varied significantly between birthplace groups. Varying frequencies with which different birthplace groups accommodated lodgers therefore largely reflected differential economic status. Irish and Welsh households had above average numbers of lodgers; Scottish, Lancashire and Cheshire, and rest of England households were below average.

The presence of servants was also an indirect indicator of economic status (see discussion in Appendix 5), and those birthplace groups with few lodgers tended to be over-represented by households having one or more servants. Foreign-born household heads also frequently had servants reflecting the presence of a foreign-born merchant class in the town. At the other end of the scale, Irish households were least likely to have servants and most likely to have lodgers. The relative frequency of court house occupancy also indirectly reflects the

323 Gauldie, 1974, p. 91.

324 See also Anderson, 1971, p. 46.

TABLE 5.6
 Characteristics of Birthplace Groups:
 Lodgers, Servants, House-type, Household Head: Index

N=	Birthplace	Number of Lodgers	SERVANT POSSESSION			HOUSE-TYPE			TYPE OF HOUSEHOLD HEAD				Total %
			None	One	More Than One	Street	Court	Male	Female	Male Absent	Female Absent		
951	Liverpool	0.78	1.01	0.88	1.11	0.94	1.12	0.93	1.35	0.45	1.55	21.2	
1459	Ireland	1.42	1.12	0.52	0.43	0.85	1.32	1.03	0.88	0.77	-	32.6	
621	Lancashire and Cheshire	0.58	0.90	1.46	1.40	1.08	0.82	1.02	0.92	0.63	-	13.9	
780	Rest of England	0.76	0.91	1.36	1.42	1.20	0.55	0.96	1.03	2.33	2.26	17.4	
227	Scotland	0.50	0.91	1.33	1.40	1.11	0.75	1.08	0.62	-	-	5.1	
288	Wales	1.33	0.99	1.22	0.56	1.08	0.82	0.98	1.08	-	-	6.4	
153	'Foreign'	1.08	0.81	1.57	2.33	1.11	0.80	1.09	1.70	-	-	3.4	
4479	Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
	Total # or %	0.81	80.5	14.3	5.2	68.7	31.3	81.0	17.4	1.3	0.3	100.0	

- Not statistically significant.
 Source: 1851 Census Sample.

economic circumstances of the birthplace groups. Liverpool- and Irish-born were most likely to live in courts, Scottish- and rest of England-born most likely to live in street houses.

Households headed by females were commonest among the Liverpool and foreign-born reflecting widowhood or (if the Census omitted to mention the fact) husbands away at sea or on business. Widows would have been less likely to migrate so it is more probable there would usually tend to be a more than proportionate number of native-born female household heads. Households where one or both parents were absent ('Male absent' or 'Head absent') were relatively most frequent amongst the born in 'Rest of England' group.³²⁵ The low frequency with which the census indicated 'male absent' from households temporarily headed by Liverpool-born wives is somewhat surprising. The proportion probably does not reflect the number of Liverpool men away at sea. The relative frequency of Liverpool-born female 'heads' of households is probably a reflection of this.³²⁶

These various indices clearly indicate the existence of social differences between the various birthplace groups in Liverpool in 1851 (Table 5.7). The overall distinctiveness of the Irish-born population is the most striking, but appreciable differences also existed between the

325 The 'assigned' head of household, if the head was absent was the wife, if both parents were absent, the eldest child was made a proxy household head and the birthplace taken from him or her.

326 The census may have paid relatively more attention to this topic in middle class homes. It is probable that they more frequently treated the seaman's wife, for instance, as the 'head' than they did the merchant's wife.

TABLE 5.7
 Parish of Liverpool, 1851
 Social Class by Birthplace: Index

N=	<u>Social Class</u>	<u>Liverpool</u>	<u>Ireland</u>	<u>Lancashire and Cheshire</u>	<u>Rest of England</u>	<u>Scotland</u>	<u>Wales</u>	<u>Rest</u>	<u>Total %</u>
62	1	1.14	0.29	1.36	0.86	3.78	1.57	1.00	1.4
623	2	0.85	0.41	1.45	1.68	1.40	1.19	1.37	13.9
566	3	0.82	0.64	1.19	1.89	0.82	0.98	0.59	12.6
1347	4	1.33	0.86	0.85	0.81	1.32	0.88	1.56	30.1
632	5	0.91	1.01	0.98	1.02	0.72	1.38	1.18	14.1
1087	6	0.80	1.75	0.84	0.32	0.47	0.81	0.34	24.3
161	7	1.19	0.80	0.89	1.42	0.86	0.92	0.39	3.6
N= 4479		951	1459	621	780	227	288	153	4479
Total		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Total %		21.2	32.6	13.9	17.4	5.1	6.4	3.4	100.0

Index: A location quotient ratio (see text).

Source: 1851 Census Sample.

other groups. Amongst the English migrants the differences were not cultural but rather the result of the distance filtering effects of Liverpool's demand for various skills.

Table 5.8 expresses the variations in social and household characteristics between major occupational groups. Servant ownership and dwelling type are clearly associated with the social ranking of the major occupational groups. Those employed in agriculture, transport, and industrial service were the least likely to have servants and most likely to live in court houses; those in dealing, public, and professional service and the independent were most likely to have one or more servants and least likely to live in court houses.

Of those in individual occupations (Table 5.9) 20.6 per cent of clerks; between 6 and 8 per cent of the semi- and skilled artisanal householders (coopers, tailors, building trades) and only 2 or 3 per cent of the unskilled occupations (manglers, labourers) had servants. Carters, though having some degree of skill, appear to have rarely had servants (2.1 per cent).

Clerks were infrequently found in court housing, while labourers, carters, and manglers tended to live in courts. Lodgers were common in the dealing group (which had within it the occupation of lodging housekeeper), industrial service, and domestic service. Individual occupations also varied in their propensity to accept lodgers (Table 5.10). Clerks, for instance, had on average as many lodgers as those in the building trades. It is possible that, as an occupation at the lower end of the

TABLE 5.8
 Parish of Liverpool, 1851
 Characteristics of Occupational Groups:
 Lodgers, Servants, House-type: Index

N=	Booth Occupation Group	Number of Lodgers	SERVANT POSSESSION			HOUSE-TYPE		PERCENTAGE IN EACH OCCUPATION GROUP	
			None	One	More Than One	Street	Court	Liverpool	England and Wales *
43	1 Agriculture	0.82	1.10	0.02	0.25	0.50	2.10	1.0	21.1
8	2 Mining	0.90	1.00	0	0	-	-	0.1	4.0
367	3 Building	0.87	1.04	0.57	0.36	0.93	1.16	8.2	5.5
1218	4 Manufacture	0.73	1.08	1.30	0.56	0.99	1.01	27.2	32.7
859	5 Transport	0.97	1.15	0.62	0.01	0.82	1.39	19.2	4.1
883	6 Dealing	1.34	0.70	2.81	2.77	1.25	0.45	19.7	6.5
430	7 Industrial Service	1.32	1.13	0.38	0.01	0.82	1.40	9.6	4.5
183	8 Public and Professional	0.87	0.68	0.55	3.38	1.27	0.41	4.1	4.6
182	9 Domestic Service	1.14	1.17	0.09	0.23	0.96	1.09	4.1	13.3
70	10 Independent	0.45	0.40	0.38	3.54	1.43	0.04	1.6	3.7
236	11 [Dependent]	1.02	1.06	0.27	2.83	0.98	1.03	5.2	
4479	Total	1.00	1.00	1.00	1.00	1.00	1.00		
	Total (#) or %	(0.81)	80.5	14.3	5.2	68.7	31.3	100.0	

- Not statistically significant.
 Source: 1851 Census Sample
 * Armstrong 1972, p.229, Table 1.

TABLE 5.9

Parish of Liverpool, 1851

Social Characteristics of Households
With Heads in Selected Occupations

<u>N</u>	<u>Occupation of Head</u>	Servant Possession %	Presence in Court Houses <u>Index</u>	By Number of Lodgers <u>Index</u>		<u>Average # of Lodgers</u>	<u>Average # of Lodgers in Court Houses</u>
				<u>None</u>	<u>Three</u>		
126	Dressmakers, etc.	5.6	0.84	1.0	0.56	0.63	0.88
248	Building Trades	6.0	1.04	1.09	0.78	0.55	0.57
87	Clerks, etc.	20.6	0.29	1.18	1.00	0.54	-
940	Labourers, etc.	3.3	1.48	0.97	0.69	1.03	1.10
204	Manglers, etc.	2.0	1.24	0.98	1.37	0.76	0.80
140	Carters, etc.	2.1	1.53	1.08	0.94	0.61	0.58
73	Coopers, etc.	8.2	1.18	1.07	0.85	0.70	0.93
133	Lodging House Keepers	24.6	0.91	0.34	4.02	3.19	3.92
252	Shoemakers	6.3	0.87	0.99	0.99	0.79	0.67
181	Tailors	8.8	0.74	1.02	0.79	0.75	1.09
2384	Parish %	19.5	31.3	69.2	11.3	0.81	0.90

- Not statistically significant.

Source: 1851 Census Sample.

TABLE 5.10

Parish of Liverpool, 1851

Birthplace of Heads in Households with Lodgers

By Selected Occupations of Head: Index

HOUSEHOLD HEAD BORN IN

<u>N</u>	<u>Occupation of Head</u>	<u>Liverpool</u>	<u>Ireland</u>	<u>Lancashire and Cheshire</u>	<u>Rest of England</u>	<u>Scotland</u>	<u>Wales</u>	<u>Rest</u>
126	Dressmakers, etc.	0.70	1.14	0.89	1.25	1.05	-	-
248	Building Trades	0.73	1.33	1.02	1.04	1.19	0.27	1.30
87	Clerks, etc.	0.33	2.20	-	0.68	0.68	-	-
940	Labourers, etc.	0.54	1.35	0.53	0.47	0.62	0.79	0.67
204	Manglers, etc.	1.09	1.23	-	-	-	1.74	-
140	Carters, etc.	1.31	0.34	0.70	-	-	0.91	-
73	Coopers, etc.	0.57	1.53	-	-	1.36	-	-
133	Lodging House Keepers	0.83	1.22	-	-	-	1.89	3.28
252	Shoemakers	1.02	1.16	-	0.71	-	0.50	0.28
181	Tailors	0.32	1.09	-	-	1.48	-	-
<u>N= 2384</u>		494	1151	264	227	85	116	47
	Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	% Index	.63	1.15	0.47	0.61	0.42	0.66	0.67

-- Not statistically significant.

Source: 1851 Census sample.

white collared group, clerks may have supplied accommodation for a 'better class' lodging market. Variations of lodging by birthplace group within individual occupations (tables not shown) suggest differing national attitudes towards lodging. Irish clerks, for instance, had more lodgers than did clerks of other backgrounds.³²⁷

Class

To Victorian society, class was an amalgam of lifestyle, political and social attitudes, degrees of deference and social esteem and relationship to the economic structure. Within this, occupation may be only one variable "but it is the variable which includes more, which sets more limits on the other variables, than any other criterion of status".³²⁸ In this study, household heads were assigned to a seven-class system on the basis of occupation (see Appendix 5). Liverpool's class structure in 1851 is shown in Table 5.11 and a comparison with other 19th century cities in Table 5.12. In Liverpool, classes 3 and 4 (petty entrepreneurial/clerical and skilled manual) were comparatively few in number and Classes 5 and 6 (semi- and unskilled labour) large in comparison to other cities (except Kingston, a small New York mining town).

The social indices considered in this section

327 It is possible that the Irish occupied the lowest rung of clerkdom and needed the extra money lodgers brought in. However, the frequent reference to the garrulousness and hospitality of the Irish must have been an important factor (Woodham-Smith, 1962, p. 19 and Anderson, 1971, p. 97).
328 Armstrong, 1972, p. 202.

TABLE 5.11
Liverpool's Class Structure, 1851

			%	%	%
Non- Manual	Class 1	Capitalists, manufacturers, professional classes, etc.	1.10] 10.23]] 21.07]
	Class 2	Small shopkeepers, lower professionals, etc.	9.13		
	Class 3	Petty entrepreneurial, clerical	10.84	39.52	
Manual	Class 4	Skilled manual (apprenticed trades)	28.68	] 74.76]
	Class 5	Semi-skilled workers	16.25		
	Class 6	Unskilled labourers, domestic servants	29.79	46.08	
	Class 7	Dependent, housewives, retired (undeclared)	4.16		

Source: Classification, see Appendix 5
Calculations, 1851 Census Sample.

Melly, 1869, p.6, estimated Liverpool's classes in 1869 as

	#	%
'Merchants and Upper Classes [Class 1]	25,000	5
Shopkeepers and larger trades [Class 2]	50,000	10
Small trades [Class 3]	75,000	15
Sober, steady warehousemen, foremen, artisans [Class 4]	200,000	40
'The Rest' [Classes 5 and 6]	120,000	30
On relief and criminals	<u>32,000</u>	
	500,000	

TABLE 5.12
 Various 19th Century Cities
 Distribution of Social Classes

P E R C E N T A G E								
<u>Class</u>	<u>Liverpool</u>	<u>York</u>	<u>Camberwell</u>	<u>Buffalo</u>	<u>Hamilton</u>	<u>Kingston</u>	<u>Poughkeepsie</u>	<u>Philadelphia</u>
1	1.1	8	2	6	10	4	10	5
2	9.1	14	13					
3	10.8	49	63	11	18	11	11	15
4	28.7			50	42	35	42	46
5	16.3	13	11	32	30	51	32	32
6	30.0	13	7					
7	4.2	3	3					

Source: Liverpool - 1851 Census Sample.

York - Armstrong; 1968, p.73, Table 3.

Camberwell - Dyos; 1968, p.101.

North American Cities - Hershberg, et al., 1974, p.194.

(Table 5.13) prove to be strongly related to class. Servant ownership and house-type, grade consistently down the social spectrum. The number of lodgers also generally increases progressively as the social scale is descended. There is one exception, class 3 households had rather more lodgers than class 4 households, thus indicating the presence of a 'better class lodgings' market mentioned above.

Comparison with Armstrong's data indicates broad similarities between the York and Liverpool samples (Table 5.14). Servant ownership by those in social class 1 in both towns was statistically alike when tested by chi-square. The other classes were similar but not statistically significant. Liverpool's class 2 seemed especially 'better off' than the equivalent group in York.

5.3. Conclusion

The high degree of statistical interrelationship among the factors discussed in this section is apparent from Figure 5.1.³²⁹ Social class, birthplace, occupational group, servant and lodging households were all statistically interrelated, three major clusters of interrelated variables emerge - the Irish/unskilled/lodging/industrial service/court house cluster; the white-collar/Scottish-born/rest of England-born cluster; the skilled and semi-skilled/Liverpool-

329 The values in the figure are 27 'social variables' contained in the correlation coefficient matrix in Appendix 2. The scores are derived from the 12 wards of the Parish.

TABLE 5.13

Parish of Liverpool, 1851

Characteristics of Social Classes:

Lodgers, Servants, Housetype, Household Head: Index

N=	Social Class	Number of Lodgers	SERVANT POSSESSION			HOUSE-TYPE			TYPE OF HOUSEHOLD HEAD				Total %
			None	One	More Than One	Street	Court	Male	Female	Male Absent	Female Absent		
62	1	0.13	0.22	0.26	8.23	1.46	0	1.00	1.06	-	-	-	1.4
623	2	0.46	0.33	3.21	5.04	1.41	0.11	1.00	1.02	-	-	3.33	13.9
566	3	1.26	0.91	1.32	1.02	1.31	0.32	0.87	1.63	-	-	3.67	12.6
1347	4	0.76	1.14	1.10	0.13	0.95	1.12	1.12	0.44	1.28	-	-	30.1
632	5	1.28	1.15	0.50	0.02	0.85	1.34	0.94	1.06	3.47	-	-	14.1
1087	6	1.34	1.21	0.33	0.04	0.74	1.56	1.06	0.81	-	-	-	24.3
161	7	1.12	1.04	0.02	0.31	0.96	1.08	0.25	4.38	-	-	-	3.6
4479	Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	Total #	or %	0.81	80.5	14.3	5.2	68.7	31.3	81.0	17.4	1.3	0.3	100.0

- Not statistically significant.

Source: 1851 Census Sample.

TABLE 5.14
 Liverpool and York, 1851
 Distribution of Servants by Social Class
 of Household Head

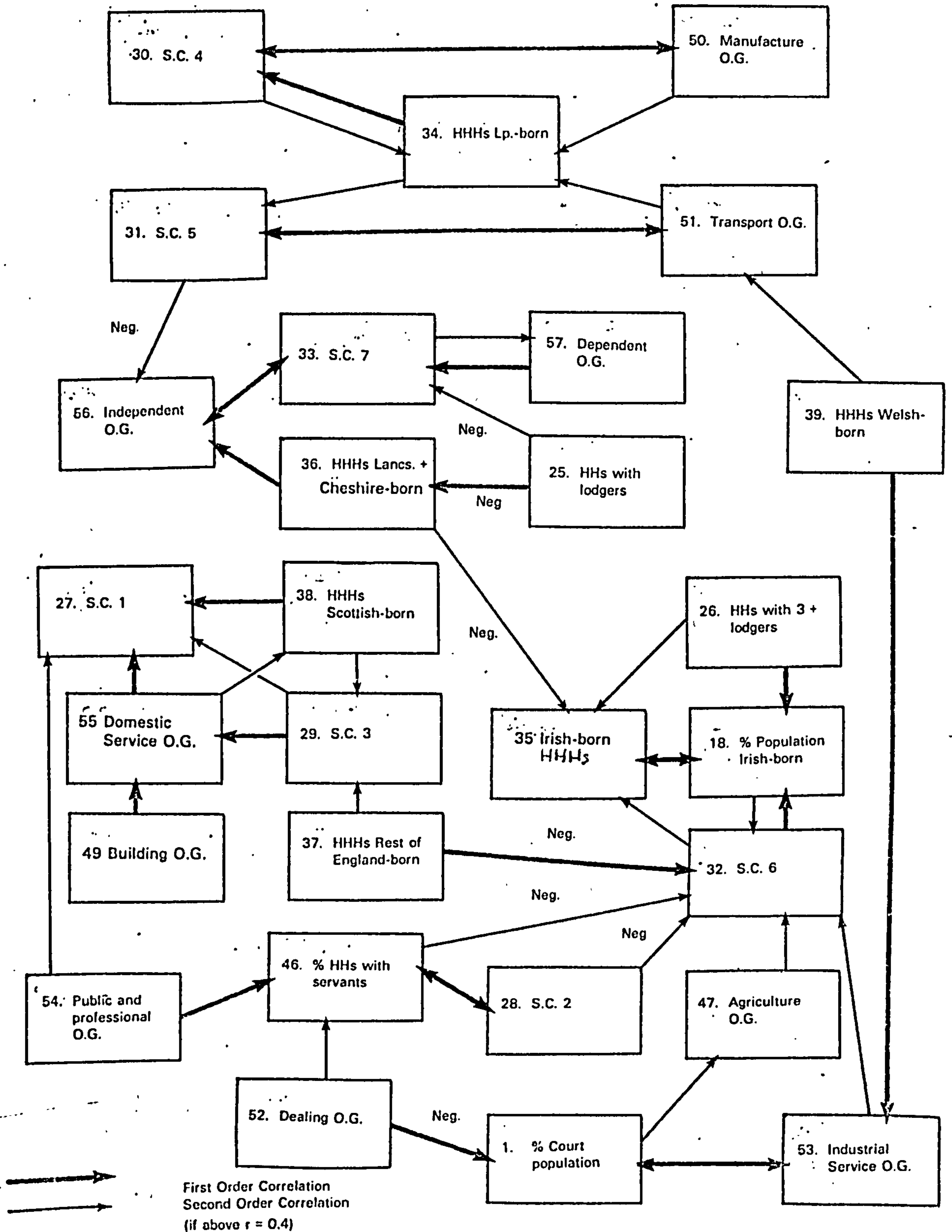
	<u>Social Class (Armstrong)</u>									
	1		2		3		4		5	
Percentage With One Or More Domestic Servants	Lp.	Yk.	Lp.	Yk.	Lp.	Yk.	Lp.	Yk.	Lp.	Yk.
	82.0	81.4	73.2	57.9	13.6	9.1	7.3	5.8	2.8	-
Two Or More	43.5	52.4	25.8	13.1	2.1	2.6	-	1.0	0.2	-
Three Or More	27.4	30.5	7.1	1.9	0.5	0.5	-	1.0	-	-
Four Or More	17.7	15.3	1.9	1.9	0.1	-	-	1.0	-	-
N=	62	59	620	107	1913	386	631	103	1085	98

Note: Armstrong's Social Classes (shown here) are the same as mine. My classes three and four are subdivisions of the Armstrong class three.

Source: Armstrong, 1974, p.179, Table 7.4 and 1851 Census Sample.

Mid-Nineteenth Century Liverpool

Correlations of Social Variables



born/transport/manufacturing cluster.

While each group has statistical links with the others, these three clusters of variables neatly express the basic underlying structure of Liverpool society. This grouping in statistical space corresponds with a broad three-fold class division which has sometimes been recognized in Victorian society.³³⁰ In Liverpool terms, the three groups also take on a social class/demographic significance. They can be broadly characterised as the upper class (10 per cent of the population), drawn from across the country; an 'in-between' class, largely native-born (40 per cent of the population); a lower class, unskilled and Irish (50 per cent).

The generalisation is a crude one but it provides an acceptable model of Liverpool society at mid-century composed as it was by migrants of differing backgrounds. Their skills and attitudes suited them for various levels within the economy and society of the expanding port. The broad based, high and, in its upper levels, increasingly steep sided pyramid of Liverpool society was composed of human strata of differing origins living vastly different lives.

330 Neale, 1968.

Chapter 6

HOUSING AND THE RESIDENTIAL ENVIRONMENT

"You will understand that Liverpool is somewhat different from most towns. We are a town of courts."³³¹

". . . so freely has human life been sacrificed rather than that life should be 'sacrificed', for that is the word employed before a committee of the House of Commons [Franklin, 1842, p. 19], that the average size of a court in Birmingham is twelve times the average size of a court in Liverpool."³³²

"Our corporate bodies as well as private individuals have been accessory to the cutting up of the ground by square inches in order to make money by packing human beings together as if they were cotton bales. The highest possible price has been screwed out of building land . . . The supreme right of property is at all events in towns an evil of the most enormous magnitude."³³³

Sutcliffe in reviewing the literature on working class housing in Britain has concluded that 'a generally optimistic picture' of housing provision in the first half of the 19th century has emerged from studies in Leeds, Birmingham and Nottingham.³³⁴ He points out however that only a few towns have received detailed study and the list does not include the larger towns where there are indications that conditions were less 'optimistic'.³³⁵ The present and succeeding chapter will attempt to analyse the nature and quality of housing provision

331 Trench, 1868, p. 412.

332 Thom, 1845, p. 20.

333 Liverpool Health of Towns Advocate, 1845, No. 10, p. 86.

334 Sutcliffe, 1972, p. 42. See also the generally 'optimistic' conclusion reached by Chalklin, 1974, pp. 304-8.

335 Sutcliffe, 1972, p. 42.

in Liverpool, considering both its physical aspects (Chapter 6) and the manner and degree of its occupancy (Chapter 7). The findings should go some way to broadening the base of comparative information available for discussions about changes in 19th century British housing standards.

From 1790 to 1840, Liverpool's housing stock increased rapidly: in each decade there was an increase of over 20 per cent, with peaks in 1811 - 1821 and 1831 - 1841 (36 and 35 per cent growth).³³⁶ The major part of this new housing stock was built specifically for manual workers.³³⁷ The remainder of the housing (more than could be occupied) was built for the middle classes, a fact which led to an inherent instability in this market with geographical consequences that will be investigated later (Chapter 8).

The type of working class housing provided largely followed the patterns established in the 1780s (see Chapter 2). Streets were lined with houses that were structurally linked to the court housing to the rear. As courts multiplied (from about 390 in 1800 to about 2000 in 1850) they contained, on average, more houses and increased their share of the total housing stock, from about one fifth in 1800 to about

336 The total rated assessments grew 56.9 per cent from 24,805 in 1833 to 43,571 in 1851 (Liverpool Corporation Inquiry, 1833, p. 429 and P.P., 1852 (2), XLV, p. 127) See Liverpool Chronicle, Jan. 1, 1816 on the noticeable increase in 'back houses'.

337 In 1833, houses assessed at under 12 pounds accounted for 48.3 per cent of all houses (Liverpool Corporation Inquiry, 1833, p. 429). In 1851, 59.9 per cent were under 10 pounds. In the latter year, by comparison, Manchester only had 28.3 per cent of its housing in this category.

one third in 1850 (Figure 6.1).³³⁸

The number of separately occupied cellars grew four-fold between 1800 to 1850, and their relative frequency increased also. About one fifth of all houses contained occupied cellars in 1790, about a quarter in 1841.³³⁹ By mid-century, about 40 per cent of the town's inhabitants - 50 per cent of its manual workers - lived in court or cellar dwellings.

Comparison between population and housing growth also indicates pressure on standards in the seven decades between 1790 and 1861. Only one (1801 - 1811) saw housing increase at a faster rate than the population in the Parish. In the 'Five Townships' as a whole, only two decades (1801 - 1811, 1851 - 1861) saw housing grow faster than population (Table 6.1).

6.1. Growth and Distribution of Court Housing

Figure 6.1 indicates the distribution of court housing by ward in 1841. Half the 16 wards had an excess of 30 per cent of their housing stock as court housing, in Vauxhall the figure rose to 60.9 per cent. In the years between the Simmons census and the census of 1841, working class housing had

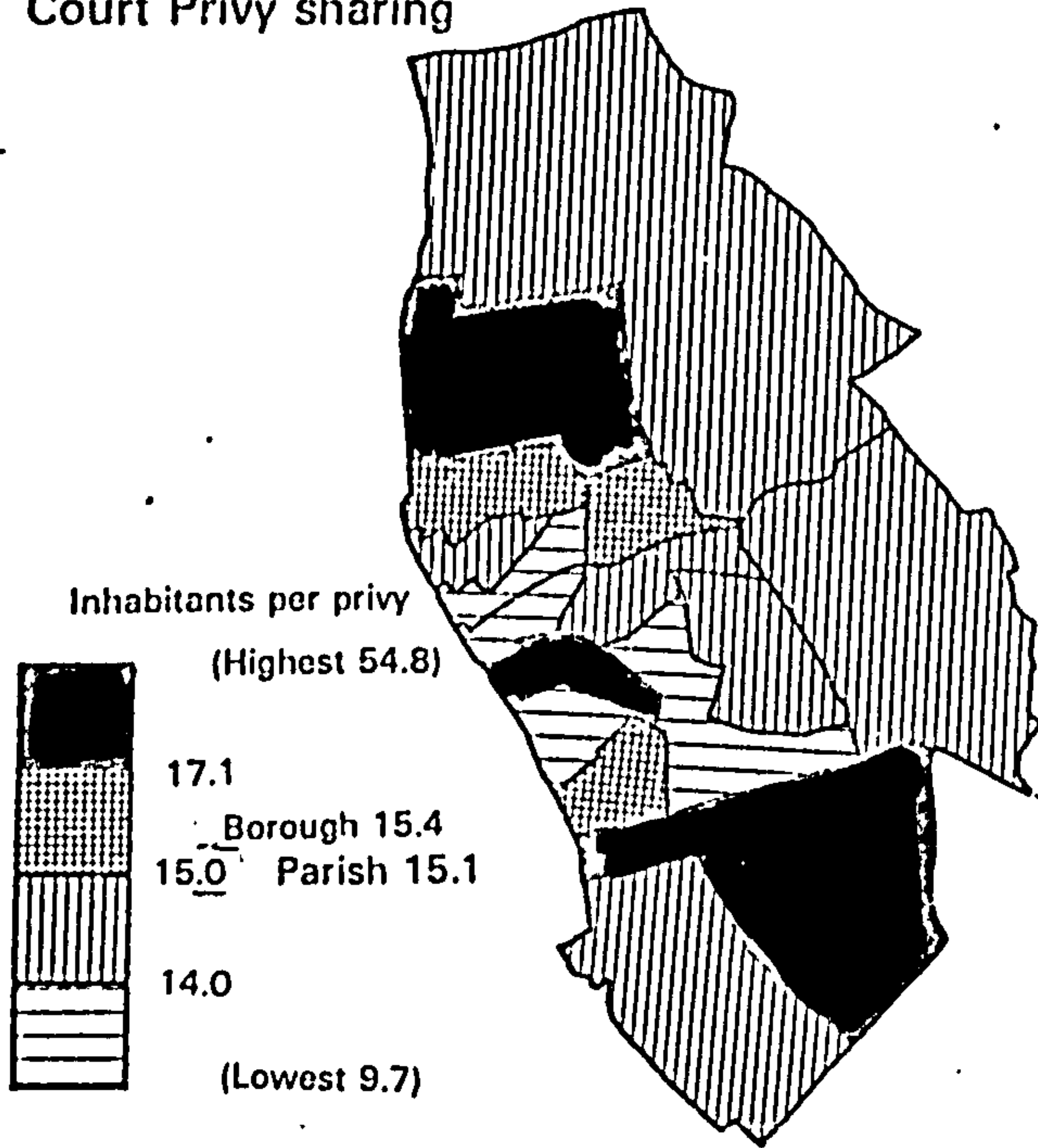
³³⁸ For comparative purposes, the Parish only is referred to here. Court housing in the Borough comprised 31.5 per cent of the total (compared with 32.5 per cent in the Parish) in 1841. (Liverpool Health of the Town Committee, 1 April, 1840.)

³³⁹ These figures do not, therefore, bear out the impressions of some contemporaries who thought they perceived a move away from cellars to court housing (Stewart, 1833, p. 288; Forwood, to the Liverpool Corporation Inquiry, 1833, p. 429).

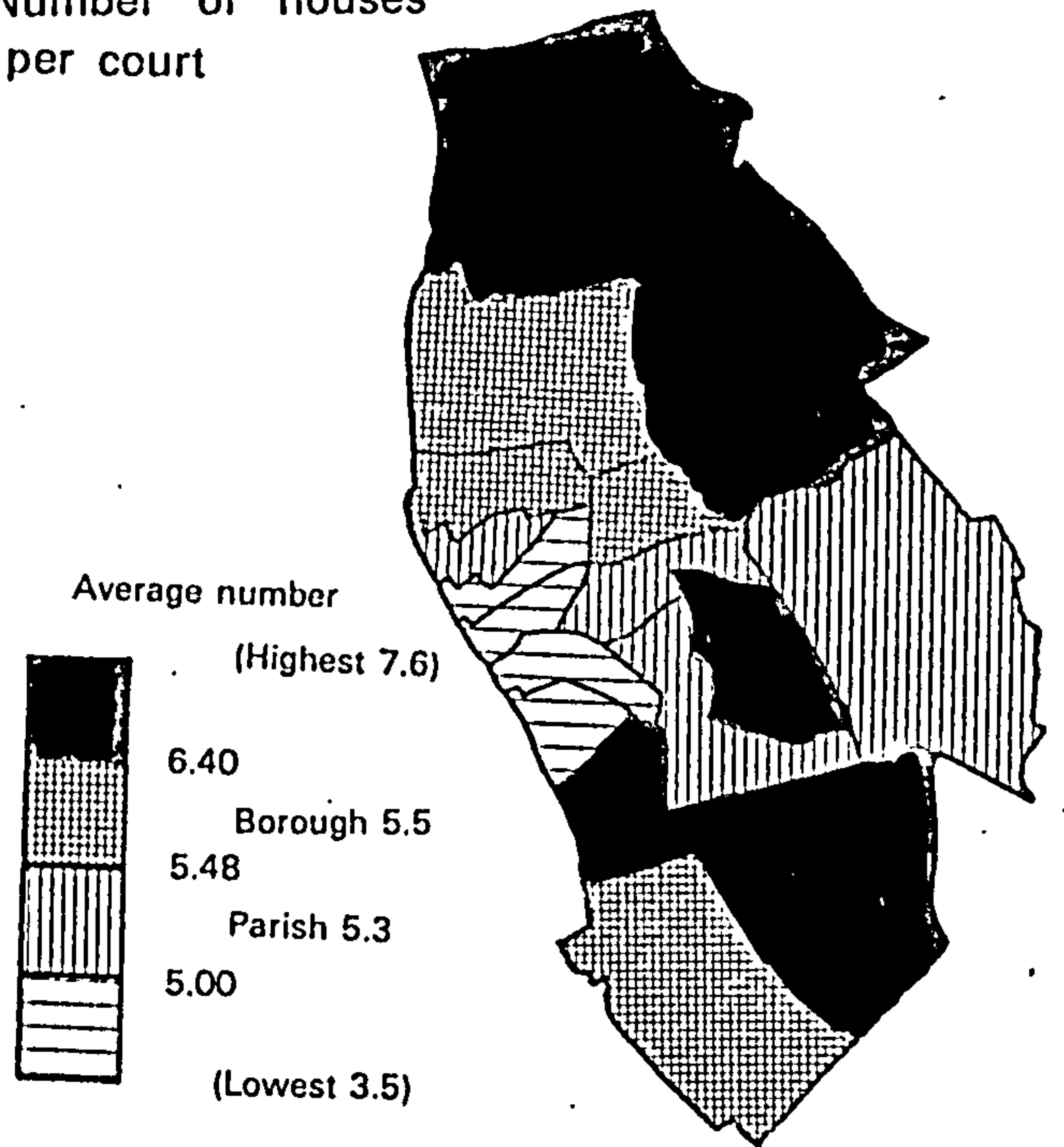
FIGURE 6.1

Liverpool Borough, 1841: Housing and Residential Environment

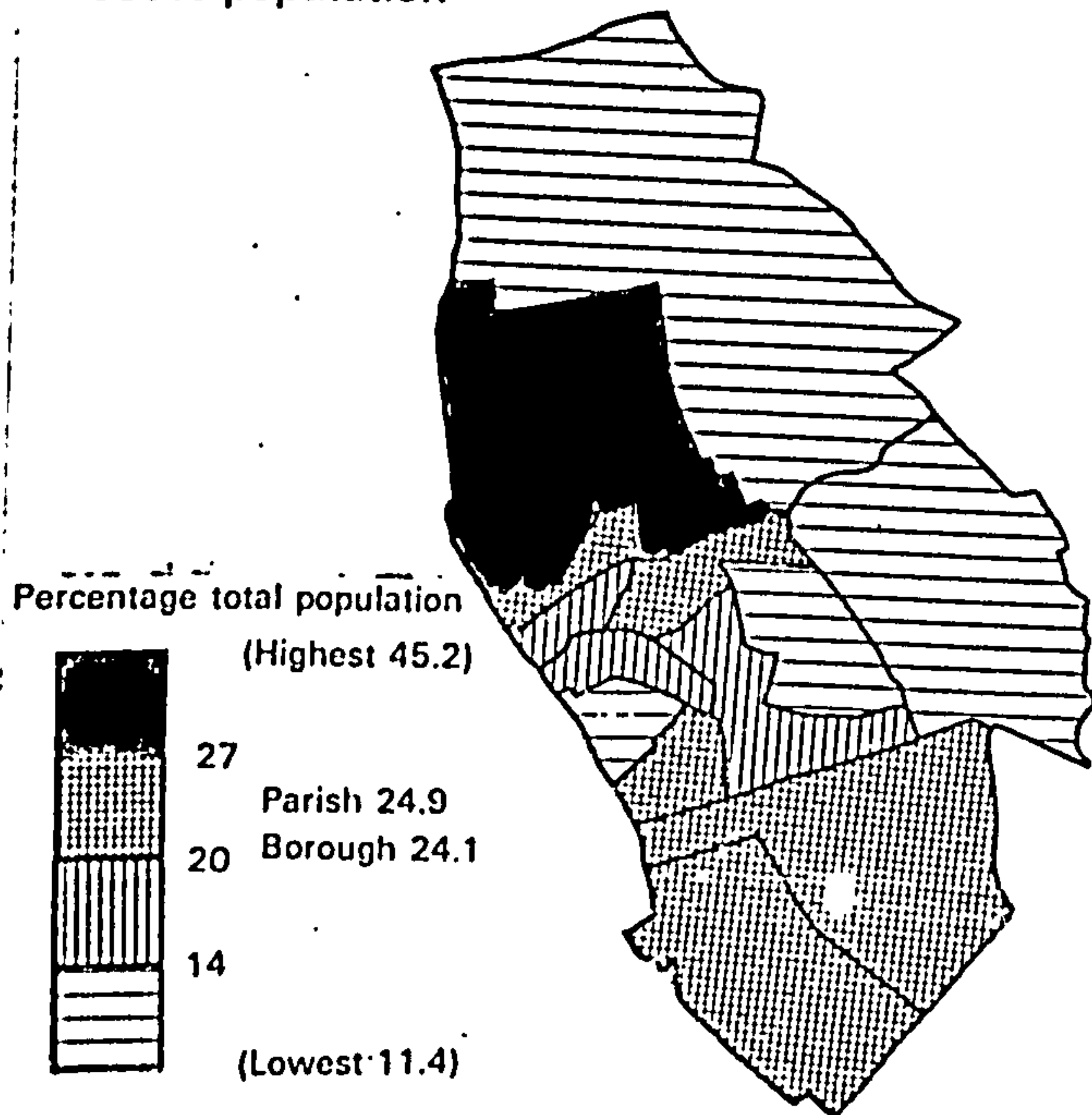
Court Privy sharing



Number of houses per court



Court population



Court housing

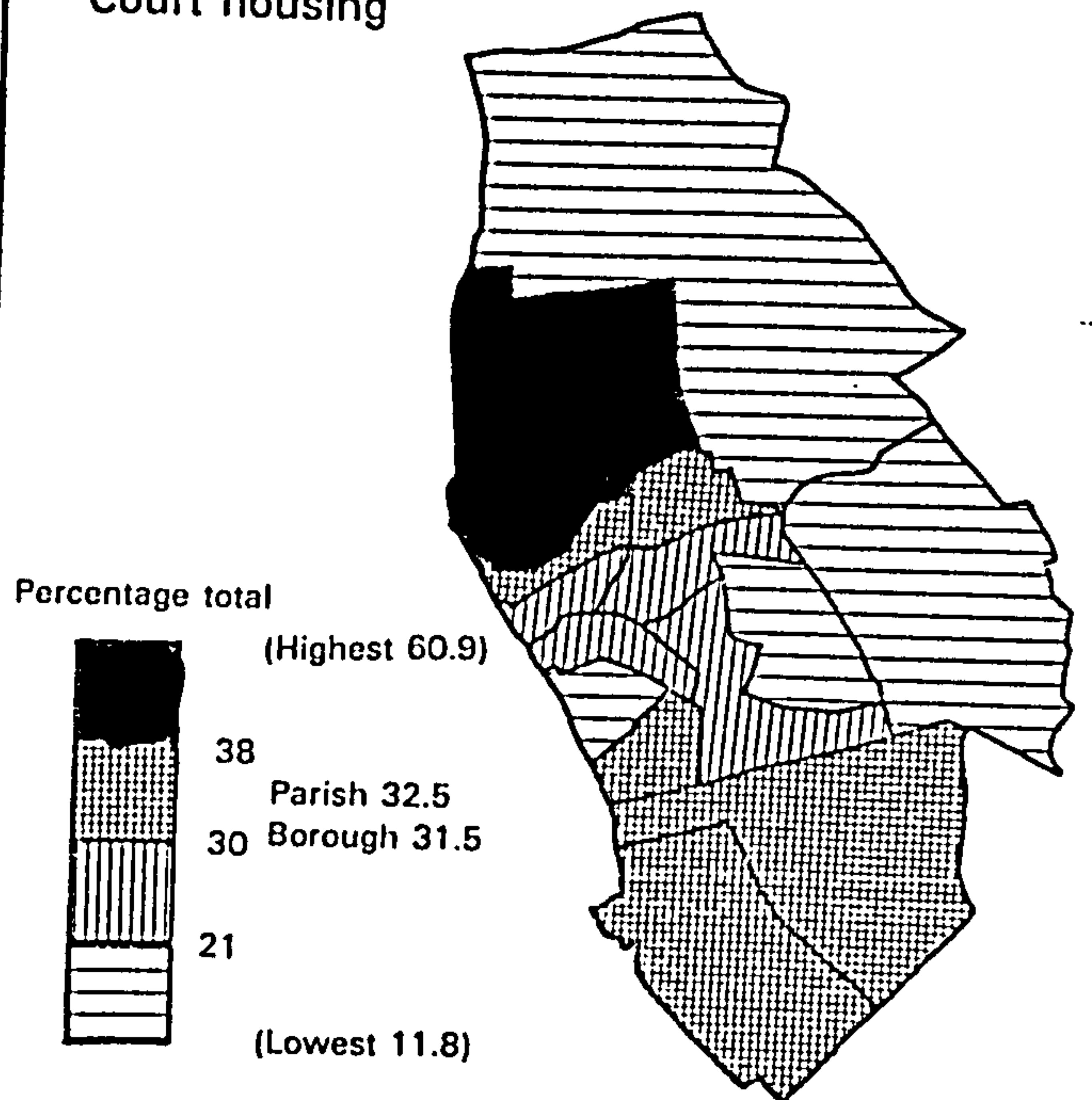


TABLE 6.1
Parish of Liverpool, 1790/1 - 1861
Housing Characteristics

Year	ALL HOUSES #	Decadal Growth %	COURT HOUSES #	% of Total Houses	COURTS #	Houses Per Court	INHABITED CELLARS #	% Houses	POPULATION	Population Growth in Previous Decade %
1789-90	8890		1796	20.2	c360	5.2	1728	19.4	56,332	
1801	11446	28.7	2021	17.7	390	5.2			77,653	37.8
1811	15589	36.2							94,376	21.5
1821	19007	21.9							118,972	26.1
1831	25732	35.4							165,175	38.8
1841	32045	24.5	10692	33.3	1982	5.4	18000	24.9	222,542	34.7
1851	35284	10.1							250,181	12.4
1861	37041	5.0	14470	39.0	2410	6.0			269,742	7.8

Sources: Summary Census 1789-90 (Appendix 1); Census Reports; Horwood's Plan 1804, Liverpool Medical Officer of Health, 1863.

spread outwards (Figure 6.2) from the late 18th century areas of concentration (Figure 2.8). To the south, the Crosbie-Jordan court district was extended across the township boundary into Toxteth Park. Here the Earl of Sefton's plans for a genteel suburb 'New Liverpool' of 1775³⁴⁰ which was later renamed Harrington (after his family-in-law) left only a legacy of wide grid-iron streets. The interior blocks were

"left to be arranged as chance or cupidity might direct. Hence arose subdivisions of mean, narrow streets filled with close gloomy courts into which as many dwellings as possible were packed, irrespective of light and air."³⁴¹
(See Plates 4, 11, 12 and 13).

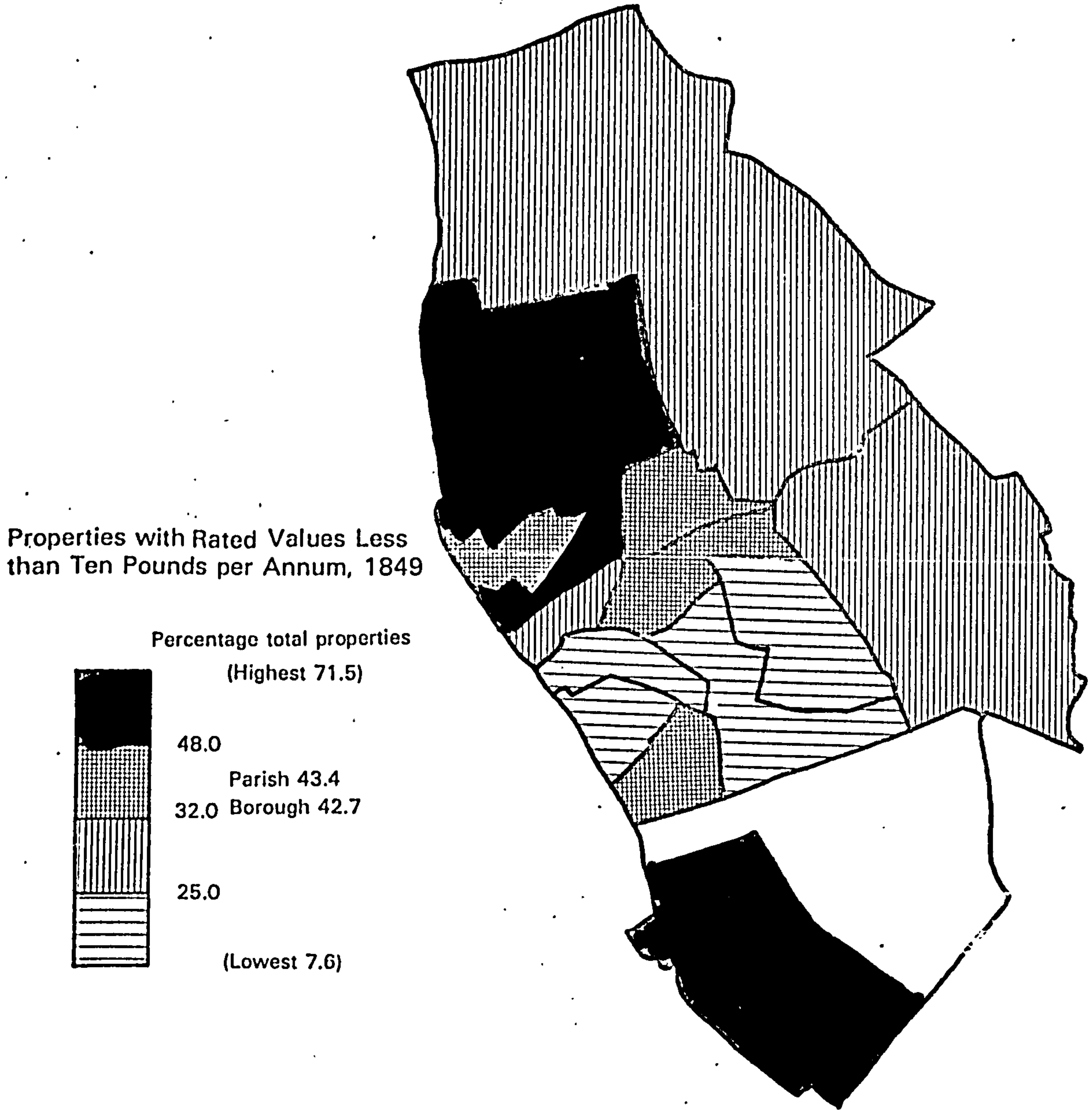
Until 1835, the township lay outside the Borough of Liverpool and as late as 1842 the area was without urban services or regulatory and administrative bodies.³⁴² The anomaly arose because, though included in the extended Borough of 1833 such matters lay within the parochial jurisdiction and Toxteth Park was an extra-parochial place. A Toxteth Park Highway Board was established in 1842 but the men appointed were almost all "interested in cottage property, what is called Jerry building, manufacturing houses for the poor on the cheapest possible

340 Act obtained for granting building leases, 15 Geo. III c. 33.

341 Picton, 1875, Vol. 2, p. 460. Chalkin, 1974, pp. 211-3 has traced the development of Harrington Court (1804) and Johnson's Court (1805) built between Gore Street and Cooper Street, Toxteth Park. The houses were approximately 13 by 11 feet ground floor plan and were sold for about 70 pounds each after completion.

342 There was no Vestry, no police, no watching, lighting and paving commission, no court of requests and the little management of the township's affairs that took place at all was conducted illegally (House of Commons Committee, 1842, Vol. 7, p. 449).

Liverpool Borough, 1849: Small Houses



scale".³⁴³ They included Ambrose Lace, Chairman of Liverpool's Health Committee and "the owner of property to a very considerable extent within Toxteth Park."³⁴⁴ By 1841, Toxteth Park had 326 courts (an increase of 30 per cent in 5 years) and 1524 inhabited cellars (an increase of 74 per cent in 5 years). The remainder of the courts in Toxteth Park enumerated in 1863³⁴⁵ were probably built in the next six years (an increase of 35 per cent).³⁴⁶

The court district around Tithebarn Street (Plate 8) provided the northern nucleus from which 19th century court districts were to extend. In 1804, a large block of land owned by the Cross estate was offered for sale laid out in streets and divided into 19 parcels.³⁴⁷ The new owners covered the building grounds with a dense mass of court property ingeniously arranged to maximise the number of houses.³⁴⁸ The area between Bispham and Lace Streets (including the area of the streets themselves) contained (after building was complete) 550 houses, 84 courts and 327 court houses at a density of 150 houses to the acre (Plate 9). The area became a notorious blackspot and at the end

343 House of Commons Committee, 1846, Vol. 104, pp. 90-1.

344 *ibid.* p. 87. He expressed qualified support for the cellar dwellings being built beneath many new houses in Toxteth Park arguing that they were separate dwellings and preferable to multi-occupied housing.

345 Liverpool Health Committee, 1863, n.p.

346 Court construction came to a virtual halt after 1847 with the adoption of Liverpool's 'Sanatory' Act on the 1st January of that year.

347 Holt and Gregson Papers, Vol. 18, p. 39 contains an estate plan.

348 On building lots 90 feet in depth, five rows of houses were laid out between parallel streets. Access to the three inner rows was by a series of narrow tunnels leading to courts 7 feet wide.

of the century was "historical in disease".³⁴⁹

The court developments on Cross's land set a pattern that was to be repeated (though rarely with quite the squalor) in the building grounds beyond. Individual freehold strips of the former town field became sinuous court-lined alleys reflecting the earlier cadastre³⁵⁰ (Plate 30). Picton noted that a "painstaking antiquary may almost always be able to trace in the tortuous avenues and oblique angles the original form of the fields."³⁵⁰ There were no restrictive agreements on the use of the land and "proprietors may lay it out as they please".³⁵¹ By the 1840s, the entire north end of the town west of Scotland Road to the river was occupied by court housing intermixed with warehouses and factories.

6.2. Economics of Working Class Housing

House building in the 18th and 19th centuries was the end-product of a complex series of investment decisions by a variety of parties - land owners, developers, attorneys, and builders.³⁵² The type of housing actually constructed reflected the builder's perception of the market, and the costs incurred in land purchase, supply of materials, labour, etc. The housing 'market' from the builder's viewpoint involved an assessment of

349 Liverpool Medical Officer of Health, 1899, n.p.

350 Picton, 1907, Vol. 2, p. 399.

351 Franklin, 1842, p. 16.

352 Chalkin, 1974, Chapter 3. The term 'builder' is used here to mean the craftsmen who actually constructed the house. Hereafter, it is used to mean the 'building owner or undertaker' who actually made the decision to build (*ibid.* p. 157).

the sale value of the house or, if the builder retained the property after house construction, its rent yield. This was a complex equation the elements of which were in continuous flux; demand changed as population growth fluctuated, the supply of capital varied with the business cycle. Many of these factors were operating at a national scale³⁵³ but the particular combinations of circumstances (especially the pattern of land-ownership) were strong enough to give building expansion (and prevailing house type) a special character in each of the towns studied by Chalkin.³⁵⁴

In Liverpool, three factors appeared to be important in shaping the type of housing provided for the working classes. The first was the price builders paid for land, the second was the rents demanded for use of those portions of urban space, the third was the varying abilities to pay these rents by the ultimate occupiers, together with the adjustments in living arrangements the tenants might make to afford these rents.

Land in Liverpool, as in many ports, was in particularly short supply as the river effectively blocked westward expansion.³⁵⁵ Prices were accordingly high and rose rapidly as population growth continued, encouraging considerable

353 *ibid.* Part IV.

354 *ibid.* p. 248.

355 No working class commuting across the Mersey occurred in the 19th century. The Wirral did, of course, provide an outlet for middle class housing.

speculation in land.³⁵⁶ Chalkin found lease-hold land prices in early 19th century Liverpool twice as high as those of freehold land in Birmingham.³⁵⁷ In the early 1830s, prices ranged from 10 guineas per square yard (1000 to 3000 pounds per acre) in the centre, to between 5 and 15 shillings per square yard in the outskirts; even four miles out it was still 500 pounds an acre.³⁵⁸ Land prices also increased rapidly - 10 to 15 per cent in the 1770s, 15 to 30 per cent in the 1810s.³⁵⁹ Over the period 1780 to 1810 they rose by 50 per cent.³⁶⁰

Land prices in the riverside zone were, to a large extent, determined by the competition among commercial interests for access to the docks.³⁶¹ Unfortunately, working class housing was another competitor. Although its needs could rarely compete directly for a particular site, the distance away from the river that casual labour could locate was extremely limited and this pushed up the demand for housing in the riverside zone. At two pounds per square yard (about the maximum cost of land used for housing), the land needed for an average working class cottage (16 square yards) cost 32 pounds in the 1840s. Materials and labour cost another 25 to 35 pounds.³⁶² The resultant costs of a cottage ranged from 80 to 110 pounds -

356 For example, the Leigh family (Picton, 1875, Vol. 2, p. 171).

357 Chalkin, 1974, p. 70.

358 Commission on Boundaries P.P., 1831-2, XXXIX, Vol. II, Part 1, p. 57.

359 Chalkin, 1974, p. 191.

360 ibid. p. 223.

361 Boulton, 1844, p. 85.

362 Franklin, 1842, p. 17.

amongst the most expensive in the country. A survey of 1845³⁶³ showed that the cost of small houses below 10 pounds per annum rental were higher than every one of the four largest provincial towns.³⁶⁴ Returns of 8 to 10 per cent on investment were general and these were considered 'high' by normal standards.³⁶⁵ Rentals needed to achieve these returns on houses costing 80 to 110 pounds ranged from 2/6d to 4/3d³⁶⁶ and these were in fact the rents generally charged in Liverpool.³⁶⁷ These rents required the earnings of about one day for dock labourers and, therefore, accounted for about a third of their average weekly wage in 'normal' weeks, provided an obvious incentive to share this rent by subdividing houses. Such rents made the owners of cottages rich men³⁶⁸ for these houses were "a very good investment".³⁶⁹

Land values, rent returns, housing density, working class income and multiple occupancy were thus interlocking factors in a housing market that created steady

363 Liverpool Highway Board, 1845, table opposite p. 32.

364 House prices in Leeds, Manchester, York and Nottingham were 10 per cent lower; houses in Birmingham, Hull and Sheffield 15 per cent lower; houses in Halifax, Bolton and Bury 30 per cent cheaper (*ibid.*).

365 *ibid.* p. 11.

366 On an 80 pound house, 2/5d per week would have yielded 8 per cent, on a 110 pound house 4/3d would have yielded 10 per cent. Repairs would have to have been deducted from this, though taxes would not. Of 16,800 cottages in the Parish assessed under 11 pounds per year, only 900 of them paid rates contributing 700 pounds to the total rates of 10,000 pounds. Of the 700 pounds paid, it was said a great proportion was paid by the Conservative and Reform Association (Duncan, 1840, p. 145).

367 See Shimmin, 1864, p. 10. Shimmin noting the high rents for the wretched dwellings in Thomas St. observed the necessity of the casual labourers to live close to town centre and riverside employment districts.

368 Duncan, 1840, p. 145.

369 Well able (but unwilling) to pay for sewerage (Aspinall, 1845, p. 83).

incomes for the owners of property and the cramped and expensive housing for the casual workforce. Housing standards were therefore the product, not of cupidity on the part of individual landlords but the logical result of the operation of the free market system.

6.3. Physical Characteristics of Working Class Housing

A. Court Layouts

Though there were variations dependent upon site considerations, the overriding characteristic of Liverpool's 19th century working class housing was its general uniformity. Five decades of house building produced few major variations on the layout generally adopted in the 1780s. The major change was the partial abandonment in the 1820s and 1830s of tunnel entrances to courts.³⁷⁰ But many courts, even of the later variety, were blocked by the walls of other buildings.³⁷¹ Such courts were often mere narrow air-wells accessible to light and fresh air only directly from above.³⁷² Examples of these courts could be found in Denison St., and Gibraltar Row (visited by Nathaniel Hawthorne in Redburn) where the court houses were dwarfed by the adjoining eight storied warehouses (Plate 7). In

370 By 1840, 52.9 per cent of the Parish and 59.6 per cent of the Borough's courts had open entrances. (Liverpool District Surveyors, 1841.)

371 Fifty-one per cent in the Borough, 56.2 per cent in the Parish in 1840.

372 "There is no means of sweeping out the foul air unless you had a species of tornado for each court" (Liverpool Mortality Sub-Committee, 1866, p. 110).

the town centre, the majority of the forty courts off Crosshall and Preston Streets were less than six feet in width.³⁷³

Nineteenth century courts (especially after the 1820s) were laid out with greater regularity than their predecessors (Plates 14, 15, 16, 17, 21, 22, 23, 24). As the larger building grounds of the former open fields became available, streets could be lined with as many as 30 courts. Six or eight houses faced across a 10 to 12 feet wide yard (Plates 19 and 20) which often narrowed to 8 feet at the entrance, sometimes by pairs of privies placed at the court entrance (Plate 15). After 1840 in some areas street houses became physically separated from the adjacent court property and privies were provided in the rear yards of these street houses (Plate 14).

The sanitary debates and health regulations of the 1840s advocated the provision of yards and privies for all working class houses and a few (194 in total) courts mainly in outlying areas were built in this manner. The numbers were not great (6.1 per cent of the Borough total) and by and large back-to-back housing in Liverpool was synonymous with court housing. Ninety-one per cent of the Borough and 93.4 per cent of the Parish's courts were built with back-to-back housing. Leeds,

³⁷³ There were other more individualistic arrangements - 19 courts built in the former backyards of large houses whose main corridor became the court entrance; 27 courts built below the level of the adjoining streets; courts accessible by passages only 2 to 4 feet above the level of the street pavement or passages 5 feet 8 inches in height (Newlands, 1863, Table No. 11).

Birmingham, Nottingham and Manchester (which in the late 18th century had court housing in some respects similar to that of Liverpool's central courts) saw the development of 'street and lane' back-to-back housing. In Liverpool, back-to-backs were never built facing streets. The end of court construction in Liverpool (1847) therefore terminated the erection of back-to-backs at an earlier date than in many other northern towns.³⁷⁴

B. Housing Densities

Housing densities provide a concise quantitative statement of 19th century building standards and place in a broader perspective the examples of court housing given above. An examination of housing density indicates how typical or representative the density of such court housing was of the town's housing as a whole.

Net housing densities for 1841 and 1851 were calculated by reference to the houses enumerated by the Census in those years and by measuring residential acreages on the Gage

³⁷⁴ Manchester had banned them in 1842 but Leeds was still building back-to-back housing in the 1930s (Beresford, 1971, p. 119). In Liverpool, there were a very few 'bye-law courts' built after 1847 which contained houses with yards (e.g., the 'Terraces' off Beloe St., Toxteth) unlike the situation in Hull where the 'bye-law court' became the chief building form (Forster, 1972, p. 21). Formal legislation against back-to-back housing was ensured by Liverpool's adoption of the Local Government Act of 1858 (21 + 22 Vic. c. 98) which forbade the construction of back-to-backs; a clause in the local act of 1864 (27 + 28 Vic. c. 73) also banned back-to-backs in courts (the only type ever built in Liverpool). After 1847, the rulings of the Health Committee, by whom all building plans had to be approved, appears to have effectively outlawed them. The cartographic evidence certainly supports this interpretation.

Plan of 1836 and the Ordnance Survey six inch map of 1848 (Figures 6.3 and 6.4). Only large non-residential land uses were identified³⁷⁵ and in the town centre it was impossible to distinguish 'house-sized' commercial establishments and extract them as non-residential land uses. No allowance was made either for the areas devoted to streets.³⁷⁶ The net housing densities are, therefore, conservative estimates of true residential densities.

Table 6.2, Plates 37 and 38 indicate the number of enumeration districts by density category. The density categories were chosen to represent housing of different types. Housing at less than 40 per acre can be considered as originally intended primarily for non-manual workers.³⁷⁷ Enumeration districts with more than 60 houses to the acre were primarily working class court districts. This density was about the maximum achievable under the early bye-law regulations³⁷⁸ and the density is, therefore, a useful yardstick with which to measure the extent of Liverpool's housing problem by the standards mid-Victorians used themselves.

Seven wards (Table 6.3) as well as 40 per cent of

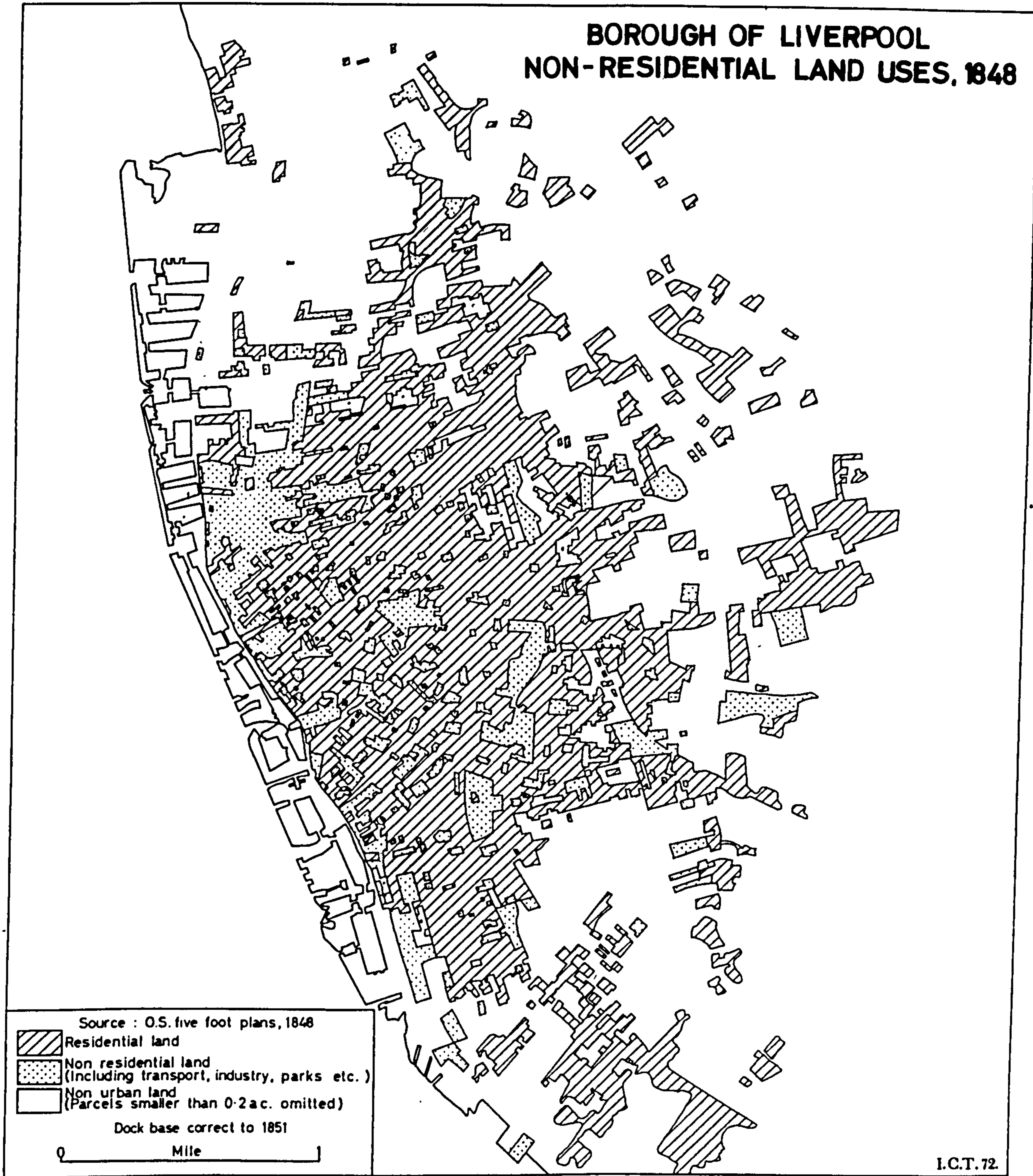
375 A grid of 10 by 10 to the inch squares was overlaid on the Ordnance Survey Six Inch map. Non-residential areas less than 0.1788 acres in size (the area represented by 1/100th square inch) were not considered.

376 Though squares and large paved areas over 0.1788 acres were eliminated.

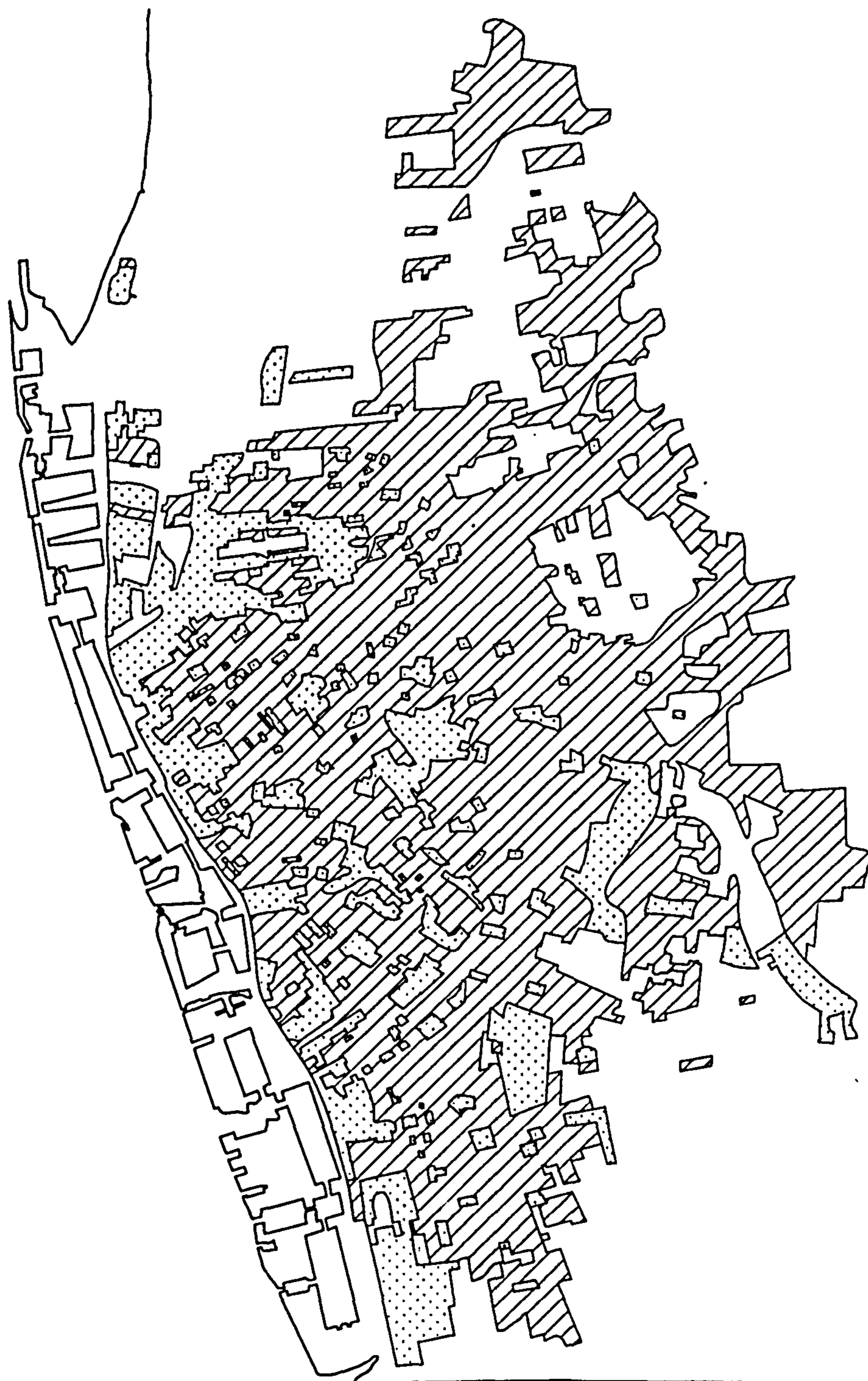
377 Though the enumeration districts in St. Peters and Castle St. wards in this category no doubt include the small commercial premises mentioned above.

378 That is, terraced 'through' houses of 12 feet frontage having a yard and two rooms on each floor, could be built at about 60 to the acre.




FIGURE 6.3



BOROUGH OF LIVERPOOL RESIDENTIAL AND NON-RESIDENTIAL LAND, 1836



Source : Gage's plan, 1836

-  Residential land
-  Non residential land
(Including transport, industry, parks etc.)
-  Non urban land
(Parcels smaller than 0.2 a.c. omitted)

Dock base correct to 1841

0 Mile 1

TABLE 6.2
Parish of Liverpool, 1851
Net Housing Density

<u>Ward</u>	<u>Number of Enumeration Districts</u>					<u>Total</u>	<u>% E.D.s > 60 H.P.A.</u>	<u>% Houses Court Houses</u>
	<u>H O U S E S P E R A C R E</u>							
	<u>0-39</u>	<u>40-59</u>	<u>60-79</u>	<u>80-99</u>	<u>100+</u>			
Scotland	7	12	12	9	7	47	57	38
Vauxhall	2	3	6	5	9	25	80	60
Exchange	2	3	5	2	2	14	64	30
St. Pauls	2	5	6	2	-	15	53	40
Castle St.	3	2	2	-	-	7	29	26
St. Peters	8	1	-	-	-	9	-	21
Pitt St.	5	3	-	-	-	9	-	17
Gr. George	6	5	1	2	1	15	27	31
Rodney St.	14	2	1	-	-	17	6	22
Abercromby	16	3	-	-	1	20	5	21
Lime St.	8	5	1	1	1	16	19	26
St. Annes	5	6	3	5	-	19	42	36
Parish	# 78	50	37	27	21	213	40	
	% 36.6	23.4	17.4	12.7	9.9	100%		32

Source: Census Enumerators' Books, 1851
Residential Acreage from O.S. Plans.

TABLE 6.3
 Liverpool, 1841 and 1851
 Net Housing Densities By Ward

<u>Ward</u>	<u>Date</u>	
	<u>1841</u>	<u>1851</u>
Exchange	59.4	58.0
St. Pauls	59.9	52.0
Vauxhall	70.9	78.2
Lime Street	40.5	36.3
St. Annes	38.9	48.4
Rodney Street	26.6	23.5
Abercromby	28.4	29.5
Castle Street	36.3	42.0
St. Peters	28.2	30.7
Scotland	56.5	61.5
Great George	44.2	39.8
Pitt Street	35.3	32.8
Parish	42.1	42.8
North Toxteth	28.4	33.1
South Toxteth	31.6	50.0
West Derby	9.6	30.8
Everton	7.7	21.6
Kirkdale	8.4	20.0
Borough	29.1	37.3

Source: Calculation from Census Enumerators' Books,
 1841 and 1851.

the enumeration districts in the Parish were built at densities above 60 houses to the acre. The most densely housed districts had over 100 dwellings to the acre (Plate 21). The 21 enumeration districts in this category containing the worst court areas were largely concentrated in Scotland and Vauxhall Wards (Plate 30).³⁷⁹ Enumeration districts were roughly equivalent in the number of houses enumerated, so it could be said that about 40 per cent of Liverpool Parish's housing was built to densities ^{in excess of} ~~above~~ the mid-Victorian standard. In the Parish, this proportion would have represented approximately 14,000 houses with 99,000 inhabitants in 1851³⁸⁰ and as many as 17,000 houses and 114,000 inhabitants in the Borough.³⁸¹

These housing densities were amongst the highest in the country. A correspondent for the local 'sanitary' newspaper observed that, to reduce Liverpool's housing density to that of London, its houses would have needed to be spread over two and one half times the area they actually occupied. From a town of three square miles, the Parish would have been seven and one half square miles at London densities. To make Liverpool "as airy as Birmingham", the area needed would be 10 square miles.³⁸²

The reason for Liverpool's high overall densities

379 Banastre St. enumeration district (off Vauxhall Rd.) was the most densely crowded in the Parish with 236 houses on 1.78 acres (142 per acre).

380 Calculated on the basis of seven persons per house.

381 Based on the estimated population of the overcrowded enumeration districts and a house occupancy rate of 6.73 (Borough average).

382 Liverpool Health of Towns Advocate, 1847, No. 20, p. 186.

lay in the standards adopted in the construction of its court houses. With an average court size of 60 square yards (compared to Birmingham's 700 square yards), to attain Birmingham's standards, Liverpool would have to demolish "3 double rows . . . or 30 cottages . . . and the space between left and thrown into an open court".³⁸³ "The rage of gain" had induced builders to utilise every possible square yard³⁸⁴ and higher space standards would be difficult to attain given the iron law of economics described in the previous section. As the Borough Surveyor stated in answer to a parliamentary question, "If houses were not to be built back-to-back, there would be a great sacrifice of land."³⁸⁵ a reply that produced the scathing comment of Reverend Thom that opened this chapter.

Even to Victorians, Liverpool's housing density was abnormal, a new commercial city which reproduced the crowding of "old walled towns".³⁸⁶ Its population was subject to "a kind of hydraulic press to squeeze the inhabitants into the smallest space"³⁸⁷ land values and profits were the motive power behind the 'press', the consequences of which to the inhabitants trapped within it will be evaluated later (Chapter 9).

C. Standard of Housing Interiors

The minimal space standards adopted for housing

383 ibid. p. 89.

384 Liverpool Domestic Mission, 1836, p. 21.

385 Franklin, 1842, p. 19.

386 Liverpool Health of Towns Advocate, 1845, No. 10, p. 88.

387 Liverpool Health of Town Association, 1845, p. 6.

layouts were reproduced in the interior dimensions of working class housing (Table 6.4). Ground floor plans of between 10 feet to 15 feet square (100 and 225 square feet) were normal, with 12 feet square (144 square feet) perhaps the most common dimension; houses were usually built three stories in height.

The cubic capacity of street houses in three streets surveyed in 1866 ranged from 2210 to 2554 cubic feet; average room sizes ranged from 791 to 944 cubic feet in the ground floor room to from 681 to 804 cubic feet in the upper garret (Plate 28). Court houses were even smaller (2048 to 2372 cubic feet) and room sizes ranged from 752 to 847 cubic feet on the ground floor to from 584 to 708 cubic feet in the garret.³⁸⁸ Within this living area, a certain amount of space was given over to stairs which ran directly from one room into another. In multi-let houses, this meant the passage of upper floor residents through rooms occupied by other families. The two lower rooms had fireplaces but the garret was almost always without one.³⁸⁹

The upkeep of such housing was often poor, occasionally leading to the appalling conditions such as those described by Rev. John Johns in 1836.

" . . . from malconstruction and subsequent misuse, the houses are barely habitable, even by the lowest of the low. Broken stones, and floors, walls matted over with spreading discolouration of dampness, windows chiefly glazed with rags and paper and roofs that keep out too little of the wind and rain - these are some of the common characteristics of the courts in the lower streets of this

³⁸⁸ Trench's letter to Board of Health 18th September, 1866.

³⁸⁹ Liverpool Medical Officer of Health, 1864, p. 30.

TABLE 6.4
Four 'Typical Working Class Streets', 1866
Cubic Capacities of Rooms

S T R E E T H O U S E S

<u>Street</u>	<u>Houses Measured</u>	<u>Average Street House =Size</u>	<u>Average Room Size</u>			<u>Largest Room Size</u>			<u>Smallest Room Size</u>		
			<u>Top</u>	<u>Middle</u>	<u>Basement</u>	<u>Top</u>	<u>Middle</u>	<u>Basement</u>	<u>Top</u>	<u>Middle</u>	<u>Basement</u>
Cavendish	97	2554	804	903	847	1008	1152	1152	660	630	640
Addison	171	2507	728	835	944	864	1008	1152	600	630	720
Hudson	78	2269	681	759	829						
Sawney Pope	94	2210	682	737	791						

C O U R T H O U S E S

<u>Street</u>	<u>Average Court House Size</u>	<u>Average Room Size</u>			<u>Largest Room Size</u>			<u>Smallest Room Size</u>		
		<u>Top</u>	<u>Middle</u>	<u>Basement</u>	<u>Top</u>	<u>Middle</u>	<u>Basement</u>	<u>Top</u>	<u>Middle</u>	<u>Basement</u>
Cavendish	2372	708	817	847	847	968	960	560	560	640
Addison	2254	686	739	829	847	847	867	540	540	792
Hudson	2048	584	712	752						
Sawney Pope	2162	643	721	798						

Note: Capacity measured in cubic feet.

Source: Letter from M.O.H. Trench to Board of Health 18/9/1866.

great and opulent town.³⁹⁰

D. Cellar Dwellings

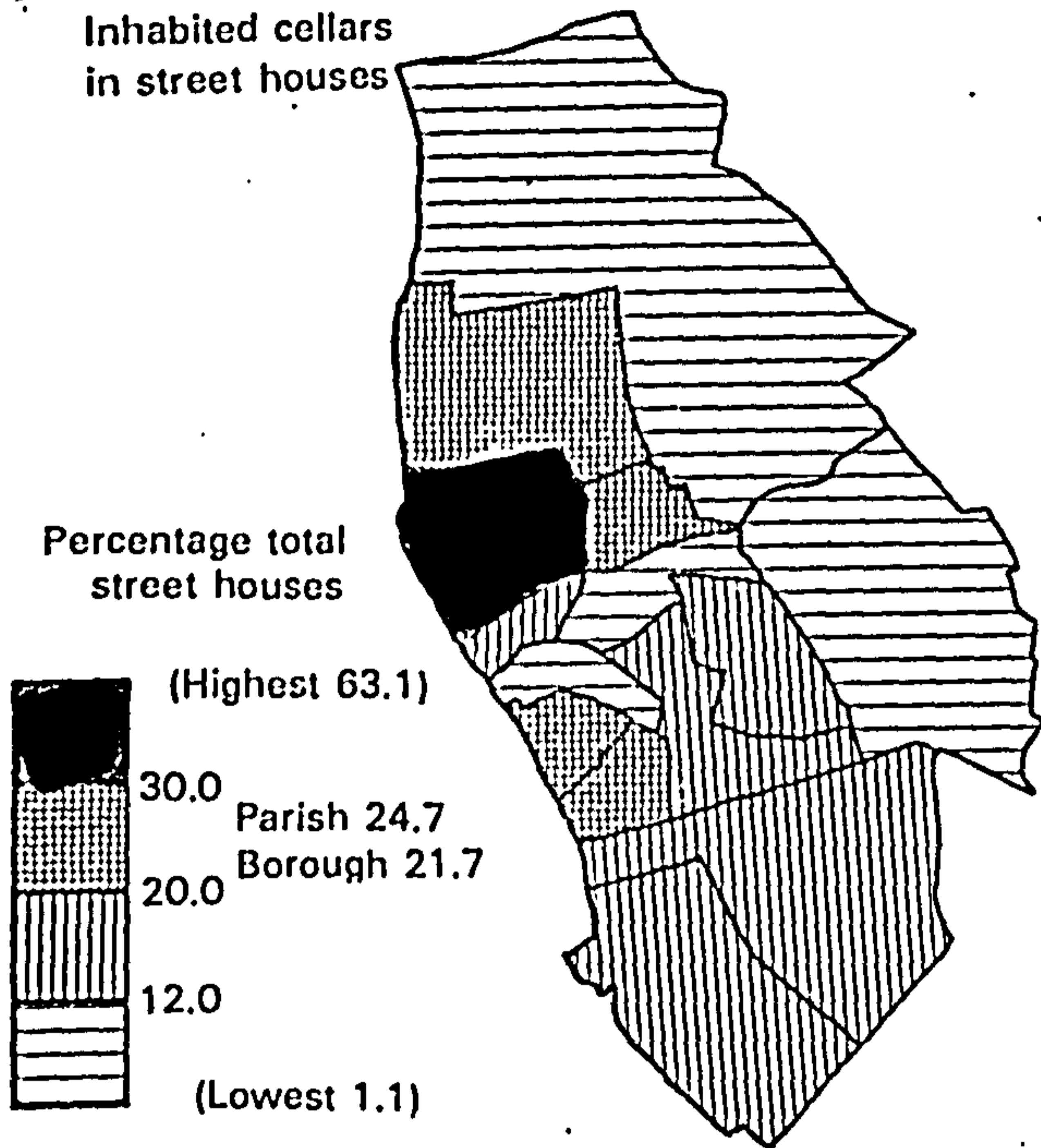
Inhabited cellars were a feature of Liverpool housing that received frequent comment. In 1840, 21.7 per cent of the street houses in the Borough and 24.9 per cent of those in the Parish had occupied cellars accommodating 8.5 per cent and 12.1 per cent of the population respectively. Cellar dwelling was most common in the working class wards of Exchange, St. Paul and Vauxhall where over one third of street houses had them (Figure 6.5 and Table 6.5). Vauxhall Ward had most cellar dwellings (found in 63.1 per cent of street houses) and the southern working class districts of Pitt St. and Great George Wards also had above average numbers of cellar dwellings.

In size, cellars differed little from the rooms above them - though the ceilings were usually lower (often less than 6 feet in height). A large number of houses in the 'old' cellar districts of south Liverpool (see Section 2.3B) had 'back cellars' - a rear alcove or small room used as a sleeping apartment. These rooms had no direct access to the outside, light and air and entering solely through the front cellar.³⁹¹ The majority were probably associated with late 18th and early 19th century building and were not provided in the street/court house complexes where ground areas were generally too limited in

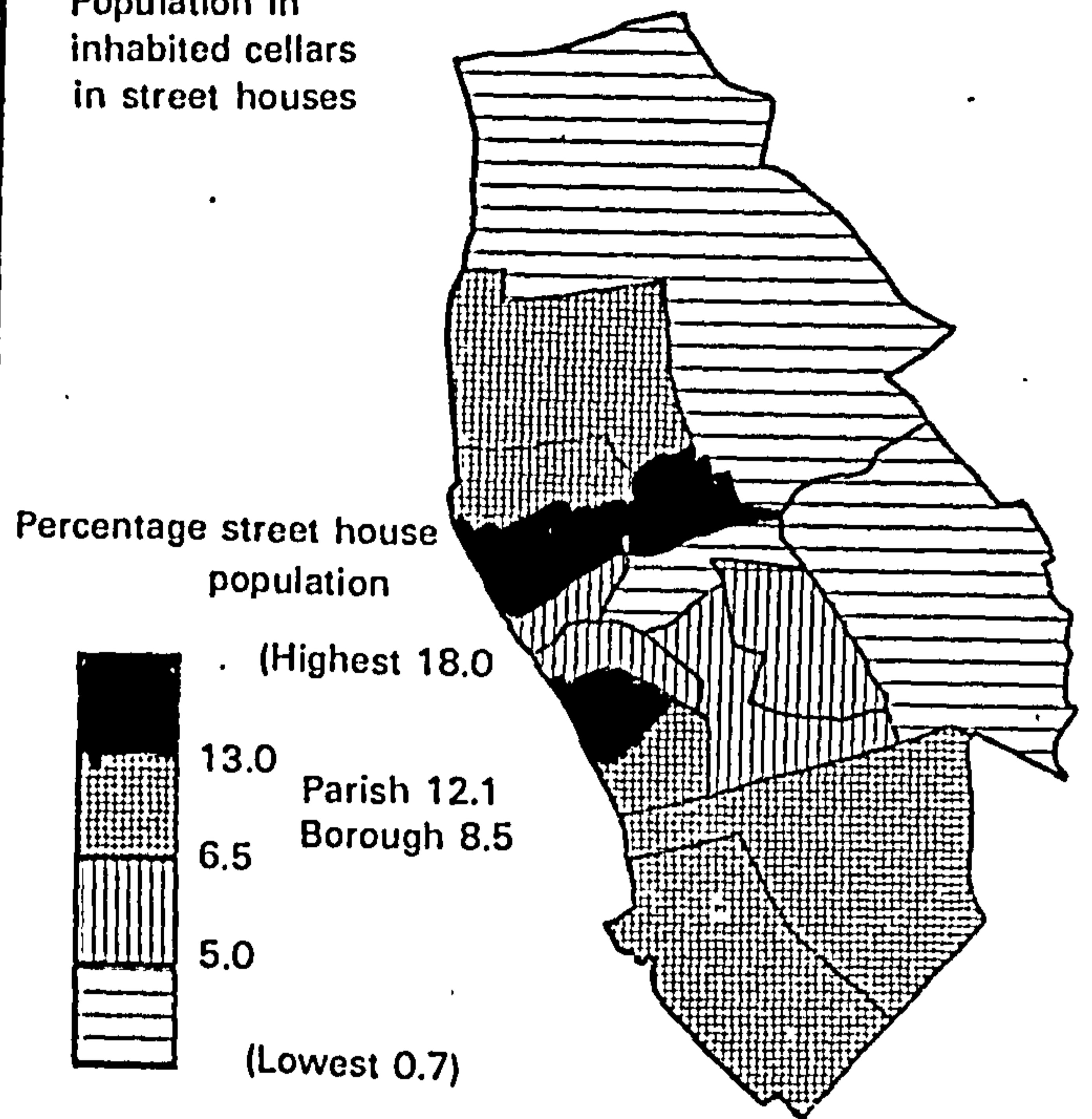
³⁹⁰ Liverpool Domestic Mission, 1836, p. 21.
³⁹¹ Duncan, 1842, p. 284.

Liverpool Borough, 1841: Cellar Dwellings

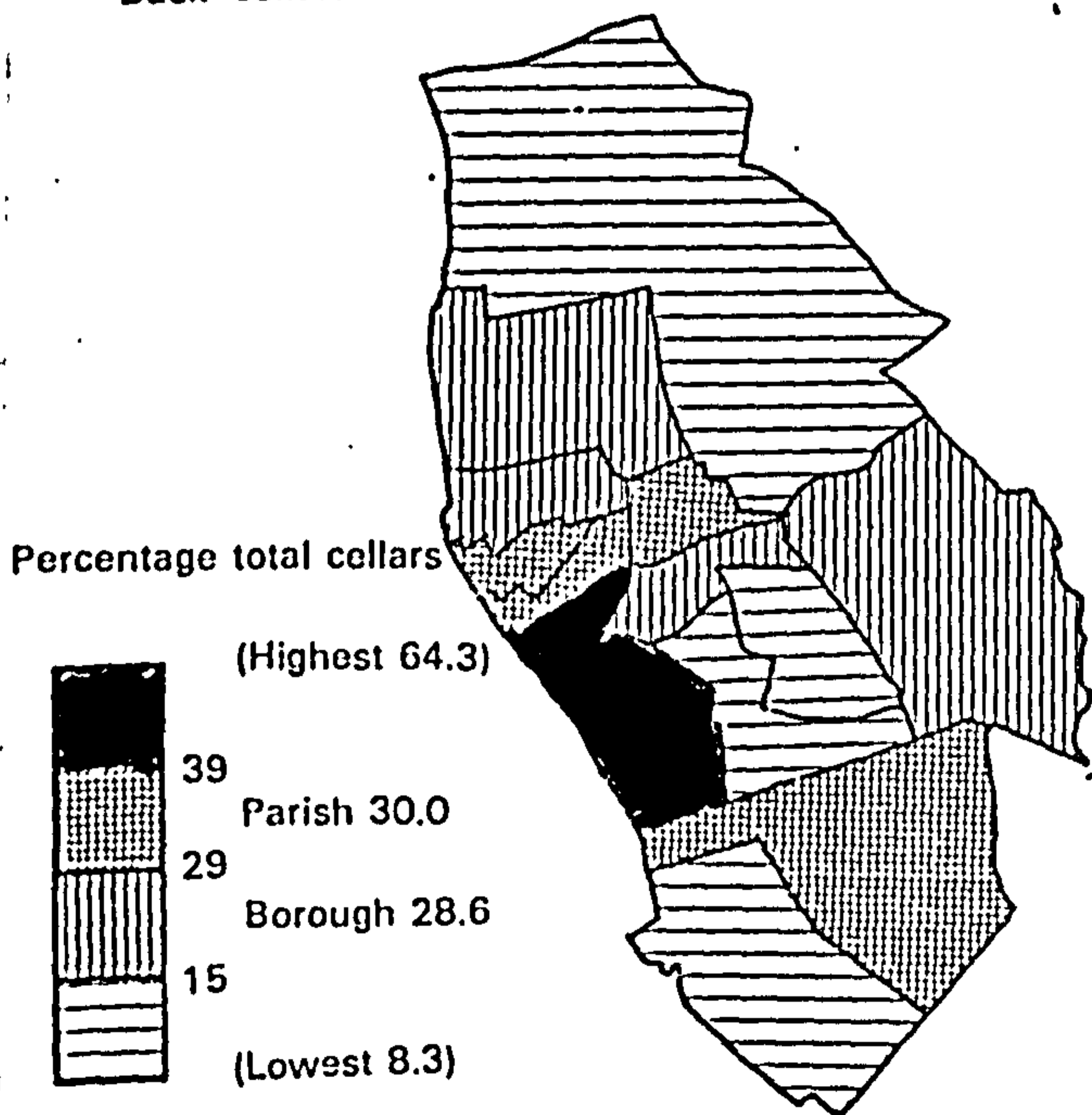
Inhabited cellars in street houses



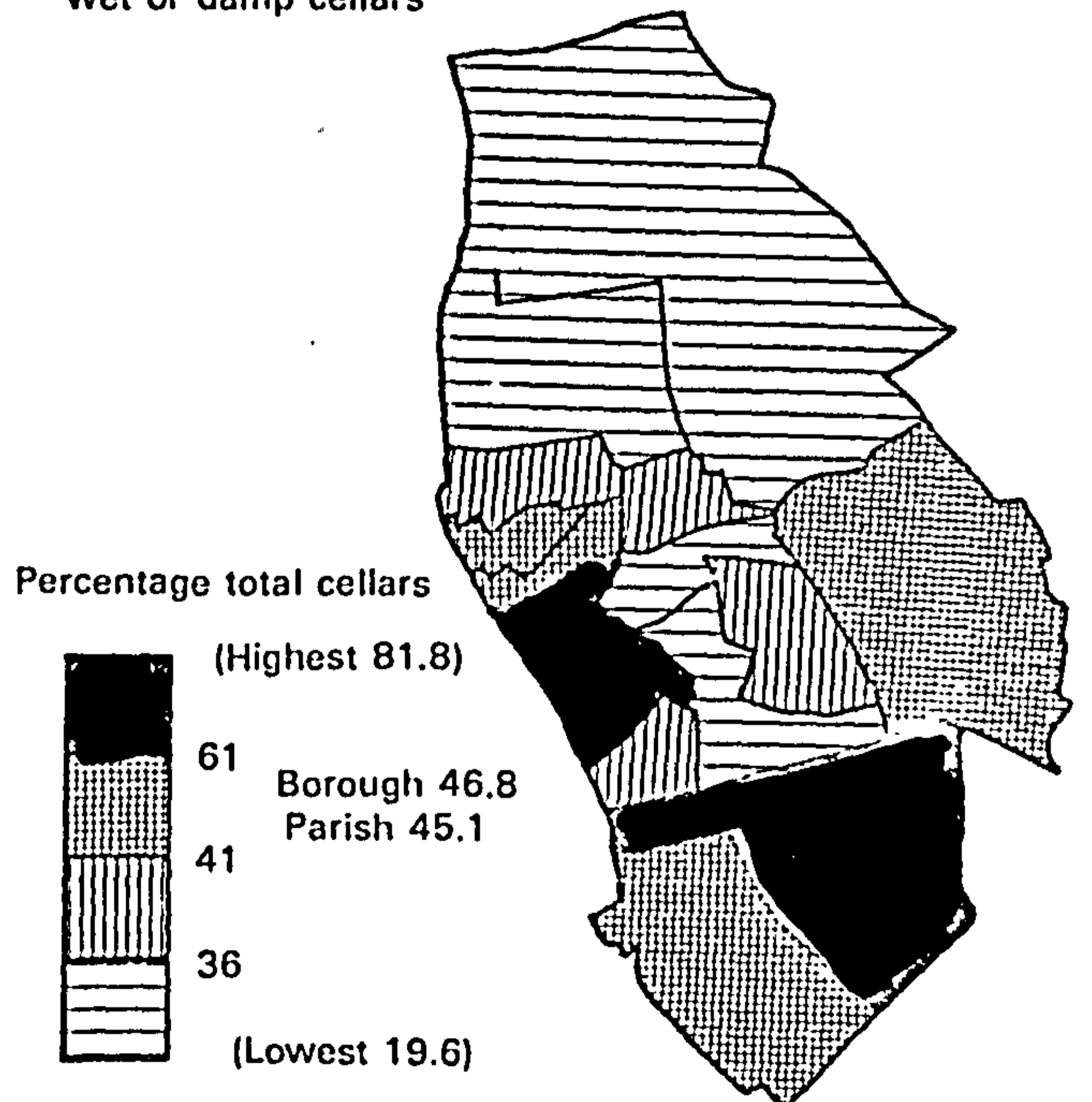
Population in inhabited cellars in street houses



'Back' cellars



wet or damp cellars



'Back' cellars were windowless rear rooms

TABLE 6.5

Borough of Liverpool, 1841
Court and Cellar Dwellings

HOUSING CHARACTERISTICS

<u>Ward</u>	<u>Court Houses as Percentage of Total</u>	<u>Houses Per Court</u>	<u>Cellars in Street Houses</u> %	<u>Cellars in Court Houses</u> %	<u>Cellars with Back Rooms</u> %	<u>Wet/Damp Cellars</u> %
NORTH DISTRICT						
Everton	11.8	7.6	1.1	1.4	8.3	29.1
Scotland	38.8	6.3	24.9	35.5	15.5	35.9
Vauxhall	60.9	5.5	63.1	1.6	22.5	40.3
St. Pauls	40.4	5.0	35.1	1.9	35.4	57.5
Exchange	30.8	3.5	37.9	2.6	38.6	51.4
Lime St. (pt.)	--	5.4	--	0.5	10.2	29.0
St. Annes	35.6	5.9	27.8	3.6	29.3	37.5
W. Derby (pt.)	--	5.0	--	11.4	23.5	23.5
TOTAL NORTH DISTRICT	38.2	5.4	29.7	2.5	26.1	44.0
SOUTH DISTRICT						
N. Toxteth	30.9	7.1	19.5	18.7	31.7	64.1
S. Toxteth		5.8		40.7	12.6	47.3
Gr. George	31.5	6.6	27.2	8.9	39.6	37.5
Pitt St.	17.3	3.9	20.6	7.6	64.3	69.1
Rodney St.	22.0	5.5	13.6	36.2	9.5	19.6
St. Peters	21.2	4.8	11.4	12.0	51.3	63.7
Castle St.	26.2	4.2	15.0	8.0	44.9	81.8
Abercromby	21.0	6.8	14.3	9.1	8.1	37.3
W. Derby (pt.)	--	5.0	--	3.0	25.0	68.4
Lime St. (pt.)	--	5.4	--	7.0	32.2	32.8
TOTAL SOUTH DISTRICT	26.2	5.7	20.8	19.0	31.6	50.2
Lime St.	25.9	--	12.4	---	22.5	31.2
W. Derby	15.3	--	6.3	---	24.7	60.2
PARISH TOTAL	32.5	5.3	24.9	6.0	30.0	45.1
BOROUGH TOTAL	31.5	5.6	21.7	9.4	28.6	46.8

-- Not applicable

--- Not available

Sources: Liverpool Medical Officer of Health, 1847-50, pp.86-7.
Health of the Town Committee, Minute Book, 1 April 1840.

size to accommodate more than a single room.

Over and above the small size of these room dimensions, the cellars were also criticised for their extreme dampness. This problem was mainly structural. To ensure dry conditions, especially in the heavy clays that made up the sub-soil of much of the north end, and the reclaimed river foreshore, cellars needed to be built above gravel-filled foundations and surrounded by an excavated 'area'³⁹² and cavity walls. Although detailed 'archaeological' evidence is lacking, it is plain that virtually none of these precautions were taken. To some extent, building technology, but more commonly considerations of cost, meant that Liverpool cellars were sunk directly into the sub-soil and were separated from it by only 9 inches of semi-porous brick.

Frequently, there was no floor at all, except "the bare earth [but] generally . . . it is flagged and in a very few cases boarded".³⁹³ Almost half of all cellars (45.1 per cent in the Parish, 46.8 per cent in the Borough) were either wet or damp.³⁹⁴ The distribution of wet and damp cellars (Figure 6.5) reflected the state of the sub-soil in the various parts of the town. The wards containing land reclaimed from the Pool where the foundations of buildings were placed in low-lying marine alluvium were especially liable to dampness (for example,

392 This term was used to describe an open set-back that ensured that there was no contact between the outer wall and the sub-soil.

393 Duncan, 1842, p. 284.

394 Liverpool District Surveyors, 1841. p. 135.

81.8 per cent of Castle Street Ward's cellars were damp). To the north, the boulder clays of the former town field (later dug for brick-making) also provided poor sub-soils for cellars.³⁹⁵ The drift-free sandstones of the former town heath to the south and east and of the slopes of Everton were better drained and far less liable to underground dampness. But poorer sub-soils were again encountered on the Liverpool plateau where 60.2 per cent of West Derby Ward's cellars were damp or wet.

Even the 'sub-soil' itself in some areas was of such a quality that any building, let alone cellar construction, should have been disallowed. Borough Engineer, James Newlands, excavating sewer trenches through the north end of the town in the 1860s found the material removed was "the refuse of the gas and chemical works deposited there many years ago" and he described how even after such an interval of time the workmen were almost overcome by the gases and how their shoes and clothing were destroyed by the corrosive chemicals.³⁹⁶ Newlands

395 Damp or wet cellars were spatially correlated with cellars having back rooms ($R = 0.84$) as this type of cellar was an older form mainly found in the inner wards (Pitt St., St. Peter's and Castle St.) where cellars were built on or near reclaimed land.

396 The description fits the area adjoining the former Muspratt chemical works on Vauxhall Rd. Muspratt, 'manufacturer of alkanin' was brought to trial in 1838 "for a nuisance alleged to proceed from his chemical works". ([Muspratt], 1838) The chemical smells combined with those derived from the boiling of dead horses and heaps of manure awaiting shipment by canal to the potato fields of Ormskirk earned the district the ironic name 'Island of Spices'. Picton thought the prosecution pointless and with characteristic Victorian fatalism about 'progress' thought it "vain to strive against destiny . . . when the evil spirit is exorcised . . . seven other spirits even blacker than the first succeed in taking up their abode." He was referring to the subsequent concentration of other polluting industries in Vauxhall (Picton, 1875, Vol. 2, p. 75).

commented that it was 'sad' to think that hundreds of dwellings had been erected on this foundation and had cellars sunk in it. The exhalations from below tarnished metal in a few hours, white paint blackened and food could not be preserved. "Poison below and poison all around" was his comment.³⁹⁷

Surrounding many cellars was soil saturated with human sewage. Often, cellars shared a common wall with tunnel middens, "foul, wet ditches of noisome fetid sewage" which seeped and even burst through cellar walls.³⁹⁸ Duncan also noted fluid from overcharged ashpits seeping into cellars covering the floors and necessitating the digging of 'little wells' to receive it. He witnessed one "filled with stinking fluid" beneath the family bed.³⁹⁹ The Inspector of Nuisances, Mr. Fresh, reported in 1847, that in 6,577 cellars measured by his staff, 2,416 were found with wells of stagnant water in them.⁴⁰⁰ "Slop or waste water"⁴⁰¹ was often carried through the cellars in street houses (presumably from the courts behind) - the water

"being generally conveyed through a wooden trough placed along the wall of the cellar, frequently full of dirt and without covering; the stench arising therefrom must be a great nuisance. In heavy showers during the night, these drains sometimes overflow on the beds of the poor people . . ."⁴⁰²

The majority of cellars were not only small and

397 Newlands, 1856, pp. 51-2.

398 "There is every reason to believe that the accident is a common one." (Medical Officer of Health, Council Proceedings, 1863-1864, p. 46).

399 Duncan, 1844, p. 129.

400 Liverpool Health Committee Minutes, Vol. 1 (1847), p. 233.

401 Presumably 'grey' water and rainwater from roofs.

402 ibid.

damp, but also dark and airless. Many had no windows⁴⁰³ and no direct communication with the outside air except by the door. Some had been sunken so low that the top of the door was below street level. When the door was closed both light and air were totally excluded.⁴⁰⁴ The survey of 1841 found 79 per cent of cellars had floors more than four to five feet below ground level (40.5 per cent in the North District and 53.6 per cent in the South District). Many cellars less than the regulation seven feet from floor to ceiling demanded by the 1842 Act were sunk even deeper into the ground to conform to the Act.⁴⁰⁵ The living environment of the worst of these subterranean dwellings where wetness, dark, and filth coincided, can best be described by an eye-witness:

"Some time ago I visited a poor woman in distress the wife of a labouring man. She had been confined only a few days and herself and infant were lying on straw in a vault through the outer cellar with a clay floor, impervious to water. There was no light nor ventilation in it and the air was dreadful. I had to walk on bricks across the floor to reach her bedside, as the floor was flooded with stagnant water. This is by no means an extraordinary case, for I have witnessed scenes equally wretched; and it is only necessary to go into Crosbie St., Freemason's Row and many cross streets out of Vauxhall Rd., to find hordes of poor creatures living in cellars which are almost as bad and offensive as charnel houses. In Freemason's Row I found, about two years ago, a court of houses, the floors of which were below the public street, and the area of the whole court was a floating mass of putrified animal and vegetable

403 The role of the window tax, repealed in the 1840s, has often been incorrectly blamed for the lack of windows in working class housing, even for the existence of back-to-back housing. However, as only 13 per cent of small houses were assessed for duty (*P.P.*, 1845, XXVIII, p. 645) the lack of windows was more likely due to skimping on materials.

404 Duncan, 1842, p. 284.

405 Liverpool Domestic Mission, 1844 - 1845, p. 10. This gained the owner exemption from the provisions of the 1846 Act and ensured the legal survival of these subterranean non-conformities for another generation.

matter, so dreadfully offensive that I was obliged to make a precipitate retreat. Yet the whole of the houses were inhabited."⁴⁰⁶

6.4. Sanitary Provisions

In addition to the physical characteristics of dwellings, the nature of the associated sanitary facilities - privies, sewers, scavenging,⁴⁰⁷ cleansing, and the supply of water - formed a second important element in determining the quality of the residential environment.

A. Privies

Perhaps most intimately connected with the activities of ordinary life were ~~the~~ privies, 'the necessaries' as the Victorians often called them.⁴⁰⁸ The disposal of human sewage had always been a particular problem in urban areas. Medieval London had made extensive direct use of streams like the Fleet or cesspits and deep privy-middens whose solid refuse was periodically removed by the goungfermors' carts.⁴⁰⁹ The techniques for the removal of human sewage in urban areas had advanced little by the early 19th century. Without systems of sewers, each dwelling or group of dwellings was expected to be able to dispose of its own. In practice, in Liverpool this meant

⁴⁰⁶ Holme, 1845, p. 73.

⁴⁰⁷ This term was commonly used to describe street cleaning.

⁴⁰⁸ The euphemism was not modern, corresponding to the medieval 'necessarium'.

⁴⁰⁹ Sabine, 1934, p. 317.

the excavation of associated midden pits⁴¹⁰ from which the water "is generally allowed to soak into the sub-soil or porous rock in which the excavation receiving the same is made".⁴¹¹

The soak-way 'solution', while satisfactory in areas of low density housing proved wholly unsatisfactory in densely populated cities, even before the adoption of water closets increased the volume of sewage effluent generated. In areas of dense housing, even well-drained ground could not absorb the liquid fast enough and most of Liverpool's working class housing was built on clays of a highly impervious quality. The subsoil beneath and around the pits often became completely soaked with sewage to such an extent that an inspector who exposed the soil in Dublin Court, Carlton St. found "the ground simply super saturated with horrible slime, the stench from which was intolerable".⁴¹²

The 'tunnel middens' built to receive the accumulations of sewage were brick-built chambers constructed beneath the surface of the court sometimes partially beneath the houses themselves.⁴¹³ The removal (at a cost of 6000 pounds per annum) of Liverpool's estimated 160,000 cubic yards of midden contents was until 1847 by private arrangement, thereafter it

410 Holme, 1845, p. 83.

411 Playfair, 1845, p. 92.

412 P.P., 1884-5, XXX, p. 589 (MS number).

413 One example was given of a half acre containing 76 houses served by three tunnel middens each about 150 feet in length by 6 feet 4 inches high by 3 feet wide. In total, their cubic capacity measured 384 cubic yards and their contents given as 225 tons "before thought full enough for emptying" (Medical Officer of Health, Council Proceedings, 1864-5, pp. 46-7).

was the Corporation's responsibility.⁴¹⁴

The nightmen who performed this unenviable task often encountered considerable difficulties in gaining access to the 'bog-holes'.⁴¹⁵ Privies (not water closets) were frequently found indoors in a ground floor room and the inconvenience of having the soil carried through the house led to neglect "until the nuisance becomes too great".⁴¹⁶ For much of the 19th century, the manure collected was piled into massive heaps on 'the Island of Spices' at the canal side in Leeds St. where it was loaded into barges and sold to Lancashire farmers.

Cellar dwellers in street houses were especially unfortunate: without a convenience of their own, they could use the court privies or, as often happened, be tempted into "emptying out their their filth and dirt in the passage up to the court".⁴¹⁷ Privies were usually constructed at the far end of the yard (Plates 20, 26 and 27), but, as open entrance courts became more common, they were also built in pairs at the street entrance leaving a passage between of three feet for the courts' inhabitants to come and go (Plates 15 and 21). Some courts had no privies at all⁴¹⁸ and many had also to serve the street-house inhabitants who had none of their own⁴¹⁹ and any casual passer-

⁴¹⁴ Newlands, 1851, p. 51.

⁴¹⁵ Liverpool District Surveyors, 1841.

⁴¹⁶ *ibid.* Unemptied middens were a common phenomenon (see Liverpool Highway Board, 1845, p. 9). Midden contents were considered the property of the inhabitants and there were disagreements over price and timing of sale (Franklin, 1842, p. 134).

⁴¹⁷ *ibid.*

⁴¹⁸ Playfair, 1845, p. 85.

⁴¹⁹ Duncan, 1844, p. 128.

by.⁴²⁰ The number of persons sharing these court privies was, therefore, very often quite considerable, ranging between 9.7 inhabitants per privy in Pitt St. to 54.8 in St. Peters.⁴²¹ The spatial pattern (Figure 6.1) seems to indicate that with a few exceptions, the newer courts were worst provided, possibly because of the greater number of houses in each court (Figure 6.1).

As a shared facility, the privy was frequently abused⁴²² and were often abominably filthy, ruinous or without doors.⁴²³ This no doubt contributed to the popularity of chamber pots, especially with more decent residents, who were

"unwilling that their girls or women should wend their way on every call of nature to an exposed, unseparated common temple of Cloacina where strangers, drunken and brutal men may also visit".⁴²⁴

The other source of smell and nuisance in courts were the ash pits. There was usually one per court located at its far end: it was a brick enclosure about four feet long, three feet broad and five feet deep.⁴²⁵ Intended only for dry refuse, many inhabitants used the ash pits as a place to empty chamber pots. Like the privies, they too were often the only place for depositing refuse available for the inhabitants of the street houses so that the ash pits were often filled to

420 Franklin, 1842, p. 132.

421 Where many courts had no privy provided. The Borough and Parish averaged about fifteen persons per privy.

422 Franklin, 1842, p. 142.

423 Duncan, 1844, p. 128; Letters to Duncan from Medical Relief Committee, 18 December, 1854 and 28 September, 1854.

424 Liverpool Medical Officer of Health, 1866, p. 30.

425 Holme, 1845, p. 69.

overflowing long before the nightmen made their appearance.⁴²⁶
 The result was that filth was deposited in the corners of the court and this joined the run-off from the pit to "spread a layer of abomination over the entire surface of the court".⁴²⁷
 There were approximately 13,000 of these middens in Liverpool in the 1840s which usage had turned into virtual dunghills within a few feet of ground-floor rooms.⁴²⁸

One of the main reasons for these appalling conditions was the Corporation's attitude that the courts were private property (which indeed they were) for which the landlords and/or tenants were supposedly responsible. The Corporation's only power, prior to 1847, was the ability to issue notices compelling tenants to clean the court.⁴²⁹ Lack of responsibility and ignorance on the part of tenants, landlordly indifference and cupidity⁴³⁰ combined to ensure that "the great numbers of courts inhabited by the lower orders receive little or no cleansing except that which Providence showers from the

426 Duncan, 1844, p. 128.

427 *ibid.*

428 Herbert and Page, 1847, p. v. Without regular disposal, these heaps could remain for months on end. A medical visitor found "fully half a ton of human excrement and vile filth in the corner of a court at the top of Sawney Pope St." (Letter to Dr. Duncan, 18 December, 1854).

429 Aspinall, 1845, p. 80. This notice was difficult to enforce and easy to evade.

430 For instance, possibly as many as half of all courts were never originally paved. Corporation efforts to pave and gully began in 1842 and in three years they had completed or were in the process of doing so in the equivalent of 375 courts (18,016 square yards of paving - Aspinall, 1845, p. 82).

clouds".⁴³¹ The state of Liverpool's courts at mid-century virtually defied description even by seasoned investigators, and casual middle class visitors came away appalled from the experience.⁴³²

B. Sewers and Water

Fundamental to Liverpool's environmental problems was its lack of the basic urban services of sewer and water systems.⁴³³ Prior to the 1840s, both were primitive in the extreme. The twenty-nine miles of sewers inherited and the nineteen built by the Liverpool Highway Board before 1845 were of very limited sanitary utility, "all filth or soil from privies or water closets or any other offensive water being excluded from the public sewers under a penalty".⁴³⁴ They had been designed and built as storm-sewers, they could not be

431 Holme, 1845, p. 71. See also Herbert-Page, 1847, p. 31. In Toxteth Park, it was not until 1842 that any arrangements for cleansing streets was made (House of Commons Committee, 1846, Vol. 104, p. 87).

432 In an interesting interchange with a Liverpool lawyer who attempted to defend the courts of Toxteth Park by a comparison with those of Westminster, Mr. Page affirmed "there is nothing in Westminster so bad as that which we have seen this morning - nothing" (Herbert-Page, 1847, p. 126). See also Parkes-Sanderson, 1871, p. 66 and Maslen, "I never saw such horrible holes or so much filth, no - not in the dirtiest alleys of London before the Improvements" (Maslen, 1843, p. 140). Marcus has made perceptive comments about Engels's description of similar conditions in Manchester ("one of the functions of language honestly used is that it should collapse before such realities", Marcus, 1974, p. 182).

433 For the history of the development of sewers and water supplies, see Appendix 7.

434 Playfair, 1845, p. 92.

'flushed'; traps to prevent odour had not been provided.⁴³⁵ The Commissioners also failed to serve the lower parts of the town and stood accused of providing sewers only for "the large streets, the streets containing the shops and the residences of wealthier classes of society".⁴³⁶

Table 6.6 indicates that working class streets were half as likely to have sewers laid in them than streets occupied by the other classes. The result was that not only did few, if any, courts communicate with the street or sewer by a covered drain but,

"even supposing the courts to be properly supplied with drains these would be comparatively useless from the absence of sewers in the front streets".⁴³⁷

The task of providing this vital underground service after the town was already built would take two decades of expensive sanitary engineering.⁴³⁸

Water was not only needed for drinking, washing, street and court cleansing, but also to meet Liverpool's special requirements for fighting ship and warehouse fires. Again, not until the 1840s did the inadequacy of this service force its

435 Despite the penalties mentioned above, several house drains must have been surreptitiously connected for there were always large amounts of decomposing refuse found when the sewers were opened (Holme, 1845, p. 69).

436 Aspinall, 1845, p. 82. See also Duncan, 1844, p. 129. An argument used by the Commission was that the lower class streets were too narrow to sewer properly (though Newlands managed to later on).

437 Duncan, 1844, p. 129.

438 Between 1848 and 1858 the Health Committee spent 1.1 million pounds on paving, sewerage, and cleansing, 1.5 million pounds on water supplies.

TABLE 6.6
 Parish of Liverpool, 1844
 Streets Sewered by Class of Occupants

<u>Streets</u>	<u>Total</u>		<u>Sewered</u>		<u>Streets</u>	<u>Miles</u>
	<u>Streets</u>	<u>Miles</u>	<u>Streets</u>	<u>Miles</u>	%	%
Inhabited by Working Classes	243	20	56	4	23.0	25.0
Inhabited by Other Classes	323	37.5	179	21.5	55.4	57.3
TOTAL	566	57.5	235	25.5	41.5	44.3

Source: Duncan 1844, p.130

attention on the town and a coalition of sanitary reformers and commercial interests led to a municipal take-over of the utility.

Prior to 1847, water had been supplied by private companies formed in the late 18th century but by the middle of the 19th century their operation had become totally unacceptable and the service was assumed by the Corporation.⁴³⁹ The insanitary state of the courts provided some of the strongest evidence in favour of new water arrangements. Water supplies were limited by the productivity of local springs and wells⁴⁴⁰ and by the capacity of the main water lines. The companies were able only to supply water at irregular intervals. Different areas were supplied at different times but, as there was no regularity of hours, many complaints were made by residents, especially those supplied with water at 5 and 6 a.m. The length of time over which water was supplied was less than an hour at a time and on occasion no more than three times per week. Landlords were responsible for paying water rates and if payments were not made, the water supply was cut off and remained so until the bill was paid.⁴⁴¹

⁴³⁹ 10 and 11 Vic (1847) c. 261. The Corporation had previously taken over the powers of the Commissioners under its 'Sanatory' Act of 1846 (9 and 10 Vic, c. 127).

⁴⁴⁰ Eleven wells at five stations were operated by the Liverpool and Harrington Waterworks Company and one by the Commissioners. The Bootle Company supplied one million gallons and the Liverpool and Harrington Company 1.8 million gallons per day - a total daily consumption of about 10 gallons/day/resident.

⁴⁴¹ In 1845, Sumner's Court, Banastre St. had been without water for twelve months and another court in the same street had had none for three years (Liverpool Highway Board, 1845, p. 22).

The companies maintained that the system of intermittent supply was not unusual in the country at that time. Given these conditions, they felt it was the responsibility of the landlord to supply cisterns which would fill when the supplies were turned on, thus ensuring greater availability of water for tenants.⁴⁴² However, some witnesses believed that the supply was insufficient to meet the needs of a court full of houses even if cisterns were supplied.⁴⁴³ Only three per cent of courts were so supplied (Table 6.7); 17 per cent had but a single stand pipe outside, some had no water pipes at all.

With an intermittent water supply, the poor had to make do as best they could.⁴⁴⁴ With barely enough water for cooking and drinking, it was hardly surprising that little was used for personal hygiene or cleaning. Indeed, the water companies' employees considered the latter activity a gross misuse of water.⁴⁴⁵ Even the filth left after the visits by the nightmen could not be removed for days because of a lack of

442 This was the system adopted in the better class houses but it implied a considerable investment of capital which would not have needed to be expended if a constant pressure were to have been maintained (Aspinall, 1845, p. 84).

443 Liverpool Highway Board, 1845, p. 49. The argument was a hypothetical one. There was no room for cisterns in Liverpool courts except above the privy where it was felt (with some justification judging from the descriptions above) that this was not the best location.

444 Begging for water by the poor was common as there were no free water pumps in the town before 1843. Any householder found supplying water to anyone else could be fined and his water cut off for non-payment.

445 Some women in Summerseat who washed the front of their doors and were told they would not be supplied the next time "considering they were wasting the water" (Liverpool Highway Board, 1845, p. 27).

TABLE 6.7
Borough of Liverpool, 1846
Water Supply to Courts

	<u>Liverpool and Harrington Company</u>	<u>Bootle Company</u>	<u>Total %</u>	
	NUMBER OF COURTS			
	1576	608	80.9	By a separate pipe to each dwelling.
	323	129	16.7	By a stand pipe outside.
	<u>41</u>	<u>20</u>	2.2	By cisterns
TOTAL	1940	757		

Source: [Herbert and Page], 1847, pp.viii, xi, 139.

water.⁴⁴⁶

The evidence of 'the water debate' of the 1840s showed that

"No efficient system for ensuring habits of cleanliness amongst the poor could be carried into effect without an ample supply of water."⁴⁴⁷

The 'habits of the poor' had, however, been formed under an environment in which there was no water for hygienic purposes. The continued difficulties that Liverpool faced in securing a reliable water supply persisted until the 1870s but the construction of a reservoir at Rivington (opened 1857) improved the situation immensely⁴⁴⁸ and this determination to provide a public supply of clean water was a major tactical manoeuvre in the war on dirt and disease.

6.5. Conclusion

This chapter has analysed the physical characteristics of Liverpool's housing in the 19th century. While it is premature to pass judgement on the relative changes in housing standards before consideration is given to the manner of occupancy of the dwellings (Chapter 7), it is possible to draw certain conclusions about the nature of Liverpool's housing compared with that of other 19th century towns and also to give an indication of some housing trends which appeared evident in

446 ibid. p. 25.

447 Liverpool Health of Towns Advocate, 1845, p. 334.

448 Even Rivington's capacity was quickly outstripped and the dry years of 1865 and 1866 again reduced water supplies to two hours a day with a consequent catastrophic effect on death rates.

Liverpool in the first half of the 19th century (Table 6.1).

In terms of housing density, the overall net housing density for the Parish was 42.8 houses to the acre (37.3 in the Borough) in 1851. Comparable figures are not available for other towns but it is apparent from the comments made by knowledgeable contemporaries that, compared with other places, typical Liverpool housing was very crowded and very small. The reason for this apparently lay in the cost of urban land which was amongst the highest in provincial England. These land values reduced allotments of land that did not generate revenue (streets, court yard, etc.) to an absolute minimum, a situation which resulted in far higher average cottage property densities than elsewhere (though again detailed comparative data are absent).

The frequency of cellar habitation noted in the late 18th century (Chapter 2) persisted and even increased in the 19th century and helped produce housing of especially low standards. These minimal housing standards were worsened by their juxtaposition with primitive and sparse provision for basic sanitation. Cellar dwelling was entirely absent from many northern industrial towns and even Manchester's notoriety was derived from a cellar population one quarter the size of Liverpool's.⁴⁴⁹ It is apparent that on this score too, Liverpool's housing was among the worst in the country.

⁴⁴⁹ Adshead, 1842, p. 14. Preston, Hull, Glasgow, Stockport also had substantial numbers of cellar dwellings in the early 19th century.

In terms of changing standards, there is little indication of improved levels of housing provision in the 60 years after courts began to be built in Liverpool in the 1780s. Court houses built were very similar in dimension throughout the period, though there was a tendency towards a slightly more generous layout of the courts themselves as archway entrances became less common after the 1820s. More significant (and this will be dealt with in greater detail in the next chapter) there was a failure in all but one of the decades in the first half of the 19th century for housing to keep pace with population growth. From the point of view of changes in the physical characteristics of Liverpool's housing, there seems to be little support for an 'optimistic' interpretation and plenty for one of 'no improvement'. In a rapidly growing town such as Liverpool, the failure to improve the poor housing standards of the late 18th century in some senses represented a 'worsening' of conditions. By mid century, a population four times as large as that 60 years earlier was living in housing conditions no better than those of the late 18th century.

Chapter 7

DWELLINGS OF THE LABOURING CLASSES

"Upon telling my Inspector that in London they ruled 400 cubic feet as the legal space in a sleeping room, he at once shrewdly remarked, 'In many rooms in Liverpool then, the mother will not only have to separate from her infants, but will have to leave her husband half-way out in the stair'."⁴⁵⁰

It was not only in its physical characteristics that Liverpool's housing standards reached levels that dismayed social reformers, indeed, as investigators sometimes took pains to point out, the 'class' of inhabitants and the manner in which the dwellings were occupied, played a considerable role in the creation of the slum.

7.1. Multi-occupancy

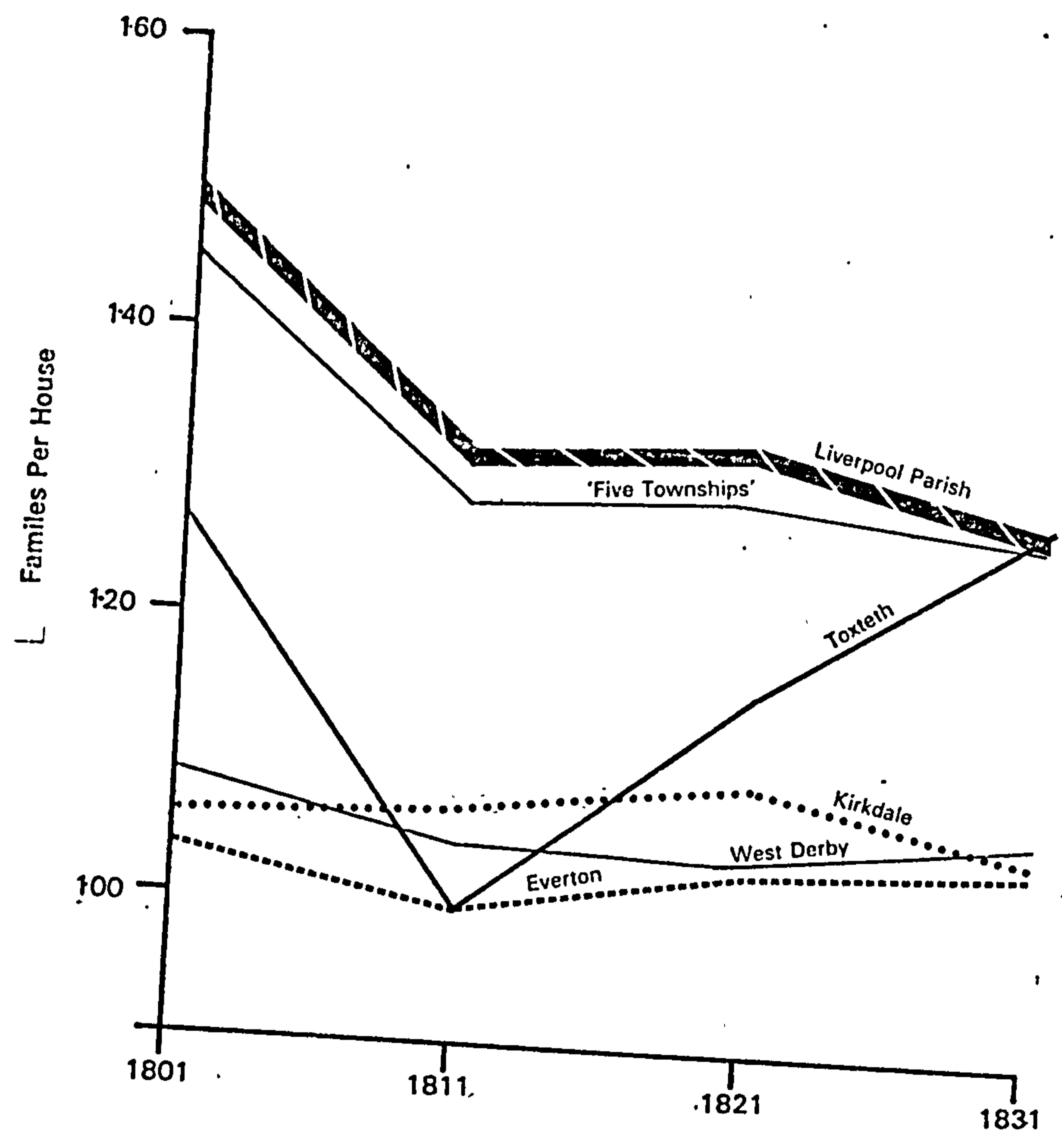
The occupation of small dwellings by more than one family or by the acceptance of large numbers of individual lodgers reduced residential space standards to levels unacceptable even by mid-Victorian standards. Our knowledge of this pressure on dwellings is limited in the pre-1851 period by inadequacies of census data. One measure (that of 'families per house') seems to indicate a decline in shared dwelling (Figure 7.1) but, given the uncertainty of definitions employed by the early census takers,⁴⁵¹ It is not clear that this can be

⁴⁵⁰ Liverpool Medical Officer of Health Trench, Letter to the General Board of Health, 18 September, 1866.

⁴⁵¹ There is, however, a close correspondence between the average numbers of families per house in the Parish 1811 to 1831 (1.32, 1.33, 1.29) and the average number of census 'households' in 1851 (1.31). No information about 'households' or 'families' was published in 1841.

Liverpool and District, 1801-31

Families per House



Source: Censuses ;

interpreted as a decrease in overcrowding (especially given the general rise in house occupancy rates from 1811 onwards (see Figure 7.7)). The Census of 1851 attempted a clearer definition of households and though it did not publish any tables based on the unit, access to the enumerators' books allows detailed calculations to be made.

The census defined a standard of 1.1 households per house as designating an undesirable multi-occupation level.⁴⁵² The Parish and Borough averages in 1851 were 1.31 and 1.28 households per house respectively, so Liverpool as a whole clearly lay well above the national level of shared dwellings. 37 per cent of the Borough's enumeration districts exceeded 1.3 households per house (Table 7.1) and several entire wards in the inner fringe attained very high levels of multi-occupancy. In Pitt St. Ward, 77 per cent of the enumeration districts had averages of more than 1.5 households per house (the Ward average was 1.64) (Figure 7.2).⁴⁵³

A special sample of 22 'fever streets' in 6 wards (Table 7.2)⁴⁵⁴ during 1864 showed averages of 1.81 families per street house and 1.52 per court house for all the streets. The worst street, Sawney Pope Street, averaged 11.17 persons and 2.93 families per street house and 7.93 persons and 1.38 families per court house. The 22 sampled streets as a whole

⁴⁵² Census 1851, Condensed Edition, Tables 10 and 11.

⁴⁵³ The larger houses of the failed middle class development of the 18th century (see above Section 2.2A) were ideal for subdivision (Duncan, 1844, p. 154).

⁴⁵⁴ Liverpool Medical Officer of Health, 1864, pp. 34-5.

TABLE 7.1
 Liverpool Borough, 1841 and 1851
 Overcrowding by Enumeration District

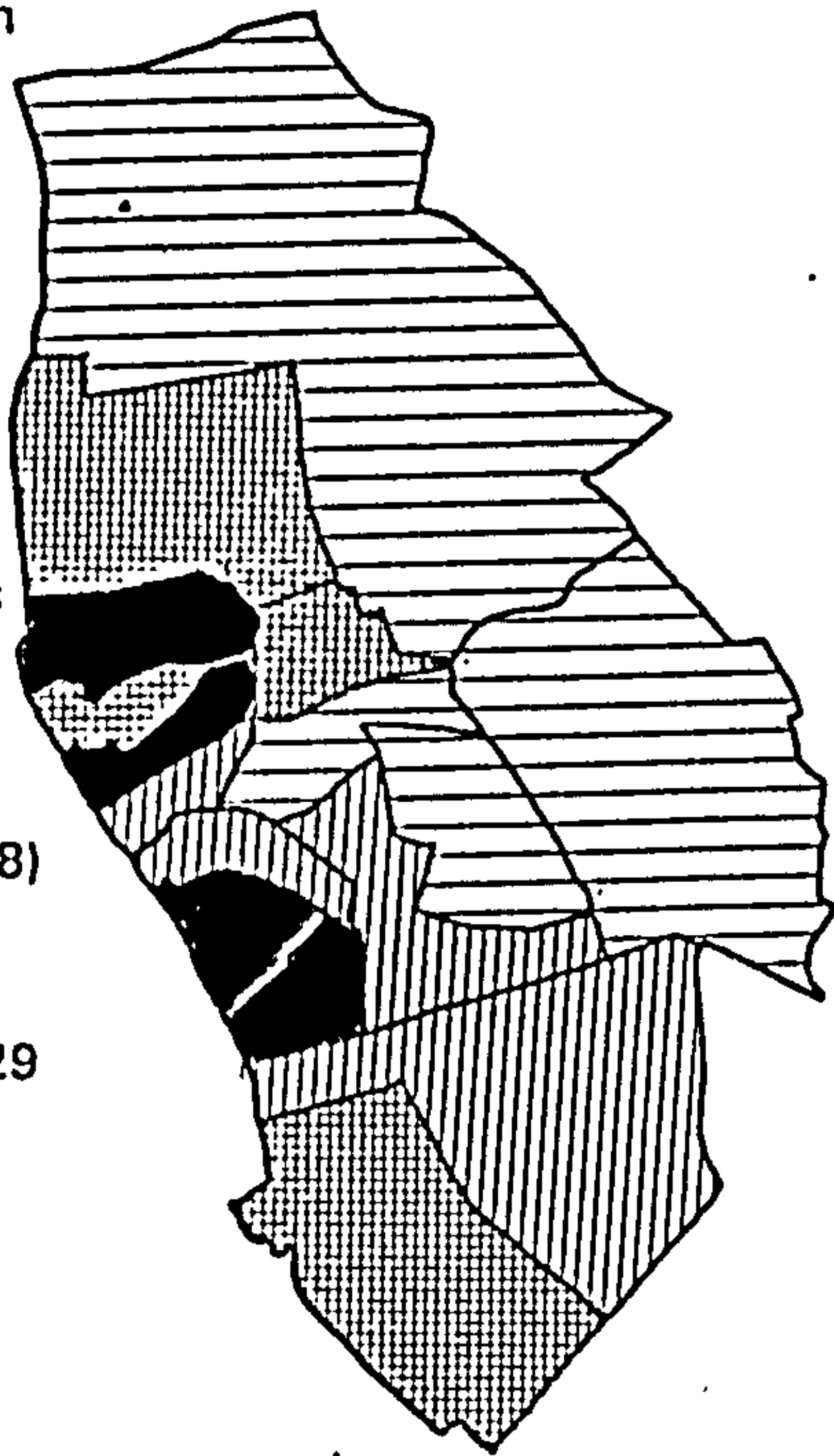
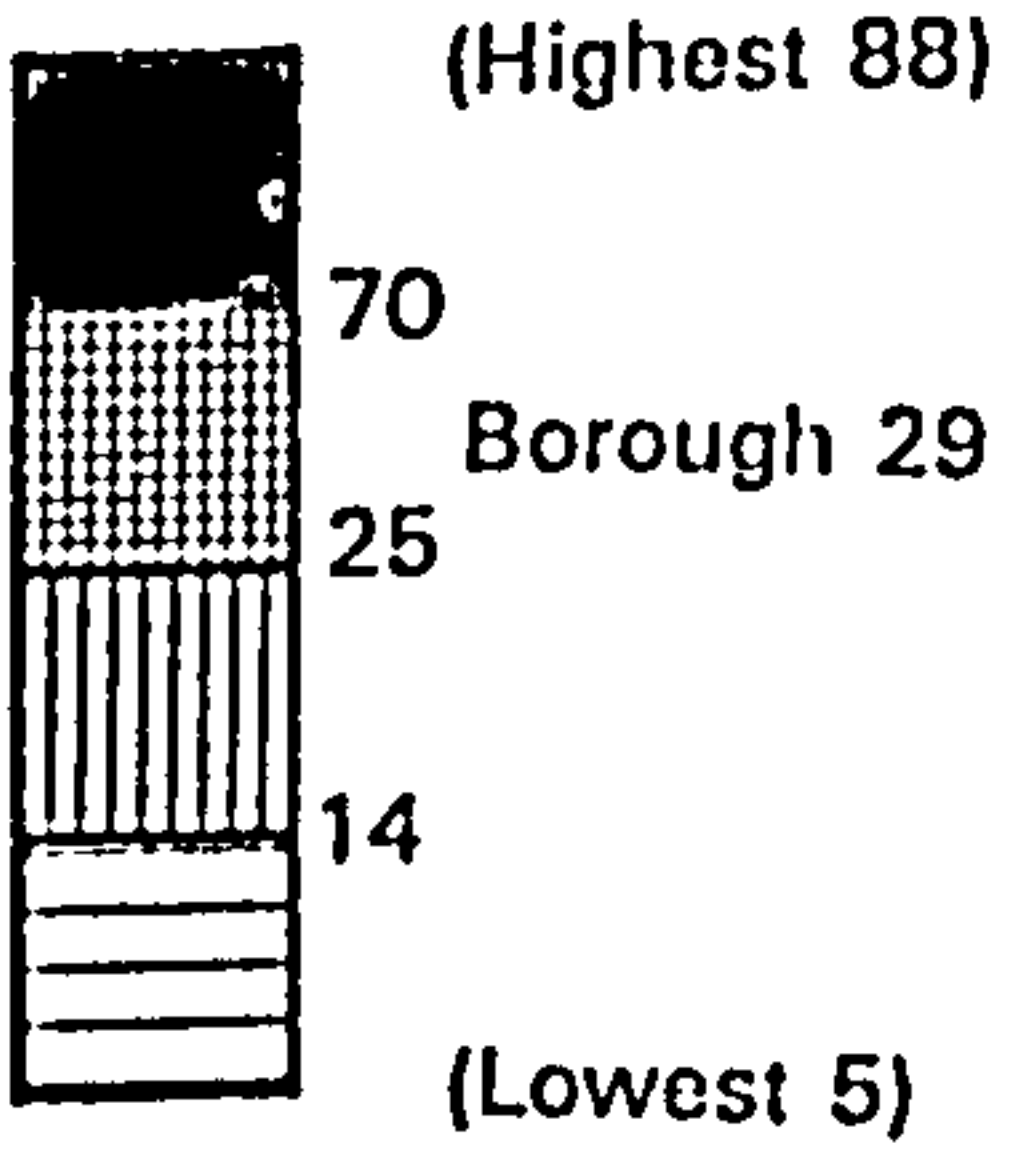
Ward	1851			Percentage of E.D.s Having		Percentage of E.D.s Having	
	E.D.s Having			7 Persons Per House		500 Persons Per Acre	
	1.3-1.49, Households	1.5, Per House	1.3	1841	1851	1841	1851
Scotland	34	19	53	20	38	32	34
Vauxhall	36	24	70	54	60	62	56
Exchange	50	21	71	86	79	50	50
St. Pauls	26	26	52	53	33	29	27
Castle St.	-	14	14	8	43	22	-
St. Peters	11	11	22	47	55	13	-
Pitt St.	11	77	88	78	100	17	11
Gr. George	33	40	73	42	53	32	20
Rodney St.	18	6	24	8	18	-	-
Abercromby	10	10	20	7	15	7	5
Lime St.	6	-	6	10	-	5	6
St. Annes	21	5	26	11	21	11	16
N. Toxteth	20	4	24	8	14	30	16
S. Toxteth	26	22	48	19	26	46	35
Everton	16	-	16	3	3	-	6
W. Derby	5	-	5	12	5	3	-
Borough	22	15	37	27	29	25	21

Source: Computer Tabulation of 1851 Census Enumerator's Books
 For class intervals see Appendix A6.4

Liverpool, 1851: Multiple Occupation of Dwellings

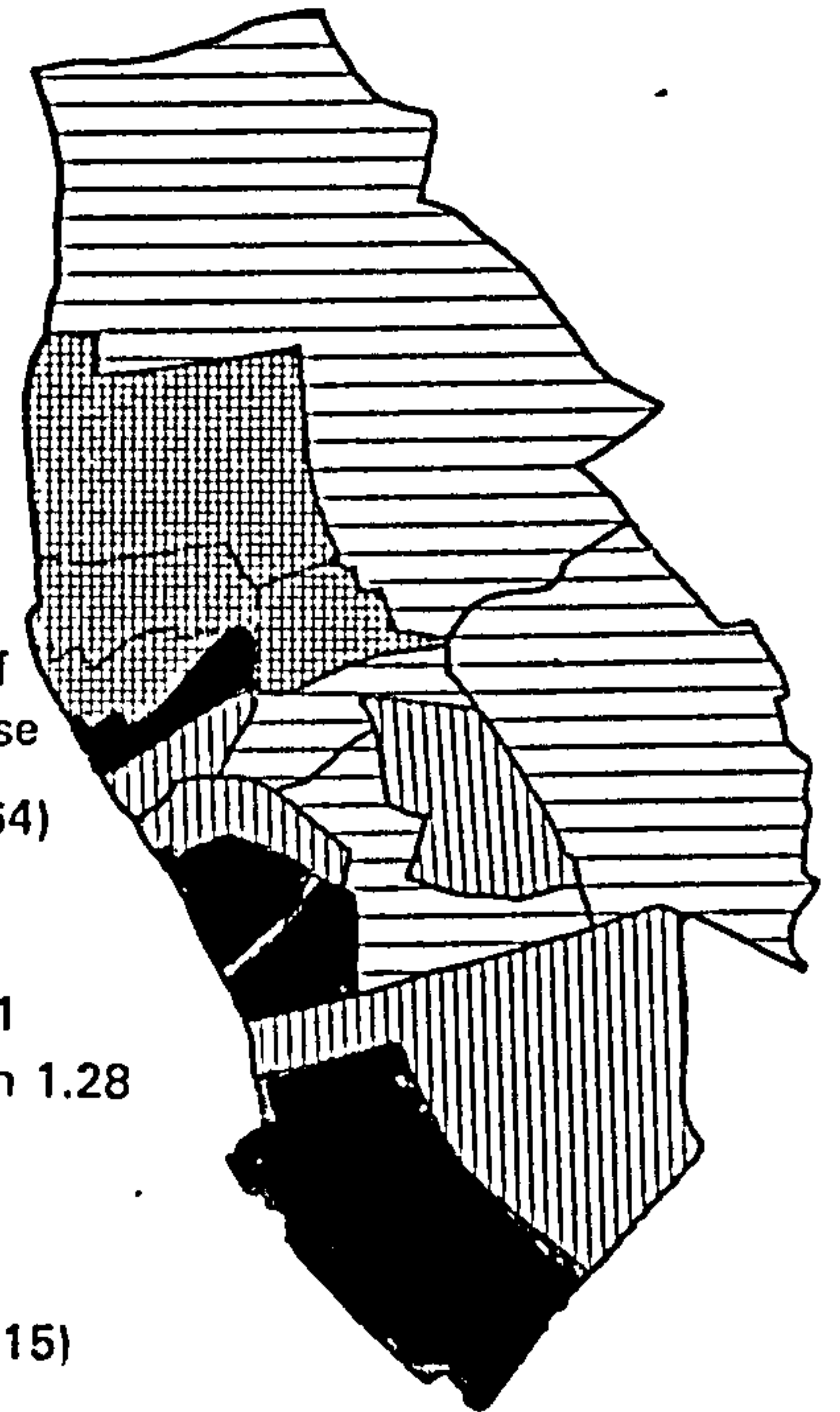
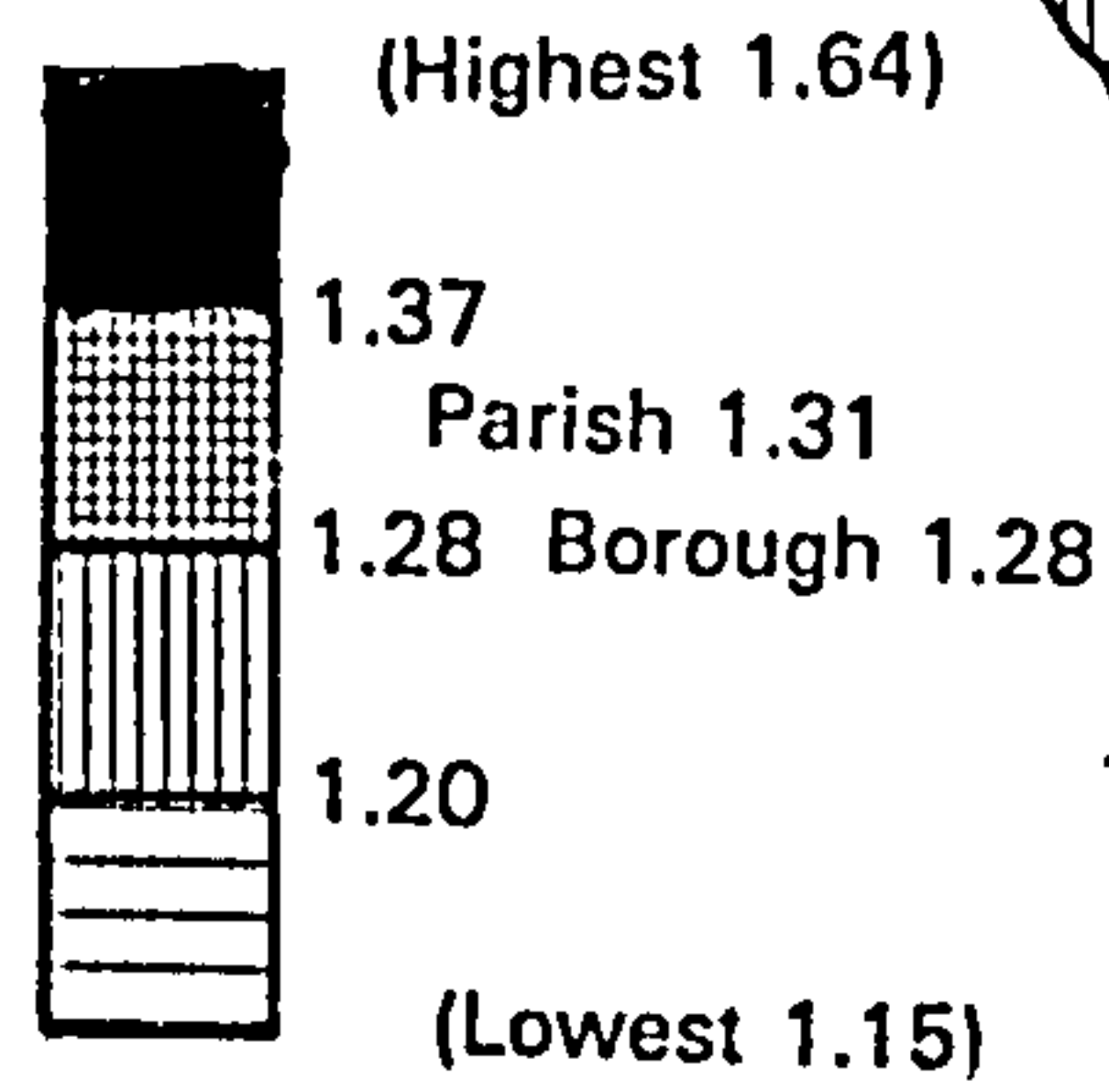
Multiple Occupation of Dwellings (A)

Percentage of E.D.s with more than 1.3 households per house



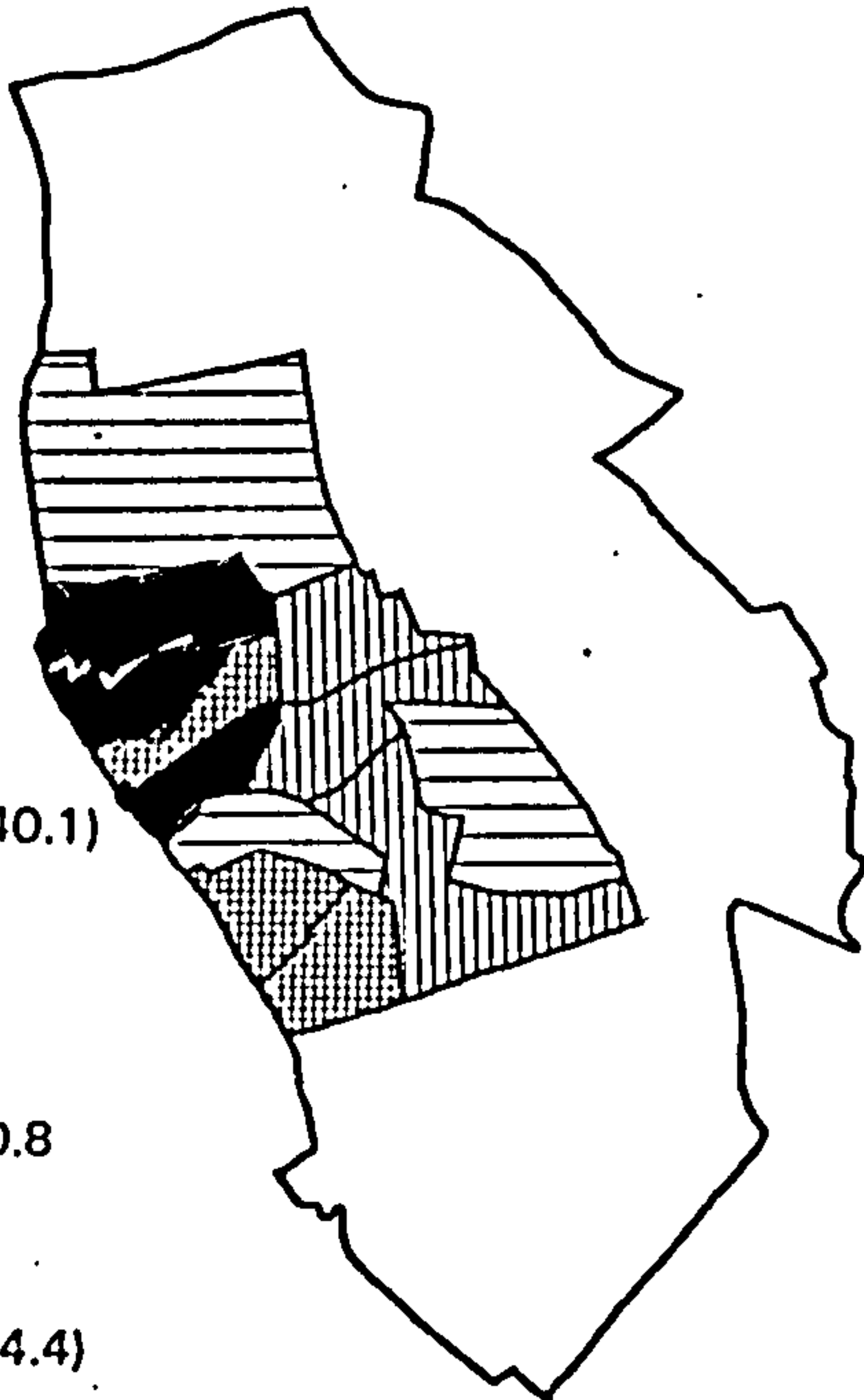
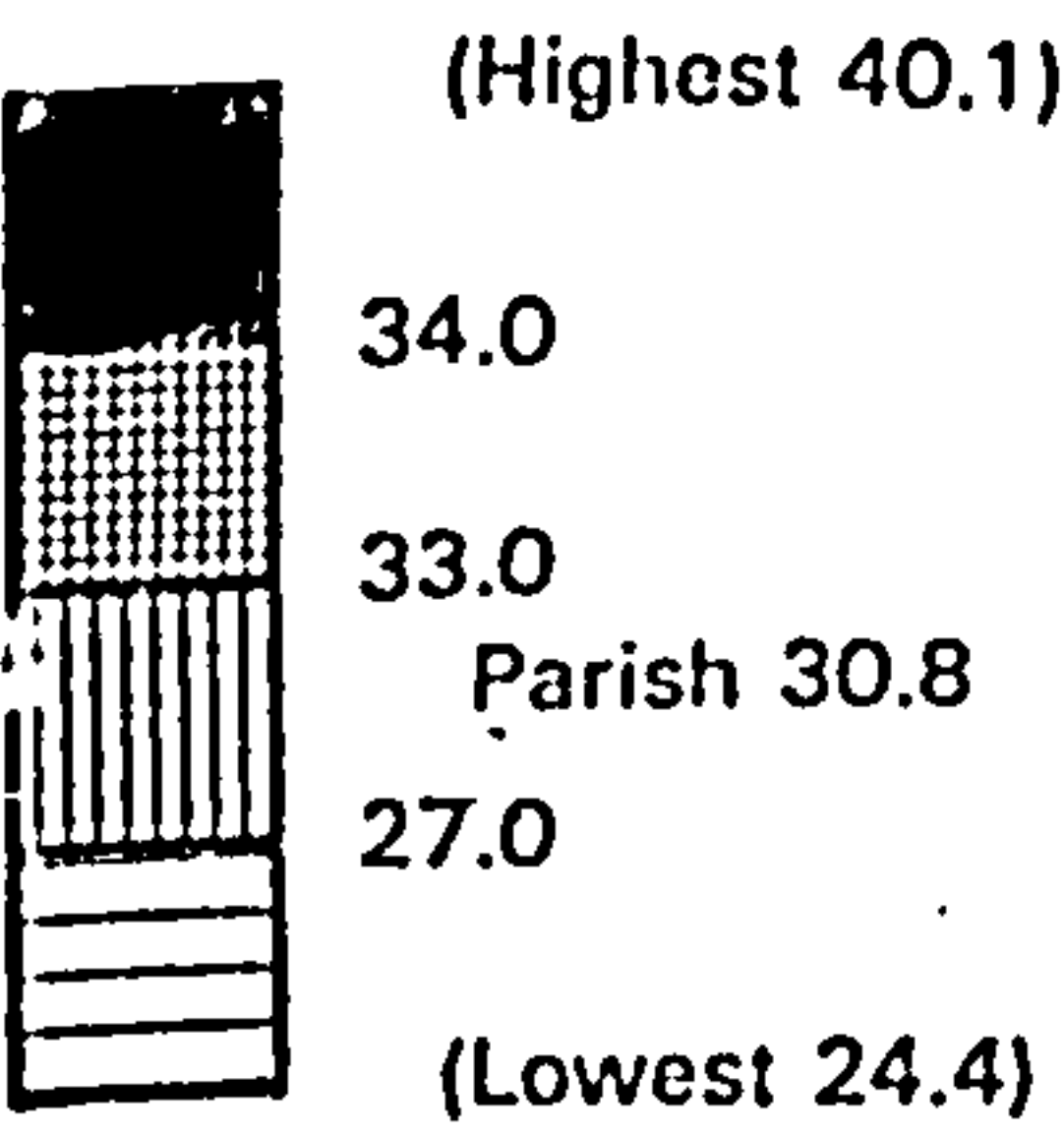
Multiple Occupation of Dwellings (B)

Average number of households per house



Households with lodgers

%



Households with more than four lodgers

%

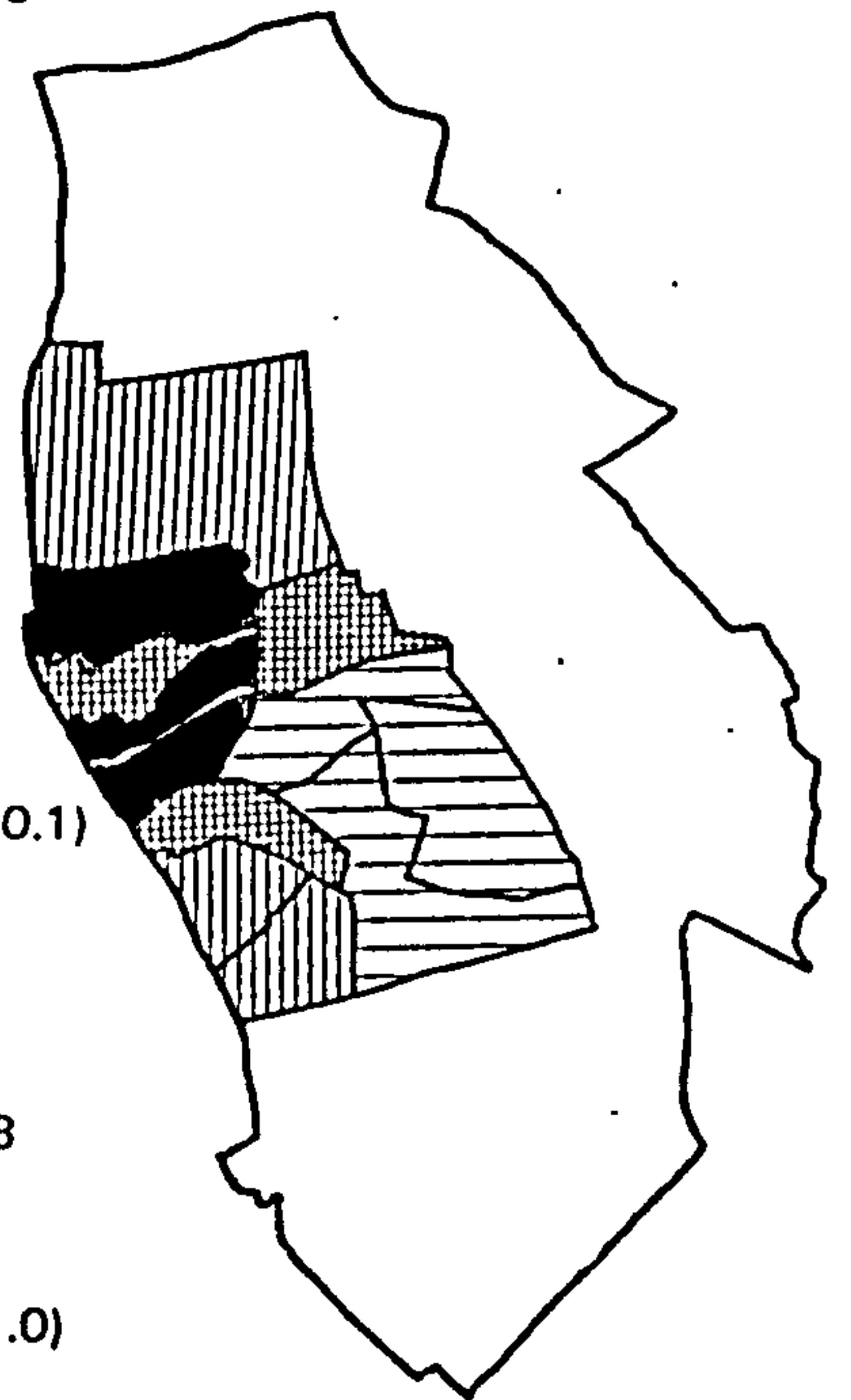
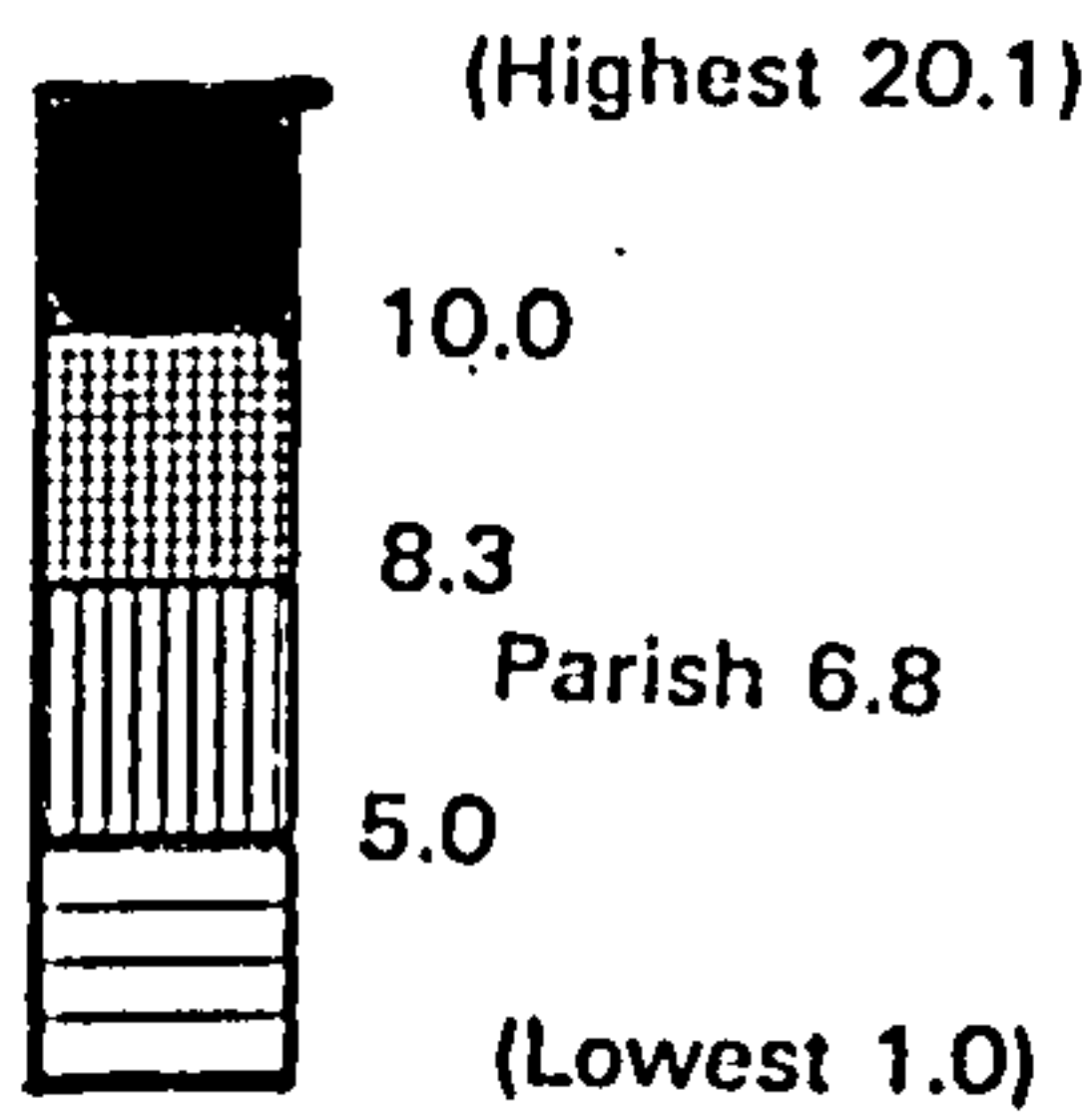


TABLE 7.2
 Liverpool, 1864
 Multi-Occupancy and Overcrowding in Some of the Worst 'Fever Streets'

<u>Street</u>	STREET HOUSES				COURT HOUSES			
	<u>Persons/House</u>	<u>Families/House</u>	<u>Persons Per Room</u>	<u>Persons/House</u>	<u>Families/House</u>	<u>Persons Per Room</u>		
Kew	8.56	2.34	2.25	5.90	1.51	1.97		
Westmoreland	9.81	2.59	1.97	5.42	1.56	1.64		
Blackstock	5.69	1.37	1.94	7.27	2.16	2.38		
Sawney Pope	11.17	2.93	2.33	7.93	2.14	2.64		
Cavendish	8.19	1.93	2.38	5.39	1.50	1.80		
Addison	10.19	2.26	3.08	8.33	1.95	2.78		
Norfolk	7.46	2.02	1.55	4.69	1.37	1.56		
Albert	7.55	1.77	2.42	7.17	1.68	2.41		

Note: The M.O.H. commented that the return was based on a visit during the day and that this "never accurately shows the real amount of overcrowding that exists at night." Twenty-two streets are named in the original table.

Source: Medical Officer of Health, 1864, pp.34-5.

averaged 2.14 (street houses) and 1.92 rooms per family (court houses); 1.8 (street houses) and 2.0 persons per room (court houses). The houses in Sawney Pope Street provided only 1.6 rooms per family (2.3 persons per room) in street houses, 1.4 rooms per family (2.14 persons per room) in court houses.

7.2. Lodging Houses and Lodgers

Co-residents in a shared house were called 'lodgers' but the term 'lodging house' was usually restricted to places offering shelter paid for by the night. These penny-a-night doss houses catered to the indigent migrants and a drifting population of otherwise homeless individuals.

In the enumerators' books, such nightly lodgings are difficult to differentiate from the more decent weekly lodgings (where the family may have boarded with the occupier). This arrangement, in turn, must have shaded into that of a

'separate household' as identified by the Census.⁴⁵⁵

'Lodgers' constituted 14.2 per cent of the sample population of the Parish and 30.8 per cent of households had one or more 'lodgers' within them (Table 7.3). Most households which had 'lodgers' generally had only one (30.8 per cent) or two (24.0 per cent) and only 6.8 per cent had four or more. These figures can be compared with those of Anderson and Armstrong and indicate that Liverpool had rather more households with 'lodgers' (30.8 per cent) than did Preston (23 per cent) or York (21.3 per cent) and more households with large numbers of 'lodgers'.⁴⁵⁶

455 An 'occupier' in 1851 was defined as either a resident owner or any person who paid rent, whether (as a tenant) for the whole of a house or (as a lodger) for any 'distinct floor or apartment'. It is clear that this distinction was evident to Liverpool enumerators from the statistical differences between multi-occupied houses of south end wards and the greater frequency of 'lodging' in the smaller court houses of the north end (see Figure 7.2). But it is apparent that 'lodgers' could be found both as part of the 'census family' (in which case the relationship to the household head was stated to be 'lodger') or as a separate 'occupier' sharing a house but paying rent to another 'occupier'. My analysis accepted the categorisation as utilised by the Census with the modifications suggested by Anderson, 1972, p. 134 *passim*. The term 'lodgers', therefore, includes those who, in the mind of the enumerators, were not separate occupiers, together with those who shared table ('boarders') with the occupier. Inverted commas are used when referring to census 'lodgers' to emphasise the fact that the term is a technical one.

456 The comparable figures are: Preston 41 per cent one lodger; 28 per cent two, 4 per cent more than 6 (Liverpool, 6.2 per cent), 1 per cent 12 or more (Liverpool, 1.6 per cent). (Anderson, 1972, p. 47) However, Liverpool's substantially higher multi-occupancy rate (31 per cent as against 23 per cent of households sharing a house in Preston) indicates a greater amount of a different form of lodging. 21.3 per cent of households in the York sample had lodgers (though Armstrong's definition is probably wider than that of either Anderson or myself [See Armstrong, 1974, p. 180].)

TABLE 7.3
Parish of Liverpool, 1851
Lodging Households

<u>Ward</u>	<u>Proportion of Households With</u>				
	<u>Any</u>	<u>1-3</u>	<u>4-6</u>	<u>> 7</u>	<u>> 4</u>
	<u>Lodgers Per Household</u>				
Scotland	26.0	21.1	3.4	1.4	4.8
Vauxhall	33.7	22.2	8.1	3.3	11.4
Exchange	40.1	20.2	12.8	7.3	20.1
St. Pauls	37.2	28.6	4.4	4.0	8.4
Castle Street	34.6	24.1	8.2	2.5	10.7
St. Peters	24.4	15.8	4.8	3.6	8.4
Pitt Street	33.4	26.7	6.6	-	6.6
Great George	33.4	25.5	6.3	1.7	8.0
Rodney Street	32.1	31.0	0.5	0.5	1.0
Abercromby	27.3	23.9	3.0	0.5	3.5
Lime Street	32.1	28.0	4.2	-	4.2
St. Annes	27.7	23.7	3.3	1.5	8.8
Parish	30.8	24.0	4.9	1.9	6.8

Note: Totals may not add due to rounding.

Source: 1851 Census Sample.

While in a definite minority, lodging houses having large numbers of lodgers were not insignificant.⁴⁵⁷ In total, 12.5 per cent of all 'lodgers' were housed in lodgings having ten or more 'lodgers' and these crowded and squalid premises were singled out for particularly harsh criticism by reformers. Nightly lodgers were found packed in as tightly as space would allow⁴⁵⁸ "sometimes lying on the floor merely littered with shavings or straw".⁴⁵⁹ Many slept in cellars on bare earth "presenting a picture in miniature of the Black Hole of Calcutta".⁴⁶⁰ Nine-tenths of these low lodgings were run by Irish⁴⁶¹ and they mainly catered to Irish transients or emigrants, especially in the period of the Famine Migration.⁴⁶²

Several of these lodging houses were encountered in the census sample.⁴⁶³ All were headed by Irish and five were specifically for emigrants. A three-roomed court house in Regent Street with fifteen Irish emigrants was headed by a widowed Irish lodging housekeeper; another in the same street accommodated twenty-five Irish emigrants and a third (in the same enumeration district) fifty-seven Irish emigrants. Number 10 Lace Street (three rooms and a cellar) was occupied by two

457 In fact, 2.4 per cent of total lodging houses had more than ten lodgers.

458 Duncan, 1844, p. 131.

459 Playfair, 1845, p. 88.

460 Duncan, 1844, p. 132. The cellar referred to contained 30 inhabitants and its cubic capacity would have barely provided one quarter the air necessary for respiration if the effects of carbon dioxide poisoning were not to be felt.

461 Of whom 29 per cent unable to write (Duncan, 1851, p. 63).

462 Of 620 lodging houses eventually registered under the 1846 Act, 149 (40.2 per cent) were for emigrants. (*ibid.*)

463 There were nine such 'quasi-institutional' households sampled, which housed more than twelve lodgers.

246 = 40.2%

households, one consisting of eight Irish of whom six were lodgers, the other, 21 Irish of whom 16 were lodgers. Details of 8 of the latter households went unrecorded, presumably because they had left before the enumerator arrived.

Lodging provided a source of income for many families but particularly those headed by females (Table 7.4).⁴⁶⁴ Female headed households were the most likely to have had any lodgers and were especially common in households with more than three lodgers.

Statistical measures of lodging proved to be highly intercorrelated with low social class and Irish families (Figure 7.3). Irish households and households in semi- and unskilled occupations were especially prone to have large numbers of 'lodgers'. The presence of 'lodgers', in turn, strongly influenced the size of the household.⁴⁶⁵ Lodging was commonest in the 'inner fringe' wards with Vauxhall and St. Paul's having the highest proportions (Figure 7.2). Households with a few, mainly 'genteel', lodgers were also fairly common in the middle class wards of Abercromby (27.3 per cent) and Rodney

464 Some examples were provided in an 1864 report. No. 9 Trueman St. paid seven shillings per week rent, its 8 sub-let rooms occupied by 18 people produced 16 shillings and 6 pence for the female tenant. No. 19 Sawney Pope St. paid 7 shillings and 6 pence rent while its 6 rooms occupied by 20 people produced 10 shillings and 3 pence for its tenant (Liverpool Medical Officer of Health, 1864, p. 28). This sharing of dwellings was difficult to control by owners and "a great number" were "very indifferent . . . so long as they get their rent." (Liverpool Mortality Sub-Committee, 1866, p. 145).

465 Class 5 households having lodgers were highly correlated with average persons per household ($r = 0.72$); percentage of population Irish born was correlated with households having more than three lodgers ($r = 0.84$).

TABLE 7.4
 Parish of Liverpool, 1851
 Number of Lodgers by Household Head: Index

<u>N=</u>	<u>Household Head</u>	<u>Number of Lodgers</u>			
		<u>None</u>	<u>Some</u>	<u>1 - 3</u>	<u>> 3</u>
3626	Male	1.03	0.92	0.93	0.88
779	Female	0.82	1.40	1.33	1.63
58	Male Absent	1.03	0.94	0.91	1.04
16	Head Absent	1.43	--	--	--
4479	TOTAL	1.00	1.00	1.00	1.00
	%	69.2	30.8	24.0	6.8

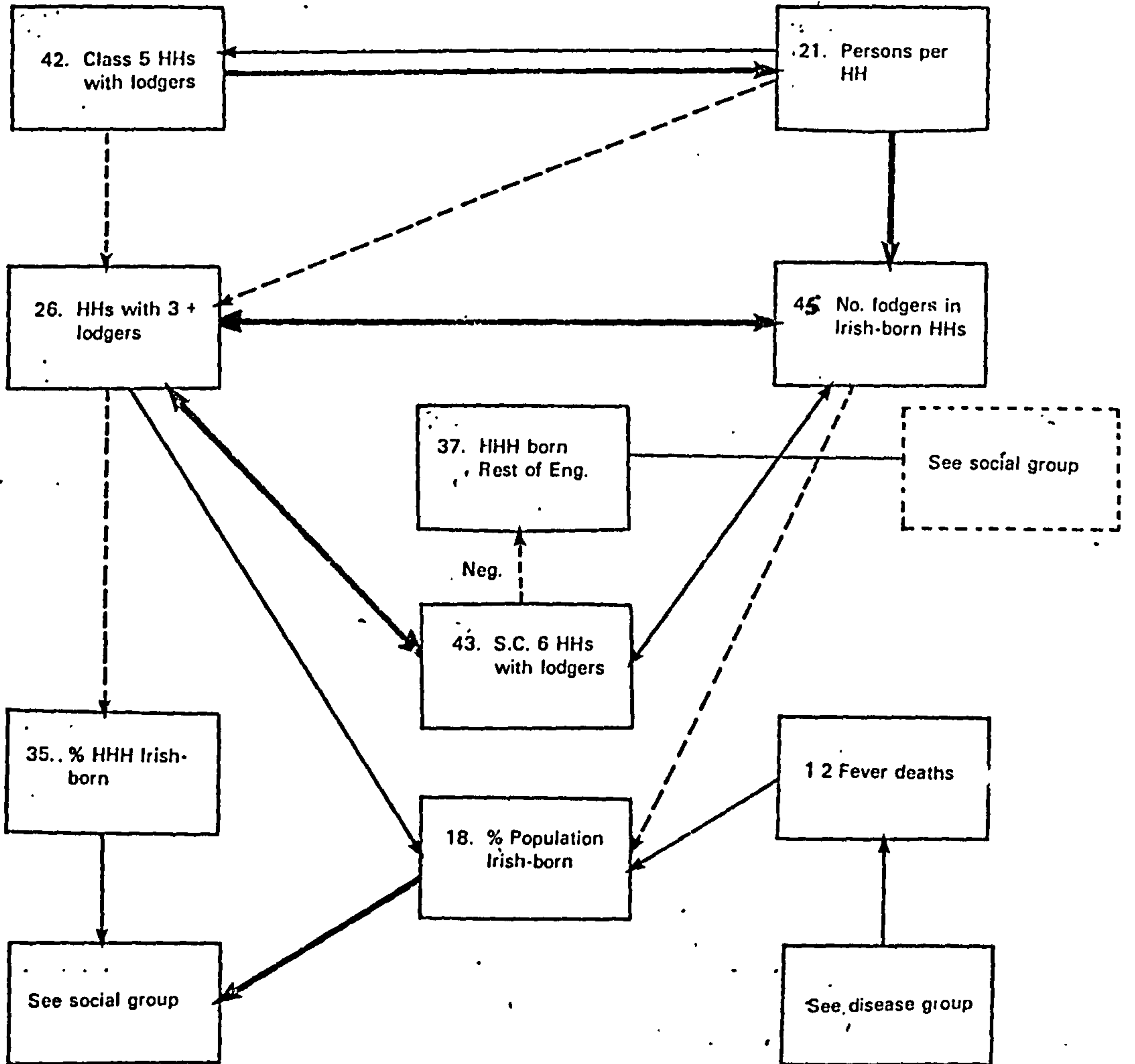
Explanation of Index, see Section 5.1

-- Not statistically significant.

Source: 1851 Census Sample.

Mid-Nineteenth Century Liverpool

Correlations of Lodger group Variables



→ First Order Correlation
 → Second Order Correlation
 - - - Third Order Correlation (if above r = 0.4)

St. (32.1 per cent). The distribution of households with more than four lodgers emphasises the social distinctions between the 'genteel' lodger and the lodger who was a 'tramping' artisan or labourer. Only one per cent of Rodney Street's households had more than four lodgers, while 20.1 per cent of Exchange's were similarly constituted.

7.3. Inhabited Cellars

In street houses, 12.1 per cent of the population of the Parish lived in cellars in 1841 (Table 7.5).⁴⁶⁶ Though the numbers occupying cellars were rarely as great as the extreme examples mentioned by sanitary reformers,⁴⁶⁷ ~~cellar~~ occupancy levels were almost twice those of the rather smaller rooms above (3.75 persons per cellar in the Borough). Indeed, until their bad press of the 1840s, cellars were often considered preferable to multi-occupied houses. Cellar dwellings at least gave residents their own front door - a privilege denied to those living in the openly accessed rooms above. A cellar was usually occupied by a single family though in the inner core, where average occupancy levels rose to more than four persons per cellar (Figure 7.4), lodgers were also

⁴⁶⁶ Liverpool District Surveyors, 1841.

⁴⁶⁷ Duncan, for instance, cites one example of 30 people occupying a single cellar (Duncan, 1844, p. 132).

TABLE 7.5
Borough of Liverpool, 1841
Court and Cellar Dwellings

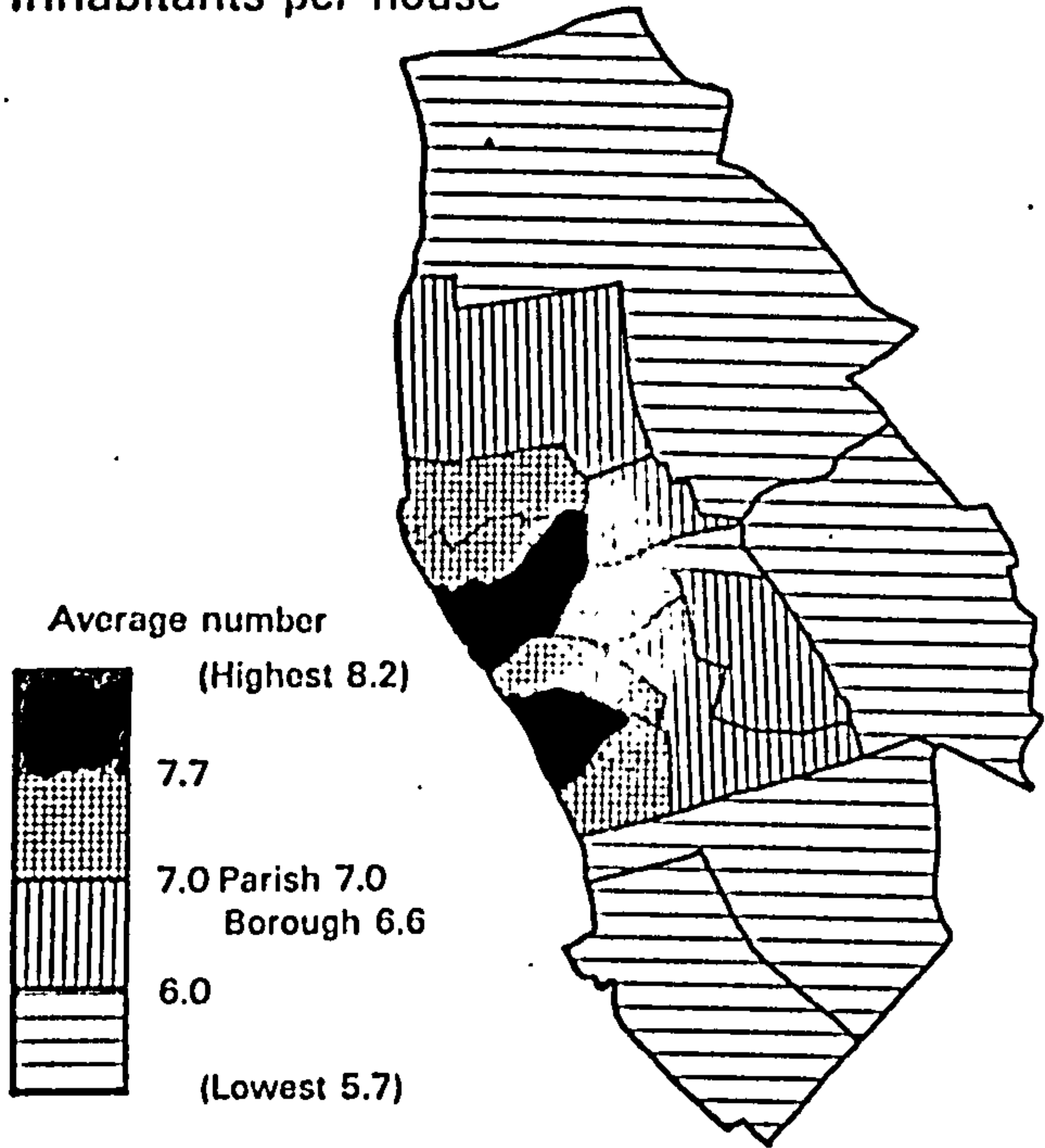
<u>Ward</u>	<u>Court House Population</u>	<u>Street House Cellar Population</u>	D W E L L I N G C H A R A C T E R I S T I C S				
			<u>House</u>	<u>Street House</u>	I N H A B I T A N T S P E R		
	<u>x</u>	<u>x</u>			<u>Court House</u>	<u>Street House Cellar</u>	<u>Privy</u>
NORTH DISTRICT							
Everton	8.3	0.7	5.69	5.92	4.00	3.62	14.0
Scotland	29.8	12.7	6.46	7.41	9.97	3.77	17.2
Vauxhall	45.2	8.7	7.45	10.44	5.53	3.84	17.0
St. Pauls	28.9	15.5	7.43	11.23	5.32	3.90	14.5
Exchange	22.4	18.0	7.85	8.80	5.72	4.12	10.9
Lime St. (pt.)	--	--	--	--	4.88	3.20	14.0
St. Annes	29.6	14.9	6.05	6.62	5.02	3.55	15.3
W. Derby (pt.)	--	--	--	--	4.31	3.47	11.6
TOTAL NORTH DISTRICT	29.4	9.7	6.76	7.72	5.20	3.82	15.3
SOUTH DISTRICT							
N. Toxteth	25.9	8.6	5.97	6.41	5.22	3.91	20.6
S. Toxteth					4.77	3.71	14.5
Gr. George	23.4	6.8	7.26	8.13	5.38	2.66	16.0
Pitt St.	11.4	13.8	8.34	8.90	5.51	4.63	19.7
Rodney St.	16.9	5.9	6.11	6.51	4.69	3.42	12.0
St. Peters	16.7	5.2	7.57	8.00	5.95	4.42	54.8
Castle St.	18.9	5.9	7.78	8.54	5.61	4.13	13.7
Abercromby	13.5	6.2	6.08	6.66	3.93	3.31	14.7
W. Derby (pt.)	--	--	--	--	4.89	4.08	14.5
Lime St. (pt.)	--	--	--	--	5.12	3.52	14.3
TOTAL SOUTH DISTRICT	19.8	7.8	6.65	7.22	5.04	3.68	15.5
Lime St.	21.6	4.8	5.98	6.33	4.99	3.73	14.2
W. Derby	13.1	3.8	5.60	5.74	4.83	3.97	14.1
PARISH TOTAL	24.9	12.1	6.94	7.72	5.33	3.74	15.1
BOROUGH TOTAL	24.1	8.5	6.61	7.27	5.13	3.75	15.4

-- Not applicable

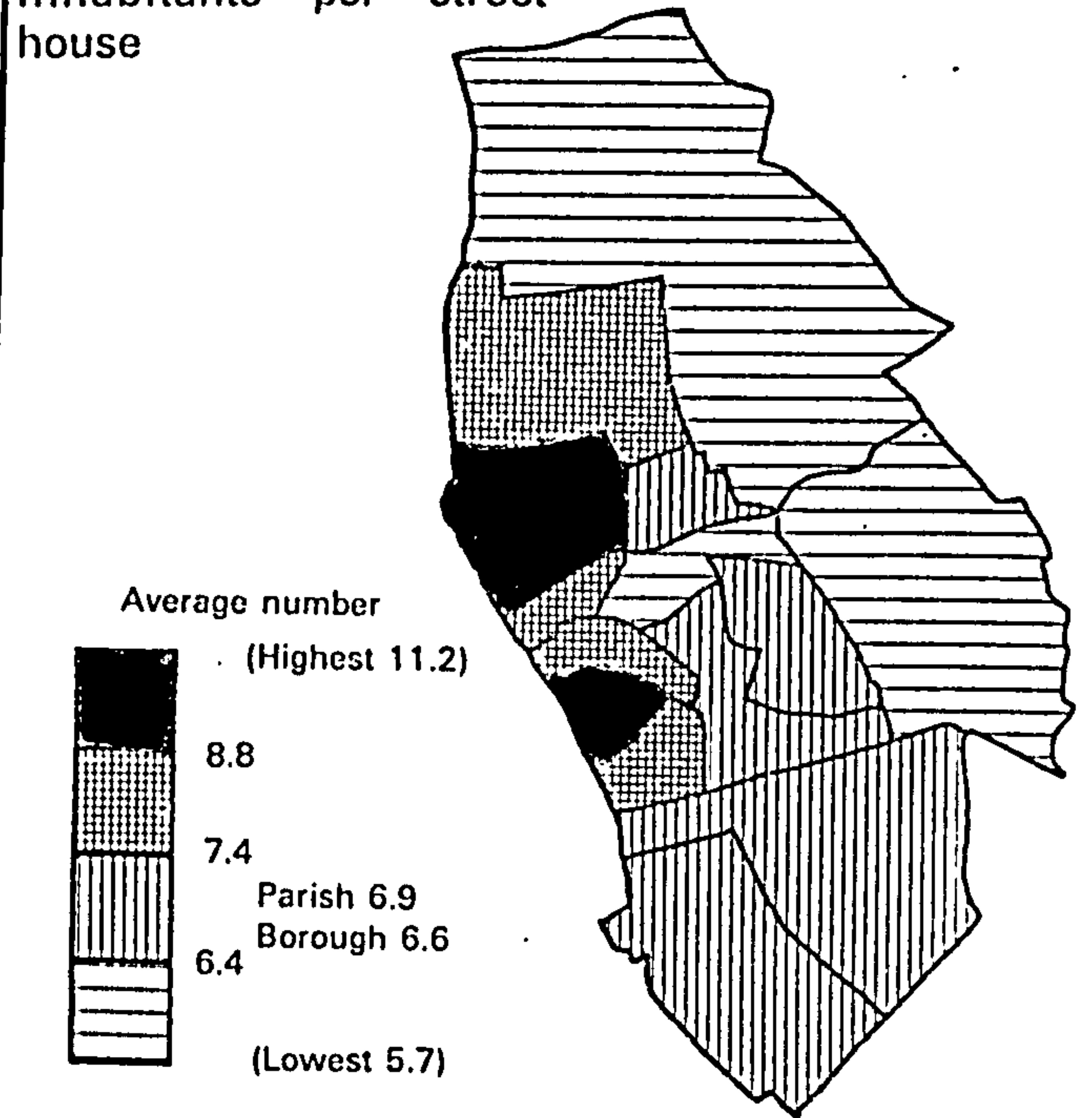
Sources: Liverpool Medical Officer of Health, 1847-50, pp.86-7.
Health of the Town Committee, Minute Book, 1 April 1840.

Liverpool Borough, 1841: House Occupancy

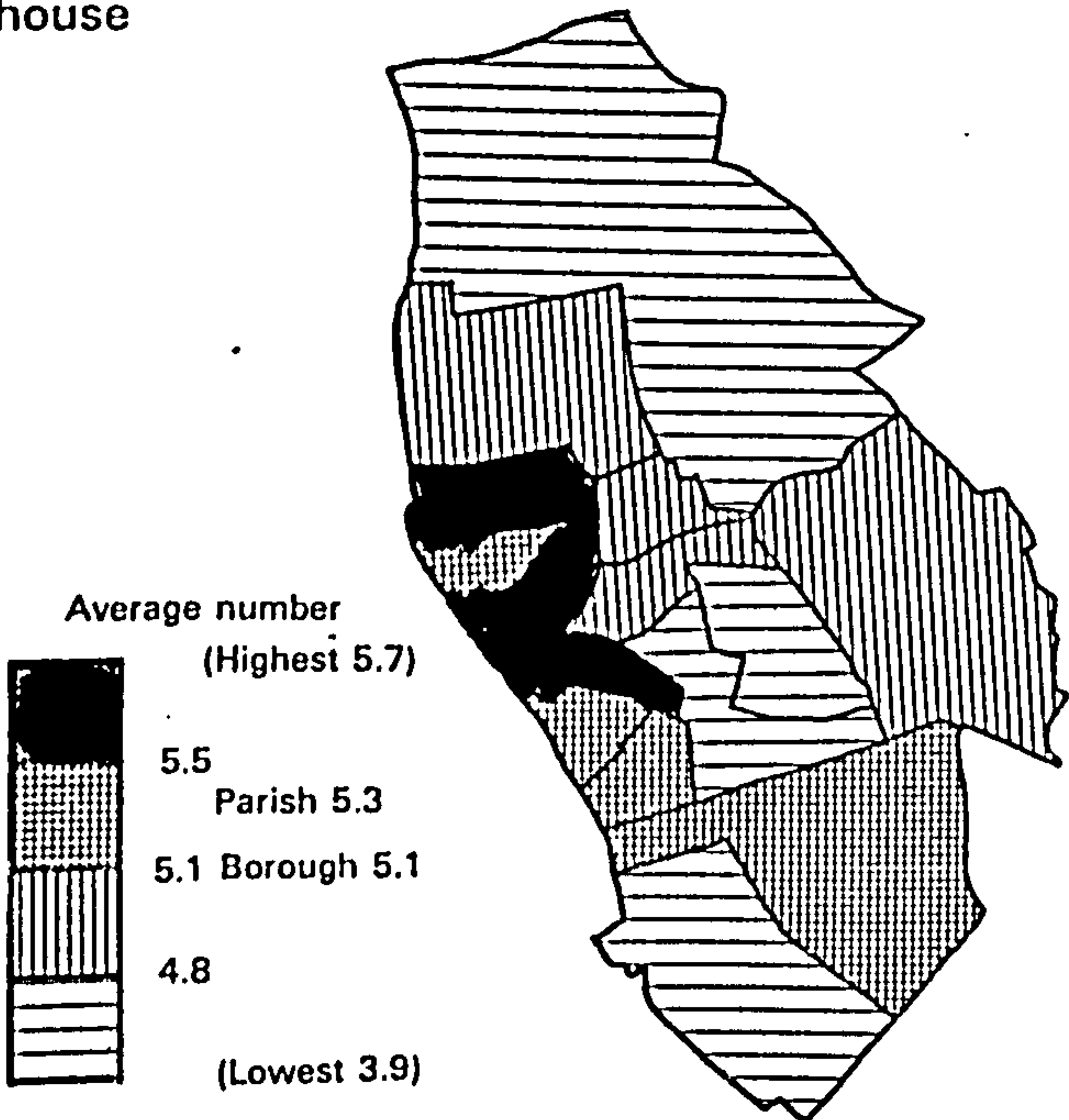
Inhabitants per house



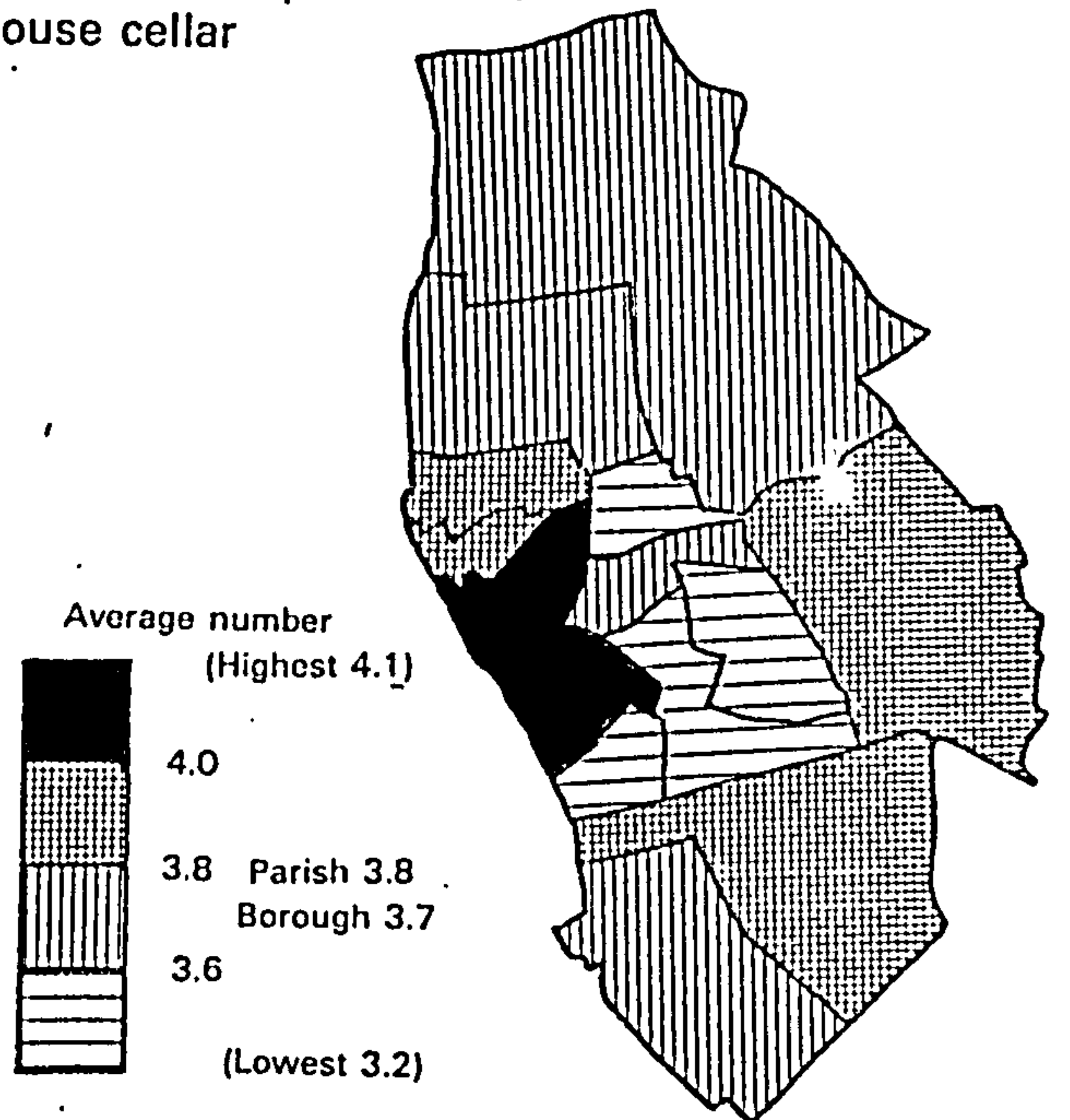
Inhabitants per street house



Inhabitants per court house



Inhabitants per street house cellar



found.⁴⁶⁸

By a coincidence of terrain, the most overcrowded cellars were also found in the worst condition. The cellars of the town centre which were in highest demand (in Pitt Street and Castle Street Wards), had been built in the reclaimed foreshore and Pool and two-thirds of them were wet or damp (Figure 6.4).⁴⁶⁹

7.4. House Occupancy

Without comprehensive data on the average numbers of persons per room, average occupancy per house is an important statistic in judging the degree of overcrowding (see Appendix 6). There is some evidence to indicate that the pressure on Liverpool's housing in the first decade of the 19th century was easing.⁴⁷⁰ Thereafter, the rise in occupancy levels was continuous until 1851 (Borough) and 1861 (Parish). The 1830s appear to have been especially critical. Average occupancy levels increased by 8.1 per cent and this was probably

468 The best statistical predictor of houses with cellars was the average numbers of persons per house (which accounted for 70 per cent of the variance in an analysis of Hume's St. Bartholemew's data, 1841) [in Playfair, 1845, p. 88]. Cellar dwellings (probably because of their uneven scatter) were not good predictors of house occupancy which was itself best predicted by the variation in proportions of Irish (71 per cent variance explained).

469 Correlation of the proportion of damp and wet cellars with average number of cellar occupants was $r = 0.69$.

470 Chadwick expressed the opinion that the early censuses were confused over the definition of a 'house' and felt that in multi-occupied houses, each room may have been returned as a 'house' (Gauldie, 1974, p. 82). Chalklin feels that in Liverpool at least, cellars were treated as part of the 'house' and not as separate dwellings (Chalklin, 1974, p. 306).

associated with the Parish's most rapid increase in population (34.7 per cent) and the beginnings of the heavy Irish influx (the Irish population doubled in the decade).

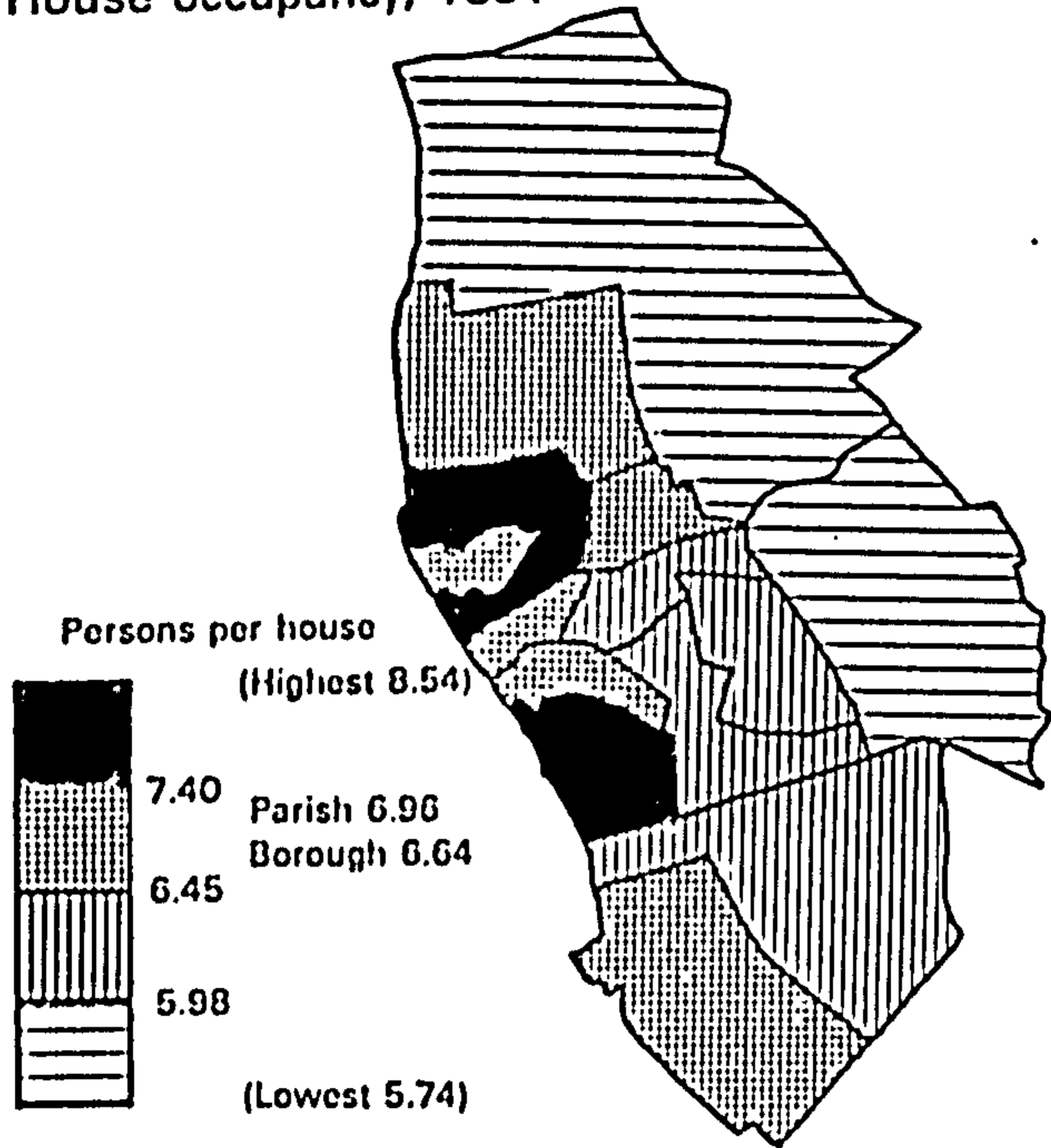
By 1841, the houses of the inner wards were all highly overcrowded (Figure 7.5). Overcrowded houses predominated in over one-quarter of Liverpool's enumeration districts (Table 7.1).⁴⁷¹ In 1841, 7 and in 1851, 6 of the Parish's 12 wards averaged over 7 persons per house (Table 7.6). Occupancy levels in both Parish and Borough increased from 1841 to 1851 and this was reflected in increases in all the out-townships and in 9 of 12 Parish wards. Increases were strongest in the new working class suburbs of both the north and south ends (Figure 7.5). Small decreases in house occupancy in the inner core were probably due to commercial expansion and demolition of poorer quality houses. By 1851, the highest occupancy levels had spread outwards into Pitt St. and Great George Wards to the south and Exchange and Vauxhall Wards to the north.

The Surveyors' report of 1841 permits differentiation between the occupancy rates of street and court houses (Table 7.5). On average, court housing in the Parish and Borough accommodated 2 less persons per house than did street housing. The difference was due to the larger number of

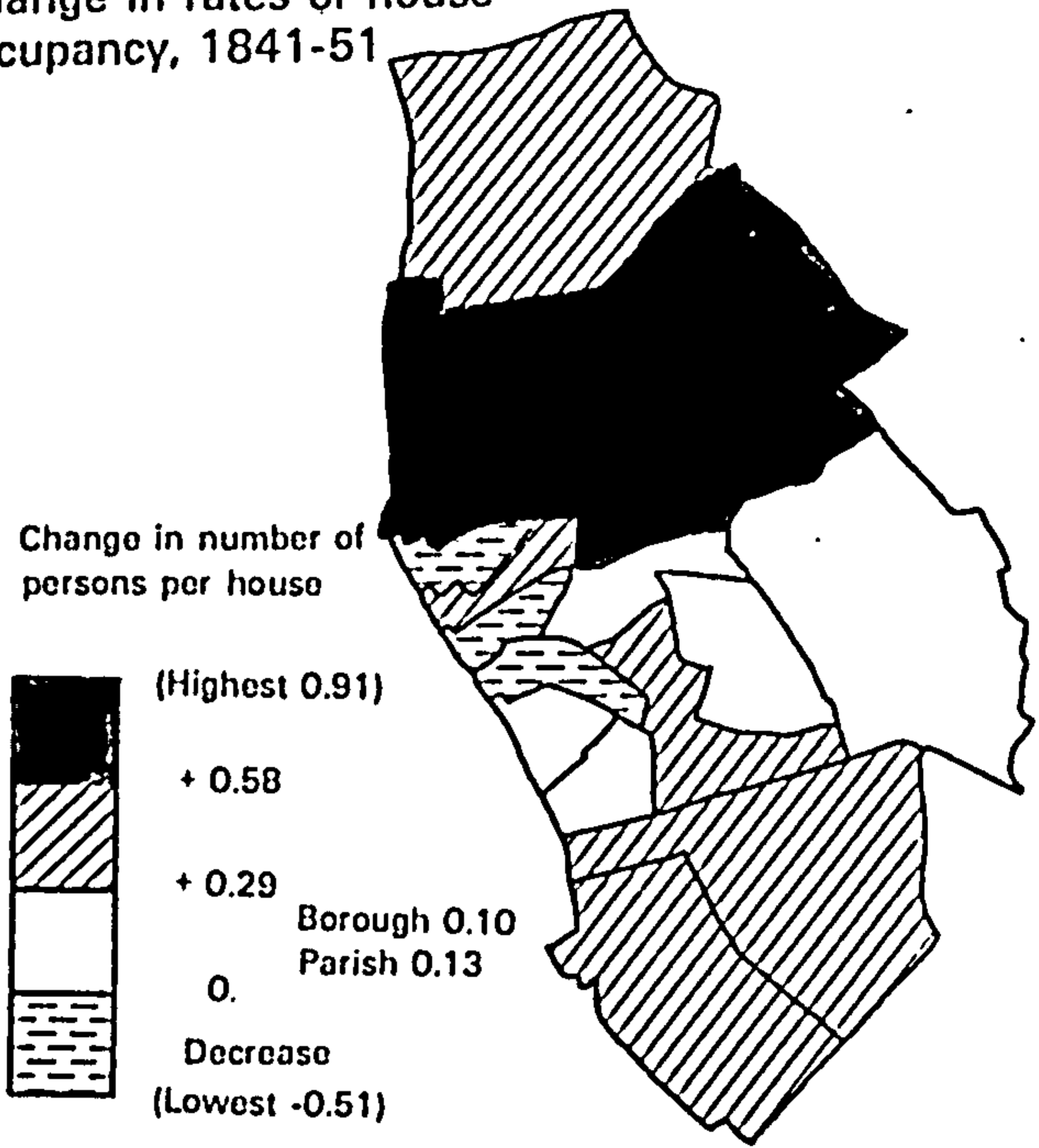
⁴⁷¹ As most Liverpool houses consisted of three or four rooms, a standard of seven persons per house can be selected as an overall indicator of overcrowding (see Appendix 6). Dr. Shearer thought there should be no sub-letting or lodging allowed in Liverpool's working class houses because of their very small size (Liverpool Mortality Sub-Committee, 1866, p. 106).

Liverpool Borough, 1851: Housing Occupancy and Population Density

House occupancy, 1851



Change in rates of house occupancy, 1841-51



Net population density, 1851

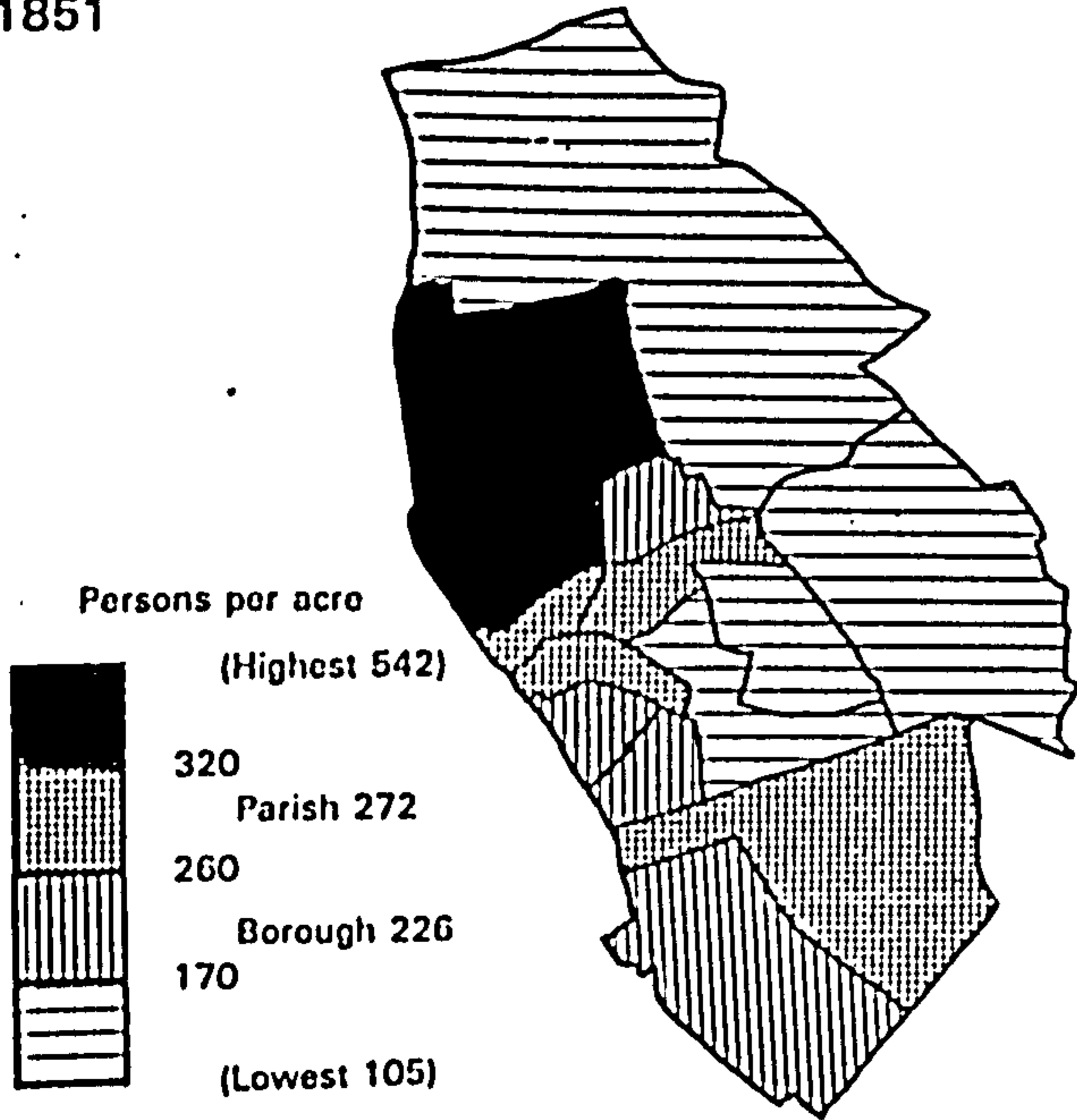


TABLE 7.6
Borough of Liverpool, 1841 and 1851
Indices of Overcrowding

Ward	Average # Households Per House	Average #		Average Population Density Per Acre		Average Number Persons Per		
		Persons Per House				Street	Court	Street
		1841	1851	1841	1851	House	House	House Cellar
Scotland	1.34	6.40	6.85	350	379	7.41	4.97	3.77
Vauxhall	1.36	7.33	7.66	511	542	10.44	5.53	3.84
Exchange	1.38	7.81	8.25	456	461	8.80	5.72	4.12
St. Pauls	1.34	7.22	6.69	428	335	11.23	5.32	3.90
Castle St.	1.27	7.84	7.16	267	236	8.54	5.61	4.13
St. Peters	1.26	7.53	7.04	202	178	8.00	5.95	4.42
Pitt St.	1.64	8.25	8.54	205	266	8.90	5.51	4.63
Gr. George	1.44	7.36	7.55	317	286	8.13	5.38	2.66
Rodney St.	1.19	6.08	6.43	158	145	6.51	4.69	3.42
Abercromby	1.23	6.00	6.23	166	172	6.66	3.93	3.91
Lime St.	1.12	5.91	6.14	226	203	6.33	4.99	3.73
St. Annes	1.28	6.10	6.61	231	289	6.62	5.02	3.55
Parish	1.31	6.82	6.96	258	273	7.72	5.33	3.74
N. Toxteth	1.22	6.02	6.10	166	190	6.41	5.22	3.91
S. Toxteth	1.37	5.91	6.49	180	302		4.77	3.71
Everton Twp.	1.15	5.45	5.79	40	113	5.92	4.00	3.62
Kirkdale Twp.	1.15	5.48	5.78	44	105			
W. Derby	1.15	5.71	5.72	52	160	5.74	4.83	3.97
Borough	1.28	6.57	6.64	185.2	226.9	7.27	5.13	3.75

Note: The figures for average persons per house are slightly lower than those derived from the printed Census. The elimination of the institutional population from the E.D. tabulations given above accounts for the difference. If the institutional population given in the table by Duncan (1851, p.86) is removed (2585 persons in 1841, 3578 persons in 1851) the house occupancy levels for the 1841 and 1851 printed census populations drop to 6.85 and 6.99 respectively.

Source: Computed Tabulations of 1841 and 1851 Census Enumerator's Books
Liverpool District Surveyors, 1841

rooms,⁴⁷² and the more frequent presence of cellaring in street houses. The three-roomed court house would have surpassed the overcrowding standard with six persons per house and the four-roomed street house (if the cellar is included) with 8 persons per dwelling. On these criteria, street houses in 7 and court houses in 8 of the Parish's 12 wards were overcrowded.

Street houses were most heavily occupied in inner fringe wards whereas it was in the central wards that court houses were most densely occupied (Figure 7.4). The increased frequency of cellar dwelling was probably responsible for these differences. Vauxhall Ward (Howard Street Registration Sub-District) was among the most overcrowded area in the town. A special tabulation by the Census⁴⁷³ showed that 52.9 per cent of its housing had 7 or more persons per dwelling, while 25.4 per cent had more than 10 (Table 7.7). The statistical relationships pick out the differences between the larger multi-let housing of the south end and the smaller court housing of the north end. In the former, there were large numbers of individual households while in the latter the proportion of households having lodgers was very high.⁴⁷⁴

The worsening situation in the 1840s was undoubtedly due, in large measure, to the Irish migrations of

472 A house-to-house investigation in 1866 calculated average numbers of rooms per street house as 3.82; per court house as 3.29 (Liverpool Medical Officer of Health, 1866, n.p.).

473 Census, 1851, Part 1, Vol. 1, p. ciii.

474 The correlations were, house occupancy/households per house, 0.65; inhabitants per court house/Irish, 0.72; inhabitants per court house/households with lodgers, 0.67.

TABLE 7.7
Howard Street Registration Sub-District, 1851
Multi-Occupancy

<u>Population</u>	<u>Inhabited Houses</u>	HOUSES WITH								<u>Single Lodgers</u>	Average Number Persons Per House	
		1	>1	2	3	4	5	6	7			8
# 27942	3269	1807	2662	960	324	119	38	17	2	2	2294	
% All Households		55.3	44.7	29.4	9.9	3.6	1.2	0.5	0.1	0.1	-	
% TOTAL Population											8.2	8.55

House Occupancy

<u>Total Persons</u>	<u>Total Houses</u>	HOUSES WITH										Average Number Persons Per House
		1-3	4-6	7-9	10-12	13-15	16-18	19-21	>20			
25402	3342	473	1109	911	431	235	106	37	40		7.60	
% All Houses		14.1	33.2	27.3	12.9	7.0	3.2	1.1	1.2			

Source: Census 1851, Vol.1, p.xcix, and cffi.

which the 1847 Famine migration was the climax. Yet the situation in 1851 probably exemplified relatively 'normal' years, four years previously the situation had been even worse.⁴⁷⁵ Vauxhall Ward was the most severely affected by the influx but only three of the Borough's 16 Wards escaped increases (Figure 7.6). While in many wards 1851 was the peak year of house occupancy, the average figure for the Parish was even higher in 1861 and by 1871 was still above that of 1841 (Figure 7.7). In 1871, 5 wards had higher rates than in 1851 and 11 were higher than in 1841. It is clear, therefore, that the Irish migration cannot be cited as the sole cause of Liverpool's problems.⁴⁷⁶

The deteriorating housing situation in Liverpool was due to several factors. Most importantly, new housing was not being provided at the same rate as the growth in population. Between 1831 and 1851, the Borough's population grew by 82.6 per cent - the housing stock by only 74.7 per cent; between 1851 and 1871 population grew by 74.5 per cent housing by 69.2 per cent. The situation within the Parish was even worse, from 1831 to 1851 population grew by 51.5 per cent, but housing stock increased by only 37.1 per cent.

The pressure on housing supply was increased by

⁴⁷⁵ Duncan, 1851, p. 9, had reported that by the end of 1847 the most severe overcrowding had already passed.

⁴⁷⁶ Some of these late peaks in occupancy reflect the changing distribution of social classes within the wards and the partial replacement of the middle classes by the more crowded multi-occupied houses of the working class (for instance, Great George, Abercromby and Everton).

FIGURE 7.6

Liverpool Borough, 1841-71

Persons per House

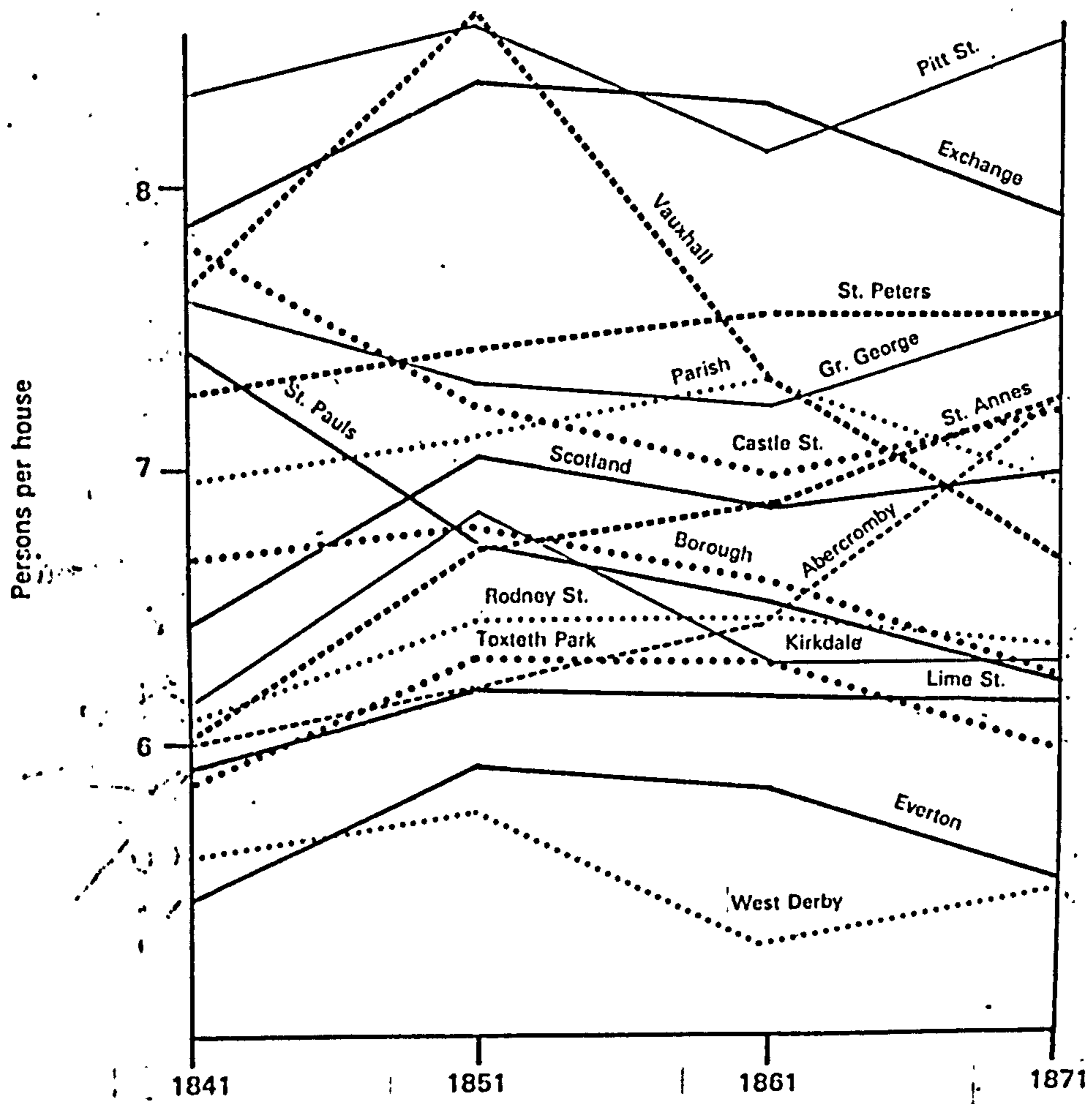
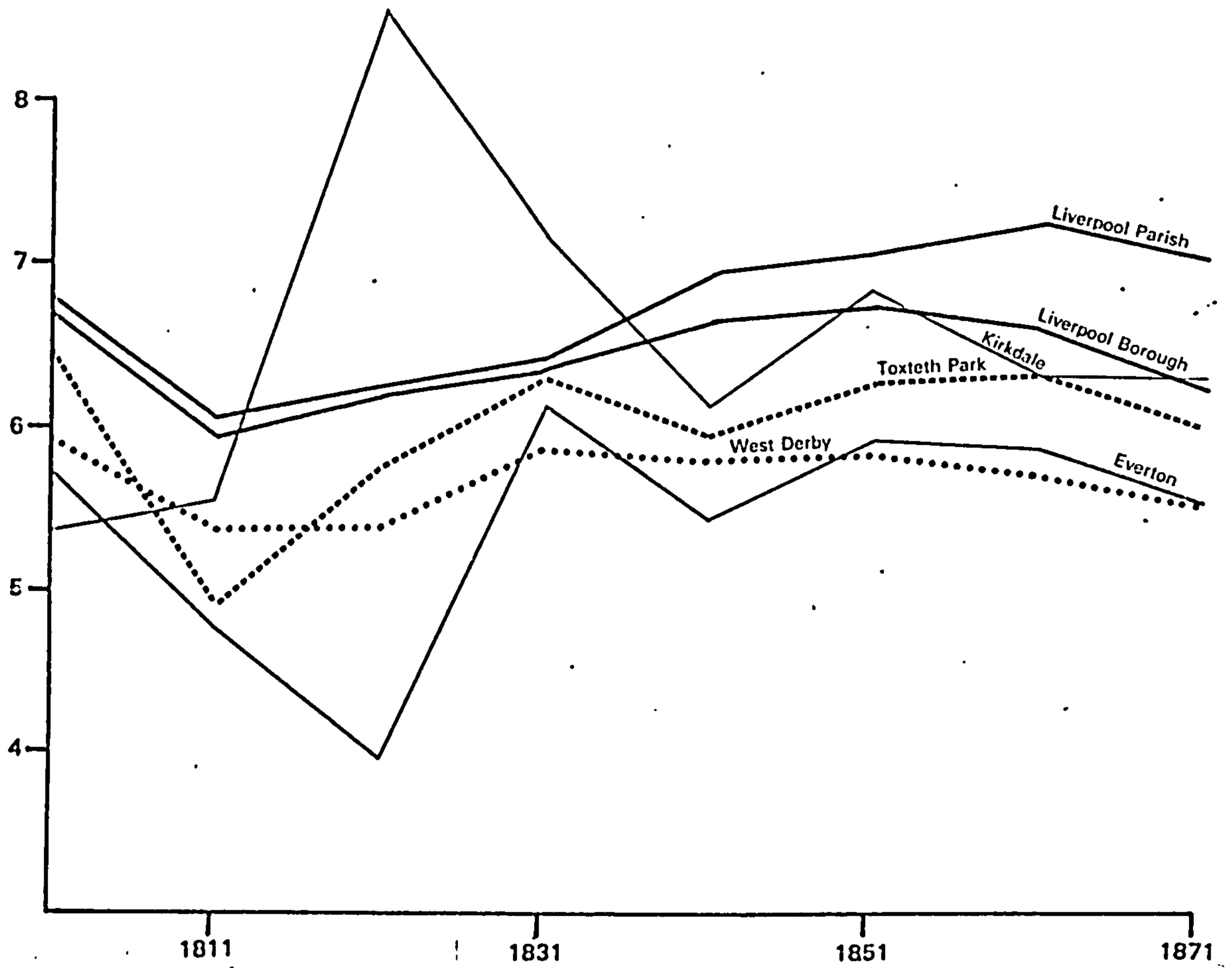


FIGURE 7.7

Liverpool and District, 1801-71

Persons Per House



the uncertainty of employment, especially in the 1840s and 1860s. The Irish famine migrations aggravated an already bleak picture. Low wages and limited employment opportunities correspondingly increased the pressure to share accommodation and this was especially common among the Irish.

The peasant tradition of hospitality in adversity and the gregarious nature of the Irish imported a cultural toleration for an increasingly intensive utilisation of dwelling space as houses, rooms and floorspace were sub-let and subdivided like so many Connaught acres.⁴⁷⁷ The Irish use of the house as a mere shelter rather 'a home' in anything approaching the Victorian sense of the term,⁴⁷⁸ was a fairly direct cultural transfer to England of the living conditions of rural Ireland in the period of pre-famine population pressure.

The 1841 Census of Ireland classified 37.0 per cent of Irish housing as 'fourth class' (a single roomed, windowless, mud cabin) and a further 40.1 per cent as third class (a two-roomed mud cabin with windows). By 1851, hundreds of thousands of the occupants of the worst housing in Ireland

⁴⁷⁷ This tendency of the Irish was often noted. See Anderson, 1971, pp. 82 and 155; Playfair, 1845, p. 88. The proportion of Irish were statistically highly correlated (at the enumeration district level) with house occupancy rates ($r = 0.72$), net population densities ($r = 0.7$). Irish population densities were themselves at their greatest in areas of most dense housing ($r = 0.71$). Irish households also had significantly more lodgers (1.15 per household compared with 0.81 for the total sample).

⁴⁷⁸ A minister remarked, "There are many especially among the lower classes of the Irish who seem to have no idea of a dwelling except as a place of shelter from the weather. If it does this they ask no more of it and take little or no care to keep it in cleanliness and order" (Liverpool Domestic Mission, 1834/4, p. 12).

had emigrated and fourth class housing fell to only 13.0 per cent of the total, a decrease from 491,000 to 135,000 ~~491,000~~ dwellings. Much of this decrease (and by extension, the greatest emigration of poor occupants) took place in the south and west (Mayo, Clare, Donegal and Cork).⁴⁷⁹ Many of the Irish coming to Liverpool were from these counties.⁴⁸⁰ Not only the Irish but many Welsh and English came from rural conditions that could be almost as bad.⁴⁸¹ To such rural migrants, the 12 foot square room in a Liverpool court house or cellar was a familiar space standard. The difference was that these 'urban cabins' were not surrounded by open country but by acres of housing sheltering countrymen in similar circumstances.

7.5. Population Density

"The people are as numerous as maggots in cheese; you behold them, disgusting, and all moving about as when you raise a plank or log that has long lain on the ground, and find many vivacious bugs and insects beneath it."⁴⁸²

As a summary statistic, population density combines measures of house occupancy and house density. The figures given by Duncan suggest that Liverpool had the highest population density of any large town in the country. With 140,000 persons per square mile, Liverpool's density exceeded

479 Census of Ireland, 1851, Pt. 6, pp. xxiii-v.

480 Special mention was made of migrants to Liverpool from County Mayo, (Rushton, 1847, p. 58).

481 Gauldie, 1974, p. 23.

482 Hawthorne, 1856, p. 18. The scene evoked is reminiscent in some respects of that contained in the popular Victorian 'balloon view' of 19th century urban panorama (Ackerman's Panoramic View, 1847; 'Liverpool From the Mersey', the Illustrated London News, view of 1865 and 'Birdseye View from a Balloon', 1885. All contained in Spiegl, 1970).

that of Manchester, Birmingham, London or Leeds.⁴⁸³ This calculation (equivalent to 215 persons per residential acre) compares fairly well with the figure (227 per acre) calculated from the enumeration books (Table 7.6).⁴⁸⁴ At the ward level, some densities were very high: Vauxhall and Exchange Wards, it was alleged, afforded "examples of a greater concentration of the inhabitants than existed in any English town".⁴⁸⁵ In 1841, the worst areas were 22 enumeration districts (of a total of 379) which displayed net densities in excess of 1,000 persons per acre and one of the worst streets, Lace St., had only 4 square yards per inhabitant!⁴⁸⁶

Figure 7.5 shows an inner-outer Borough contrast in population density together with a northern extension of high densities. The southern inner wards had fewer courts so the net densities were rather lower than those in the north.

7.6. Crisis and Response

"Liverpool created in haste by commerce - by men too intent on immediate gain; reared without any very tender regard

483 Duncan, 1844, p. 130.

484 Duncan probably included more non-residential land in his calculation.

485 Duncan, 1844, p. 131. His almost boastful assertion that the Marylebone-Great Crosshall-Byron St. district (population 12,000) had nearly "two and three-quarters times the maximum density of London" as displayed in two Registration Districts suffers from the unequalness of the comparison. It does not, however, negate the unfavourable comparison between the Parish of Liverpool and the entire Metropolis.

486 Duncan, 1844, p. 156. Newlands, 1859, p. 731, calculated the area per inhabitant at the time of the 1851 Census as 17.3 square yards in Liverpool; 16.7 in Kirkdale; 35.7 in Everton; 44.7 in West Derby, and 24.8 in Toxteth Park.

for flesh or blood; and flourishing, while her working population was rotting in cellars - has been taught the lesson, that a part of the population, whether in cellars or on distant shores, cannot suffer without involving the whole community in calamity. In itself one of the unhealthier towns of the kingdom, Liverpool has for a year been the hospital and cemetery of Ireland ... It will require all the energy of the inhabitants of Liverpool and the utmost resources of science to place the health of the town in a satisfactory condition."⁴⁸⁷

At this point, we should return briefly to consider the question raised at the commencement of Chapter 6 concerning the changes in the quality of Liverpool's housing. Examination of available statistical and qualitative evidence appears to point conclusively to a 'pessimistic' interpretation. From 1811 onwards, the quality of residential provision in the town declined progressively to reach a low ebb in the 1840s that was not left behind finally until the end of the 1860s. This judgement, based as it is on a consideration of both the characteristics of the dwellings themselves and also the manner and degree to which they were occupied, is not original. It reflects the opinions and statements of contemporaries who (as our cross-checking of their evidence indicates) were making similar assessments on limited but factually sound data. All agreed that the medical evidence (which will be considered in Chapter 9) showed Liverpool to be the unhealthiest town in the country and that it was the nature and manner of occupancy of the town's housing that was the major contributory cause. Without this conviction, it would have been impossible for the town to have been persuaded to embark on what was a novel and

⁴⁸⁷ Quarterly returns of the Registrar General, Third Quarter, 1847, n.p.

governmentally unorthodox series of housing regulations.

Liverpool's sanitary acts attempted to rid the town of its worst housing abuses (cellar dwelling and overcrowded lodging houses) and to regulate the form of housing to be built in the future. Philanthropy was mixed with civic pride and perhaps even more, the desire to escape national interference.⁴⁸⁸ The legislation of 1842 and 1846 was largely concerned with the physical arrangement of houses and sanitary facilities⁴⁸⁹ but two provisions in the acts affected the manner and type of occupancy. The 1842 Act⁴⁹⁰ banned the habitation of cellar dwellings in courts and in streets when the heights of cellar ceilings were less than 7 feet or when they were below 2 feet above ground level. The order was to take effect 1 July, 1844 to give time for cellars to be brought into compliance with the law. The later act of 1846⁴⁹¹ which took effect 1 January, 1847 reiterated the prohibition of court-cellars and 'raised' the permissible depth of cellars to those with ceiling heights 4 feet above ground. Cellars altered or built under the earlier act were exempted and remained a legally sanctioned insanitary nuisance for many years. The 1846 Act also subjected lodgings, (but only nightly lodgings), to registration and inspection.

These two enactments were compromises in many ways but they were extremely important nationally as they formed

488 I have argued elsewhere (Taylor, 1974, pp. 45-6) that the second motive played a strong role in Liverpool's early adoption of housing regulations.

489 ibid. Table 3.3 for details.

490 5 and 6 Vic, Ch. 44.

491 9 and 10 vic, Ch. 27.

the basis of the country's first Public Health Act of 1848⁴⁹² and Common Lodging House Acts of 1851 and 1853.⁴⁹³ In some respects, the occupancy clauses of these Liverpool public health acts were successful. Duncan, who had decried the lodging houses as places where "overcrowding of inmates is carried to the highest pitch"⁴⁹⁴ was able a few years later to comment that "their conditions since registration has been very materially improved".⁴⁹⁵ This clause was by no means without its problems, however, as the ticket issued applied to the house not individual rooms. A man having a three room house might obtain a ticket for 12 lodgers, then put them all in one room and sublet the other two.⁴⁹⁶

Enforcement was in the hands of 75 police who led surprise nightly inspections. Of 620 lodging houses which had been registered by 1851, 147 had been prosecuted for overcrowding and another 512 for non-registration,⁴⁹⁷ these prosecutions were particularly extensive in the early years. By the end of 1849, 30 per cent of all registered houses had been taken to court for overcrowding.⁴⁹⁸

But when it came to the enforcement of the cellar regulations, the Health Committee had problems of greater magnitude. Appendix 4 discusses the varying estimates made of

492 11 and 12 Vic. c. 63.

493 14 and 15 Vic. c. 28 and 16 and 17 Vic. c. 41.

494 Duncan, 1844, p. 131.

495 Duncan, 1851, p. 65.

496 *ibid.* p. 82.

497 Fresh, 1851, p. 35.

498 Duncan, 1851, p. 63.

Liverpool's cellar population and points to the possible under-enumeration of the court-cellar population by the District Surveyors in 1841. Of an estimated total of slightly over 8,000 inhabited cellars in the Borough⁴⁹⁹ about one-third of which were in courts. Clearance of illegally inhabited cellars began under the 1842 Act and 3,000 cellars had been cleared by the end of 1846. Cellars could be altered to comply with the Act of 1842 but rarely were these 'improvements' beneficial.⁵⁰⁰ This first cellar clearance program was pursued with some vigour against the resistance of owners and occupants alike.

"... it has been indeed hard to convince those who were ordered to quit them that the measure was not only designed but calculated for their good; and as the subletting of the cellar formed in many cases the chief deposit of the occupant of the house for paying the common rent, another party was of course implicated in the transaction and another class of interests embattled against it."

Reverend Johns added with his characteristic touch of humanity,

"I have been struck and affected by the emotion with which many talked of quitting these forlorn and underground abodes."⁵⁰¹

The new act was to be even more stringent and

499 A total of 14,084 cellars had been measured by the time of the Act's date of commencement (Duncan, 1851, p. 98) and this figure probably represents the total number of cellars in street housing (Fresh to Liverpool Health Committee, 25 November, 1847, p. 438). If this is the case, then about 60 per cent of all cellars in Liverpool were inhabited.

500 "Unwilling to lose the separate profit of the cellars many owners of houses set about meeting the conditions of the notice by sinking them deeper into the ground so as to produce the required distance between floor and ceiling . . . in the great majority of instances, no change whatever has taken place. The worst cellars that I am acquainted with, are as bad and as densely inhabited as ever . . . we are yearly building new splendours over a lurid social Pompeii, in which the ruins of Decency are filled with the ashes of Virtue." (Liverpool Domestic Mission, 1844/5, p. 10).

501 Liverpool Domestic Mission, 1845/6, p. 7.

probably affected twice the number of cellars prohibited by the earlier one. But, by an ironic twist of fate, its date of commencement (1 January, 1847) coincided within a few weeks with the beginnings of the Irish migrant flood. To Duncan and the Health Committee, the results must have been disheartening. The hard work of the previous years had largely been spent in vain.⁵⁰² Cellars cleared were being reoccupied and short of filling them with sand or posting police at each door, there was little that could be done, "for merely boarding up the doors and windows would be insufficient."⁵⁰³ However, there was a single-minded determination to keep up the pressure of inspection and ejection. Even though the clearances would (and did)⁵⁰⁴ affect 20,000 people, the Committee agreed with Reverend John Johns that the ends would ultimately justify the means.⁵⁰⁵ The act allowed no compromise. An incredulous royal commissioner asked the Chairman of the Health Committee if the Corporation was bound to expel 23,000 persons in cellars from their dwellings on a given day, without having provided means of accommodation for them, "Certainly" was the reply.⁵⁰⁶ Police were used to enforce the clearances and undertake regular inspection⁵⁰⁷ and had it not been for their constant vigilance "the cellars would be

502 Rushton, 1847, p. 57. "The influx has entirely destroyed all that has been done and these cellars are filled."

503 Liverpool Health Committee Minutes, 16 June, 1847, p. 226.

504 Duncan, 1851, p. 99.

505 "Like the iron senator of old who concluded every speech with the senate with 'Carthage must be destroyed', I cannot help interweaving with every report I present you, 'the cellars must be shut up . . .'" (Liverpool Domestic Mission, 1847-8, p. 15).

506 Aspinall, 1845, p. 78, q. 34.

507 Resolution of the Liverpool Watch Committee. 9 December, 1848, Watch Committee, Orders to Head Constable.

reoccupied nearly as fast as they are cleared."⁵⁰⁸

The human tragedies lying behind these self-assured pronouncements went virtually unrecorded.⁵⁰⁹ Without alternate quarters, the dispossessed went where they could, mainly into already overcrowded court and street houses. With sickness raging in the town, many of the dispossessed were hardly capable of looking after themselves and the Parish Vestry was called upon to accept sick people ejected from cellars who had "been found in the open streets some remaining 24 hours".⁵¹⁰ The pace of clearance was deliberately held back to 100 cellars per month to allow the population to disperse⁵¹¹ but proceedings were constantly hampered by

"the reluctance of the inmates to leave their miserable abodes and the expedients to which they have recourse in order to evade the law."⁵¹²

Magistrate Rushton, a humane man, refused to convict cellar dwellers unless a bed was found on the premises⁵¹³ but Duncan

508 Duncan, 1851, p. 100.

509 The Health Committee's determination was backed by that of the Parish. One old dock labourer told the Morning Chronicle's correspondent that he had been given 5 shillings a week by the Parish until it was discovered he was living in an illegal cellar. "The relieving officer told me to leave the cellar: but I had nowhere else to go to, and I paid no rent for it. The landlord had pity on me, and allowed me to live rent free in it, because I was so poor. I was afraid that if I left the cellar I should be struck off the Parish books all the same and that I might have lost both my lodgings and my relief money." (Morning Chronicle, June 17, 1850).

510 Liverpool Health Committee, 26 June, 1847.

511 Duncan, 1851, p. 99.

512 ibid.

513 Liverpool Health of the Town Committee, 2 June 1846. But, "In order to withhold this proof, the parties are in the habit of removing or concealing in the day time the beds or the sacks, straw or shavings which they use as bedding" (Duncan, 1851, p. 100).

strongly defended these draconian measures

"whatever extent these operations may be supposed to crowd certain houses, they uncrowd others to the same extent. The good is a matter of certainty; the evil a matter of conjecture."⁵¹⁴

While moving people did not of itself increase house occupancy rates, the numbers of inhabitants per room (the real measure of overcrowding) must have increased considerably. What was worse, overcrowded houses or occupied cellars? Like John Johns earlier, Duncan felt 'the cellars must be shut up' and for this he was prepared to pay the price.⁵¹⁵

The consequences of Duncan's policies were understood at the time. It was known that the houses under construction were too expensive and the expelled cellar occupants would crowd into the cheapest available accommodation.⁵¹⁶ As anticipated, the number of sub-let houses increased and became a far worse problem than ever the nightly lodging houses had been.⁵¹⁷ Yet because of legislative oversight, these crowded 'weekly lodgings' remained beyond the reach of the law for another 20 years.

As the census statistics indicated, the problem of crowded dwellings diminished somewhat in the 1850s (Figure 7.7) but reappeared in the 1860s, when overcrowding again became

⁵¹⁴ Duncan, 1851, p. 88.

⁵¹⁵ He declared, ". . . no one who has personally inspected the worst description of the Liverpool cellars can hesitate to admit the policy of investing the authorities with power to prevent their being used as the habitations of human beings" (Duncan, 1851, p. 101; see also Bennett, 1848).

⁵¹⁶ Aspinall, 1845, p. 79.

⁵¹⁷ Duncan's letter book, 15 December, 1849.

the subject of legislative action, just as cellar dwellings had been attacked in the 1840s. The question of setting standards for sub-let houses gave the Health Committee and the Medical Officer of Health some trouble. Liverpool houses were barely large enough for one family, let alone lodging families (Table 6.4). But to try to enforce standards that elsewhere in the country might have been barely minimal would, in Liverpool, have been "worse than foolish".⁵¹⁸

Victorian space standards had to a large extent been derived from attempts to reduce overcrowding in ships and barracks. The army's standard was 600 cubic feet per person, the Poor Law in its institutions, and Prisons 500 cubic feet, and Police Barracks 450 cubic feet, but medical men wanted higher standards (Dr. Parkes 1000, Professor Huxley, 800).⁵¹⁹ The Local Government Board and Marylebone Justices recommended 400 cubic feet per person and the Sanitary Act of 1886, 350 cubic feet.⁵²⁰

Liverpool's court houses contained 2000 to 2300 cubic feet and street houses 2200 to 2500 cubic feet (Table 6.4), so the institutional space standards mentioned above would not have allowed even a single family within a typical house. Accordingly, Liverpool's standards of overcrowding were set at a very low level. At 300 cubic feet per person (children 6 to 15 counting as half and ignoring all those under 6 years) this standard was exactly the same as that allowed nightly

518 Letter of Medical Officer of Health Trench to Board of Health, 18 September, 1866.

519 Clarke, 1920, p. 126.

520 ibid.

lodgers.⁵²¹ In part, the adaption of this, not overly generous space standard, was an allowance for the poverty of the occupants⁵²² but it also betrayed the fear of being accused too autocratic by men with ulterior motives who might attempt

"to embarrass . . . and give rise to sensational appeals to the public by the advocates who attend the Magistrates' court as counsel of the House Owners Association."⁵²³

In the 1860s, ticketed rooms, the detailed sub-let registration book, the visit of the inspector (often unannounced at night), hiding the children under the bed to escape detection by the 'Health Inspector' - these all became a part of Liverpool slum life that was to continue for almost another century.⁵²⁴

The three decades from 1840 to 1870 had seen a growing municipal role in the shaping of the residential environment. The function of council evolved from merely prohibiting and regulating the worst housing abuses to that of active involvement in creating decent housing standards. The powers (acquired in the 1860s) allowing the demolition of insanitary housing and, as in the case of St. Martin's Cottages,

521 These powers were obtained under the Liverpool Sanitary Amendment Act of 1864 (27 and 28 Vic., Ch. 73) and the Health Act of 1866, 29 and 30 Vic., Ch. 90. They allowed bye-laws to be made for 'ticketing', and included such provisions as floors to be swept by noon, windows of sleeping rooms open full width for an hour in the morning and an hour in the afternoon "unless prevented by tempestuous weather or illness". Floors to be washed weekly, owner to wash and whitewash every wall and ceiling twice yearly.

522 Liverpool Medical Officer of Health, 1866, p. 144.

523 Letter, Liverpool Medical Officer of Health to Board of Health, 18 September, 1866.

524 The 1891 Census enumerated 17.2 per cent of all Liverpool houses ('tenements') and 18.3 per cent of houses with 5 rooms and less as having more than 2 persons per room.

even the construction of Corporation workingmen's dwellings, mark the threshold of a new era of urban management, not only in Liverpool but in the country at large.⁵²⁵

⁵²⁵ I have traced this chain of cause and effect, from health regulation to council house building, in my paper (Taylor, 1974).

Chapter 8

THE SLUMS AND THE SUBURBS: RESIDENTIAL GEOGRAPHY AT MID-CENTURY

"Each court may be said to have a distinctive peculiarity caused by the attention which more or less is paid to the outward appearance of the house and class distinctions are as strongly marked, indeed perhaps more strongly marked than they will be found in another class of society."⁵²⁶

"The ever widening gulf between rich and poor, who have ceased even to live near one another, so that whole districts exist, in which if not the most respectable, the wealthiest ratepayers are the pawnbroker at one corner who takes the drunkard's clothes in pledge and the gin palace keeper at the other."⁵²⁷

Bootle, Walton, Wavertree and Toxteth Park . . . these places are the Hammersmith, the Hampstead and the Greenwich of Liverpool."⁵²⁸

Evidence of Owen Williams, a land agent and resident of Toxteth Park.

Question: "Do you not find the distance extremely inconvenient?"

Answer: "No"

Question: "Why not?"

Answer: "I keep a horse and gig and annihilate space in that way."⁵²⁹

In this chapter, the spatial pattern of Liverpool society at mid century as it related to the town's physical and structural environment is examined. The analysis will not be in the form of a customary urban ecology.⁵³⁰ The emphasis will be slightly different in that the question will not be "what was the spatial nature of the town's social structure?" but rather "how far did the town's social structure contribute to or

526 Shimmim, 1864, p. 37.

527 Melly, 1869, p. 5.

528 House of Lords Committee, 1842, Vol. 2, p. 42.

529 House of Commons Committee, 1846, Vol. 104, p. 138.

530 For such analyses of 19th century cities, see Goheen, 1970, Robson, 1969, Tansey, 1973, and work of Lawton and Pooley in progress.

reflect the physical and environmental patterns of dwelling provision described in the previous two chapters?"

Urban social ecology usually takes the physical environment into account but treats it as a dependent variable. Here the relationship is viewed from the opposite direction. The social geography of the town is examined in order to determine the extent to which it was an expression of the town's physical morphology. More emphasis is placed on the developing urban morphological framework than is usually the case in studies of urban ecology for it is felt that this structure was a key determinant in shaping, on a broad scale, the town's social and environmental geography. New economic conditions and increasing diversity of residential opportunities led to changing perceptions and spatial patterns in the utilisation of the town's housing stock by Liverpool's various social and occupational groups. These processes were to become increasingly important later in the 19th century but certain trends already in evidence at mid century will be examined.

1. Urban Ecological Patterns

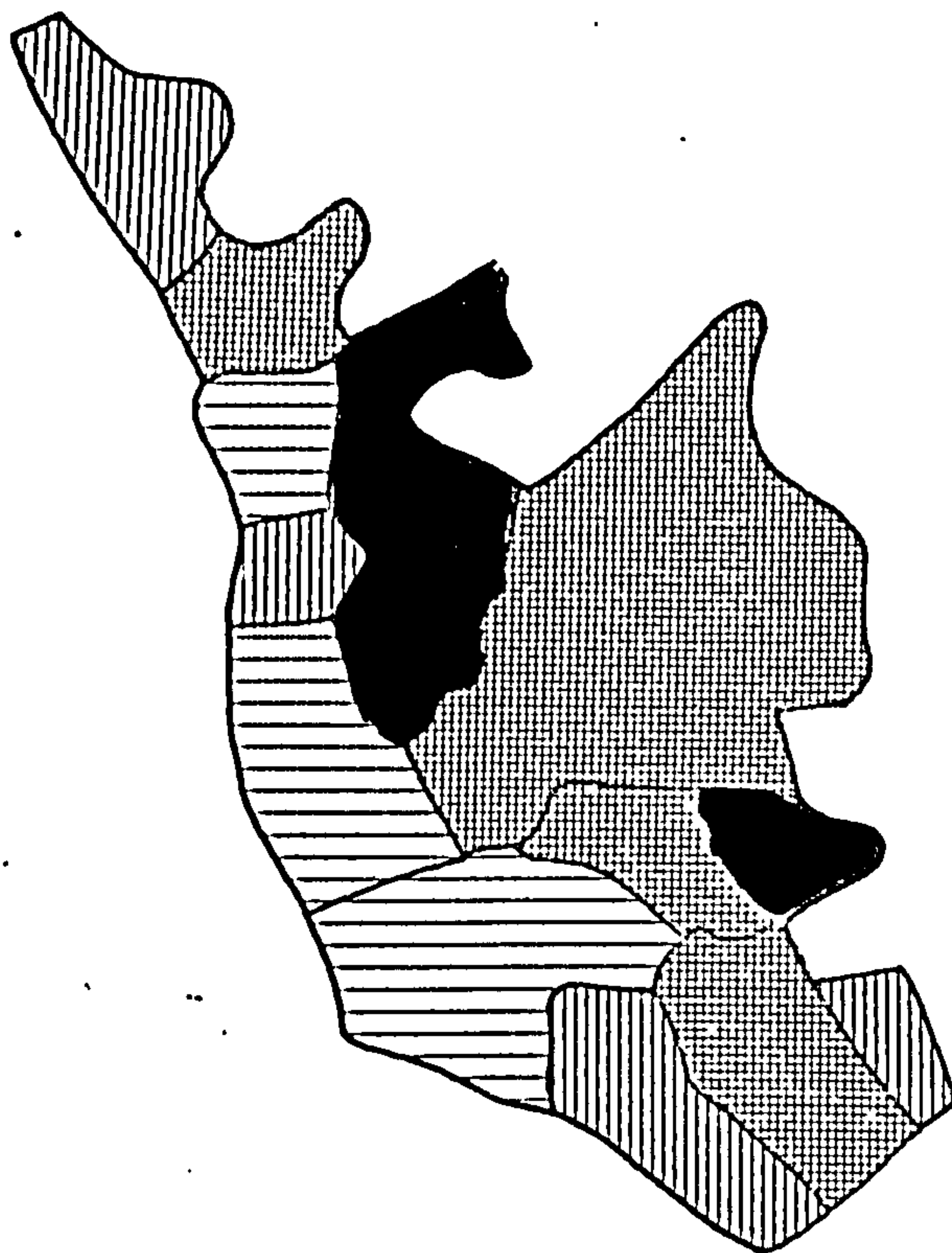
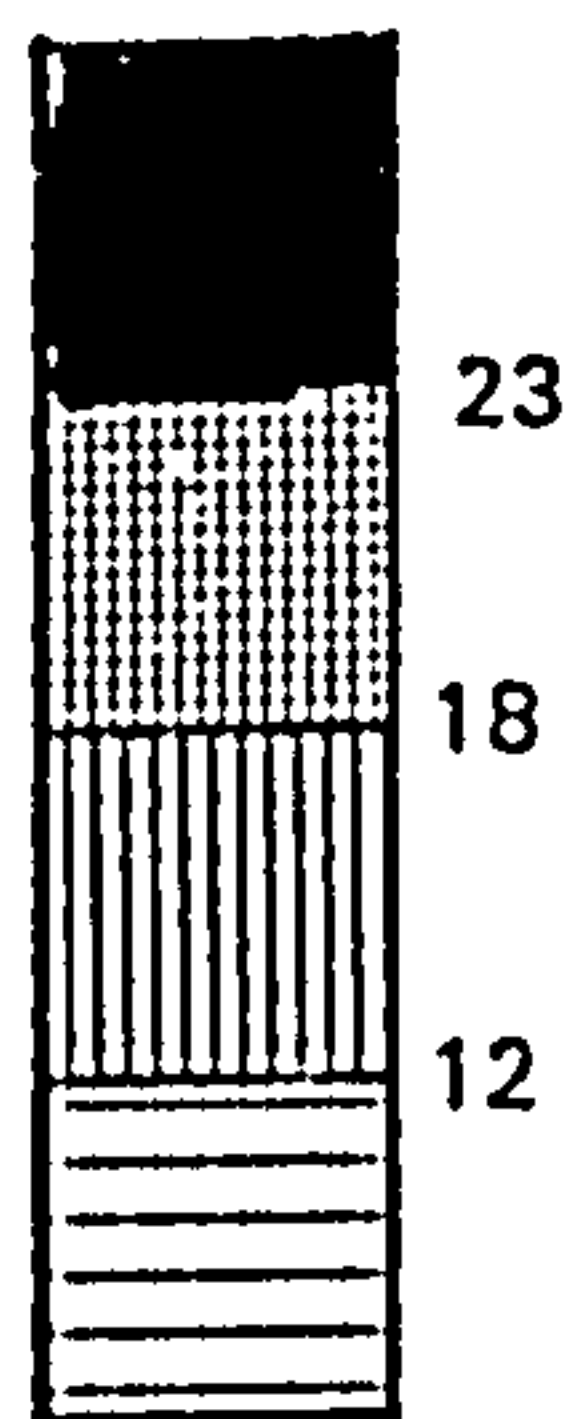
Liverpool at mid century was part of a growing regional urban system - an embryo conurbation that was extending its influence into a journey-to-work region 8 to 10 miles distant from the Town Hall. At this time, only the rich were capable of travelling such distances and many, no doubt, did not need to commute on a regular basis. As was noted in an earlier chapter, the late 18th century saw a landscape of generously aced parkland surrounding spacious halls, emerging around the outskirts of the town. Liverpool's growing 19th century merchant community continued this trend. Villa colonies emerged in places as far distant from the town as Waterloo, Walton, West Derby, Woolton, Gateacre, Mossley Hill, Allerton and Aigburth. The process was visible in the returns of the 1831 census when in the ring of outlying townships, over 14 per cent of the adult males were "capitalists, bankers, professionals, and other educated men." In these same townships, over 18 per cent of all females were servants (Figure 8.1). The outlying townships were, however, but one element in an emerging social geography of the urban region.

By 1851, broad differentiation in the social structure of three rings of urban growth can be identified - an urban core, inner and outer suburbs (Table 8.1). In general, there was a gradient of increasing maleness, decreasing numbers of servants, and old women as the inner core was approached. The numbers of both children and old people increased in the

Liverpool District, 1831: Upper Classes

Female Servants

Percentage of total females



'Capitalists, Bankers, Professionals and Other Educated Men'

Percentage males over 20 years

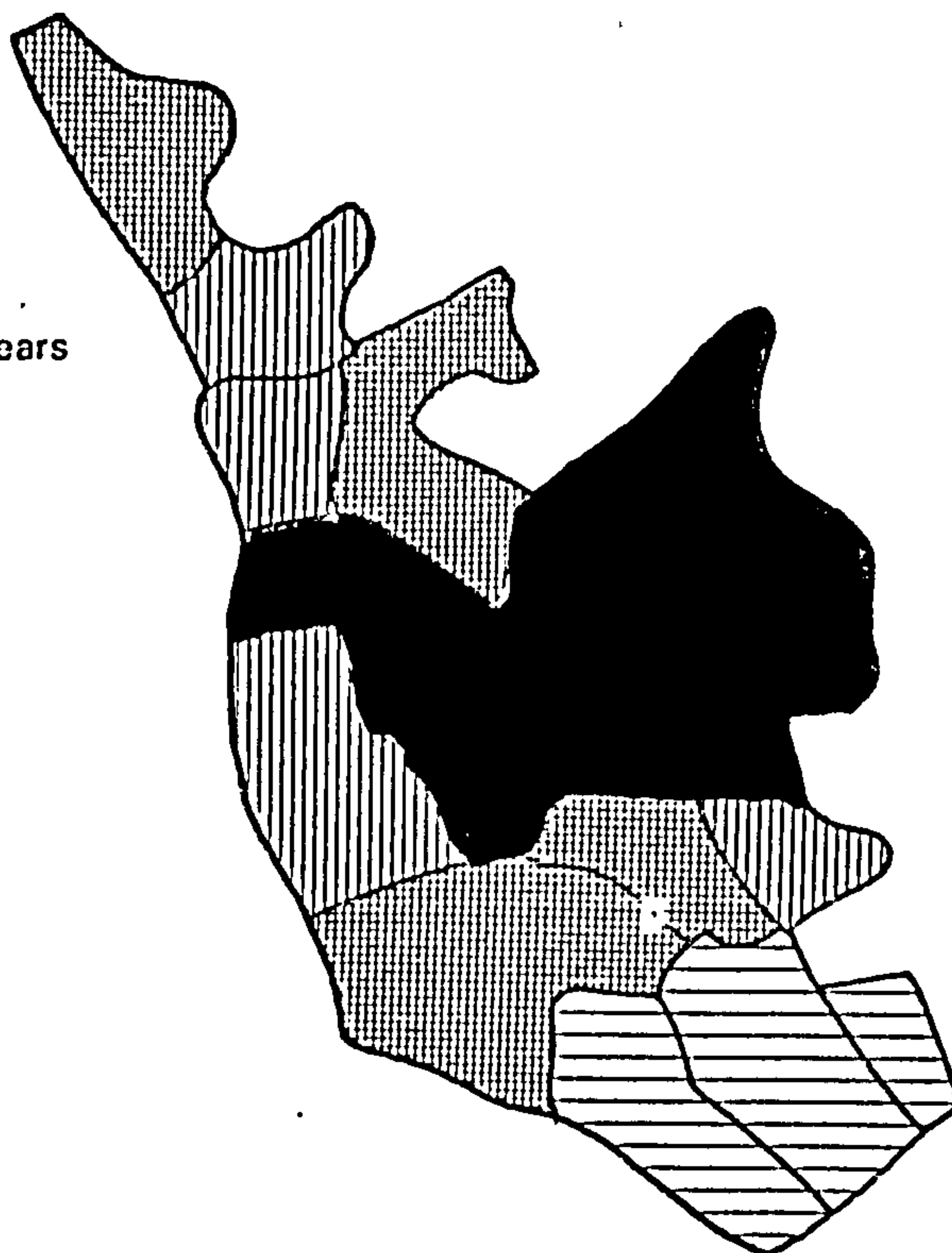
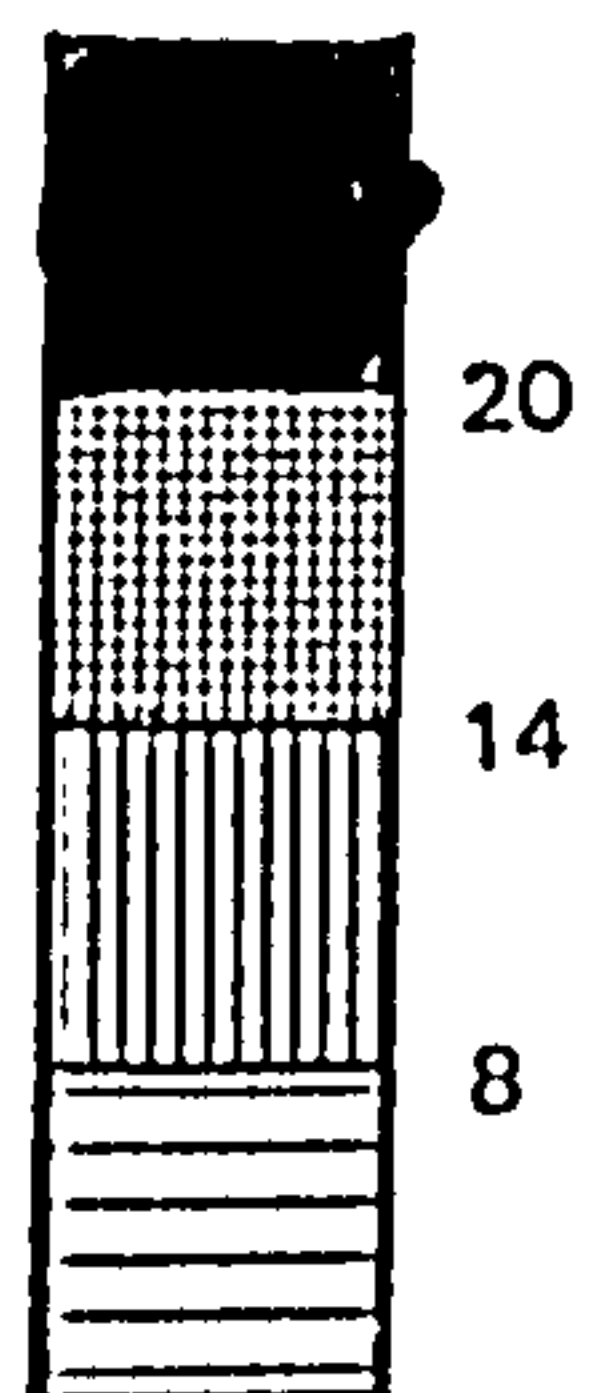


TABLE 8.1
Merseyside, 1851

Major Contrasts in the Population Structure

	Number of Registration Sub-Districts, Above or Below Regional Mean									
	Children (0-15 Years)		Women Aged (20-25 Years)		Workforce-Men Aged (15-60 Years)		Old Men (Over 60 Years)		Old Women (Over 60 Years)	
	+	-	+	-	+	-	+	-	+	-
Inner Core	1	4	1	4	5	-	2	3	-	5
Inner Suburbs	2	2	3	1	3	-	2	2	3	1
Outer Suburbs	5	2	4	3	-	7	4	3	5	2

Note: Inner Core: St. Martin's, Howard Street, Dale Street, St. George, St. Thomas.
 Inner Suburbs: Everton, Islington, Mt. Pleasant, Toxteth Park.
 Outer Suburbs: Remainder of West Derby Registration District, Wallasey and Birkenhead

Source: 1851 Census.

opposite direction.⁵³¹ The pattern is not unexpected but provides some reason to suspect the 'modernity' of the town's social geography even at this early date.

Further evidence of broad patterning of social characteristics is provided by an analysis of the town's 'urban sub-regions' (derived by consolidating the enumeration districts of 1841 and 1851 into a series of 31 comparable areas arranged by sector and zone) (Figures 8.2 and 8.3).⁵³² Tests of analysis of variance were undertaken to confirm the visual impressions of difference (Table 8.2).⁵³³ This analysis indicated clear zonal differences in all measures. Sectoral differences were less apparent - none at all appearing when all four zones were included. As zone four was relatively sparsely populated, it was decided to omit it from the analysis to see if any sectoral trends might emerge in the remaining contiguously built urban area.⁵³⁴ With the reduced number of zones, both sex ratios and population density emerge as having had sectoral dimensions. The

531 Certain townships such as Wavertree and Crosby were particularly favoured by the elderly rich.

532 Boundaries followed major road arteries and were kept constant in both censal years with the exception of two new sub-districts created in areas of rapid growth. The framework was a somewhat arbitrary one but using the mapped enumeration district data (Plates 33-40) as a guide, the sub-regions were organised so as to maximise within sub-regional similarities.

533 The 'central' sub-region was omitted from the analysis.

534 The question of scale and the delineation of sectoral boundaries is an important consideration in ecological analysis. It is possible that a finer grid or different axial orientation might have produced more positive sectoral differences. However, to test the zonal or sectoral characteristics of urban social data, some grouping procedure must be employed that aggregates enumeration district data into larger units. For analysis, it is not possible to prove zonal or sectoral characteristics from visual analysis of the mapped enumeration district data alone.

FIGURE 8.2

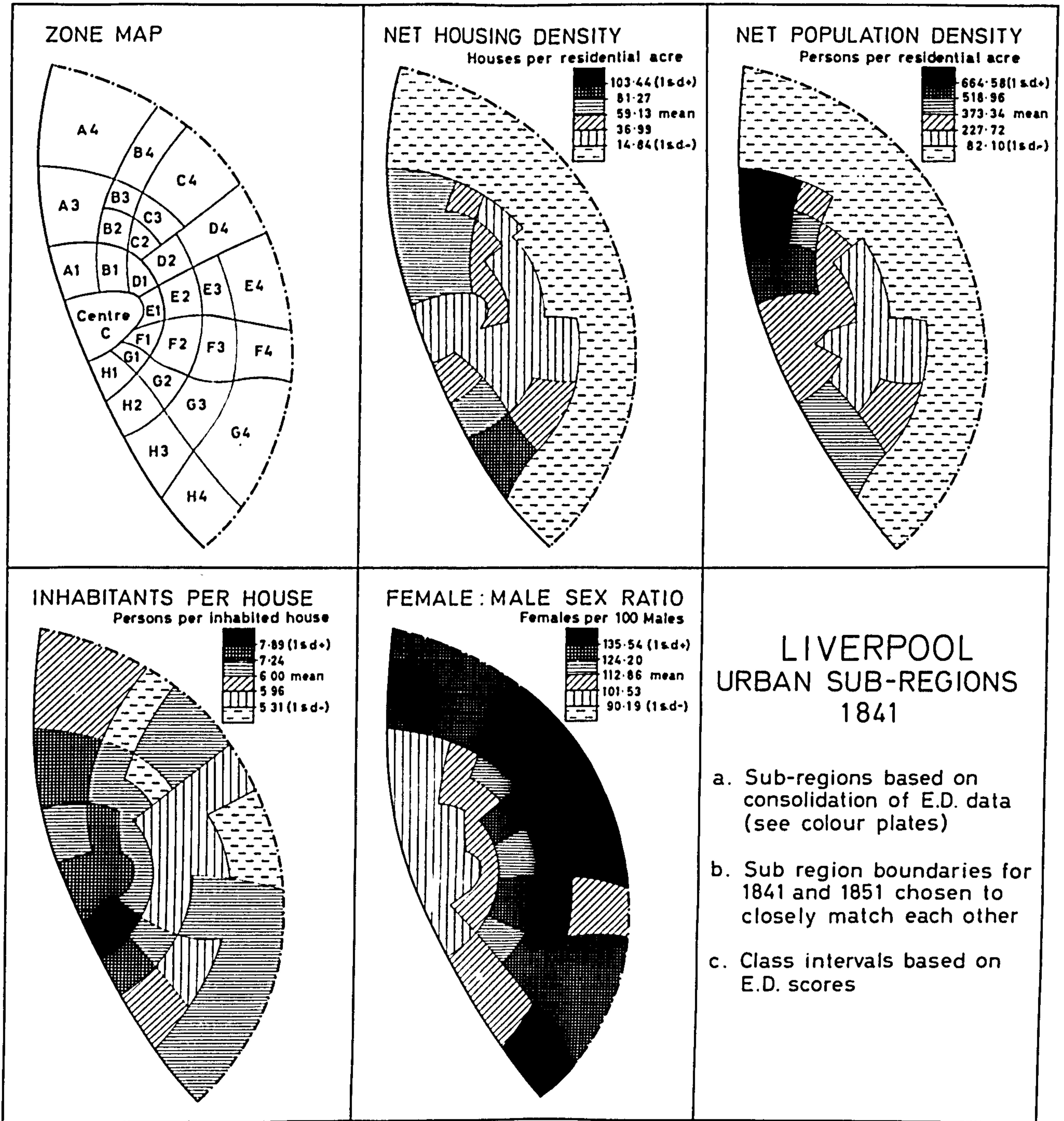


FIGURE 8.3

LIVERPOOL, URBAN SUB REGIONS, 1851

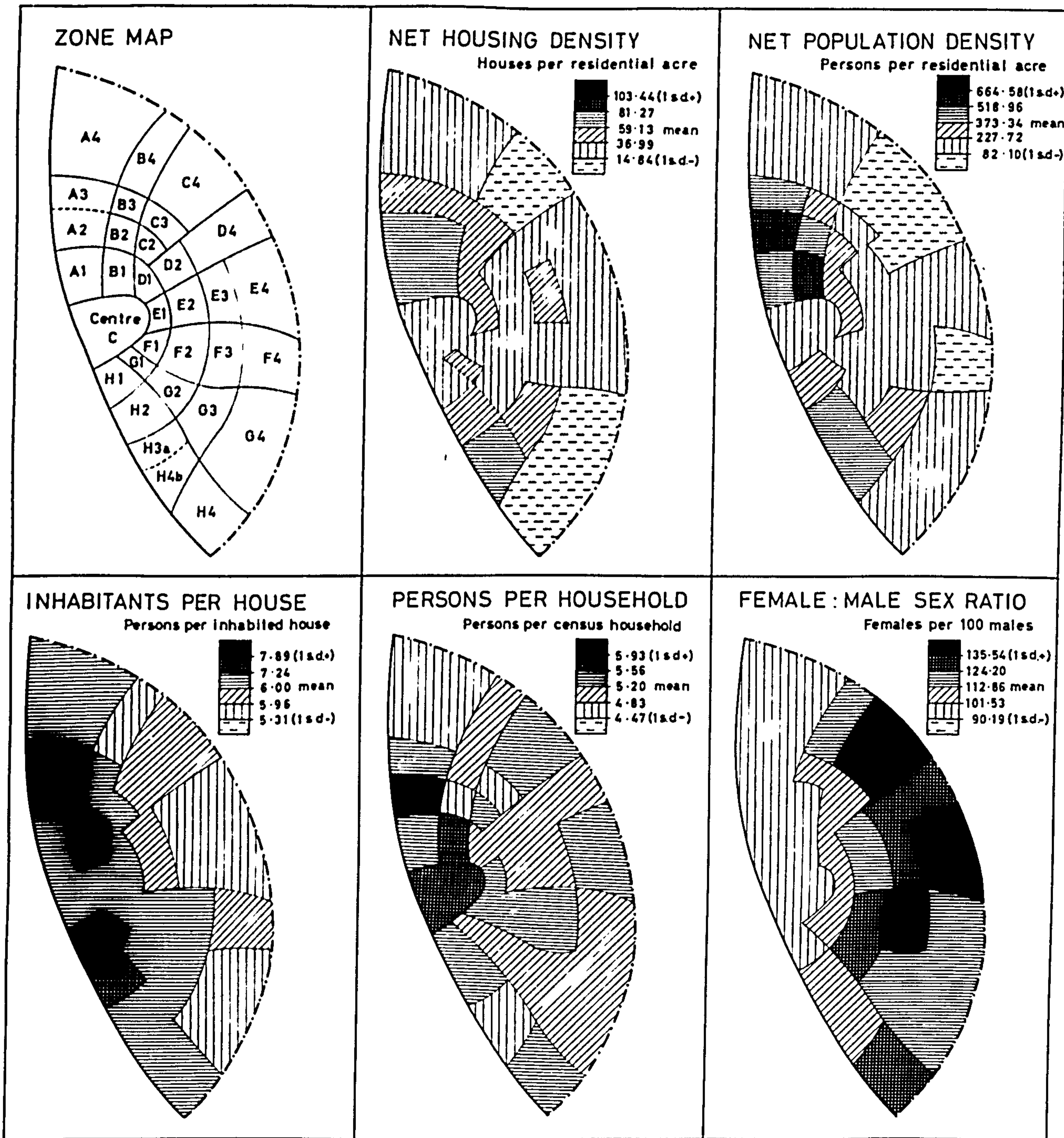


TABLE 8.2
 Liverpool Borough Sub-Regions
 Analysis of Variance Tests

	By Zone			
	<u>Households Per House</u>	<u>Sex Ratios</u>	<u>Population Density</u>	<u>Inhabitants Per House</u>
1841	n.a.	***	***	**
1851	*	*	*	***

	By Sector (3 Zones Only)			
	<u>Households Per House</u>	<u>Sex Ratios</u>	<u>Population Density</u>	<u>Inhabitants Per House</u>
1841	n.a.	*	***	-
1851	-	*	***	-

Note: * Significant at 95.0% level.
 ** Significant at 99.0% level.
 *** Significant at 99.9% level.

analysis, though undertaken for only a limited number of variables, indicates that some of the patterns found in analysis of other cities appeared evident in mid 19th century Liverpool.

The question remains, however, as to what extent these analogies of pattern are superficial or are the result of the operation of similar processes. Robson⁵³⁵ in his analysis of Sunderland in the 19th century appears to think so. Ward does not.⁵³⁶ He feels that the characteristics of the 'commercial city' as it evolved from the Renaissance and even earlier were carried into the city of the Industrial Revolution. The 'two class' city, consisting of residentially undifferentiated lower classes and small upper class suburbs, in his view persisted, until it was replaced by the finely differentiated communities of the late Victorian city in the last quarter of the 19th century. Ward's model may be tested by examining further a number of social variables derived from the 1851 census sample for Liverpool.⁵³⁷

The distribution of occupational groups in Liverpool in 1851 appears to indicate significantly different patterns of residential location (Figure 8.4). The transport group shows the riverside location of the dockworkers, the industrial service group the north end location of general

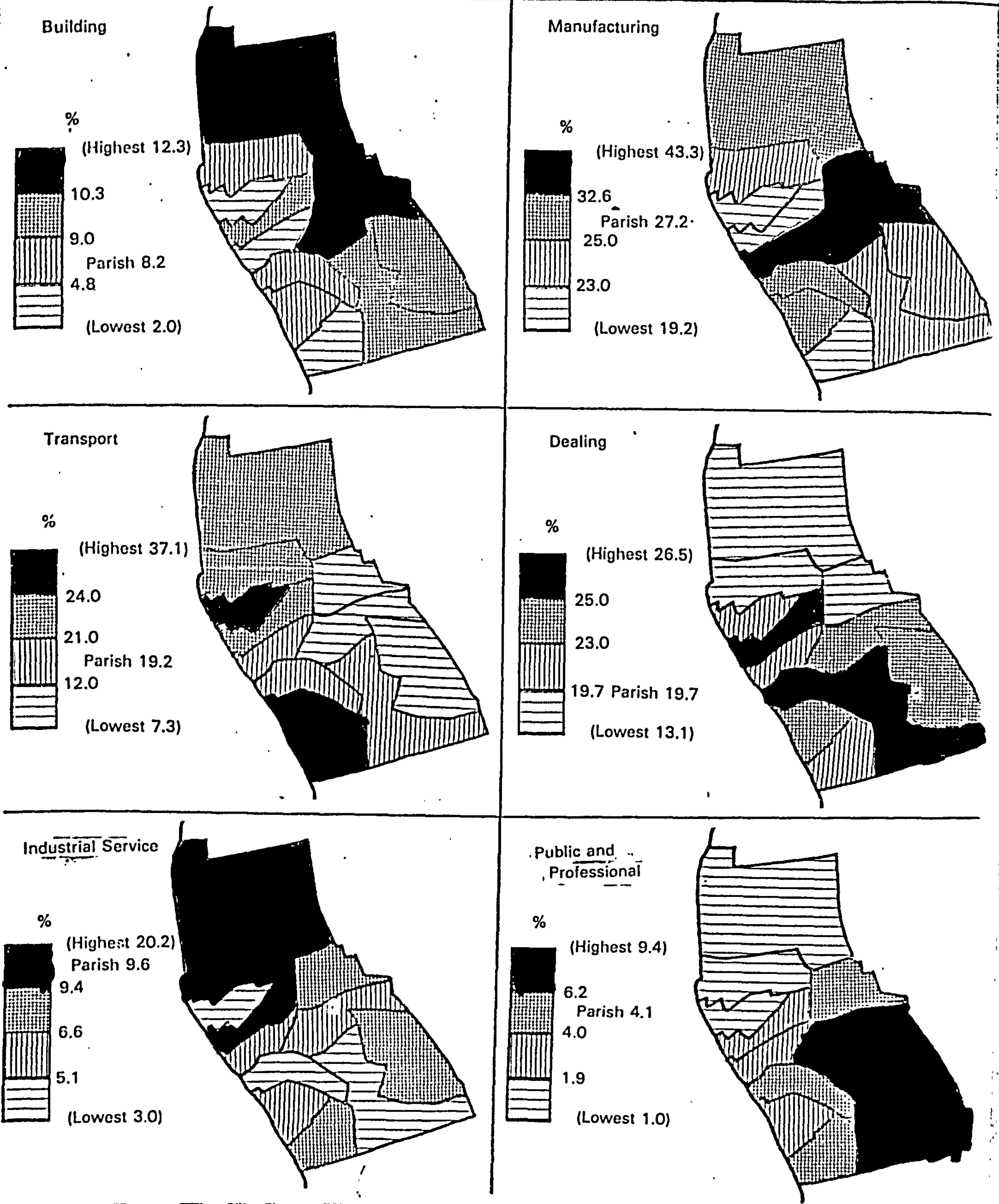
535 Robson, 1969, p. 132.

536 Ward, 1975, passim.

537 The ward is used here as a frame as it could be used later for comparison with municipally published vital data. Consideration was given (and data collected) that would have allowed analysis at the enumeration district level. However, standard errors (particularly in cross-classifications) with a ten per cent sample often proved too high.

FIGURE 8.4

Liverpool Parish, 1851: Major Occupational Groups of Household Heads



labourers (many in the manufacturing industries of Vauxhall and Scotland), those in public service and the professional group in the south-eastern neighbourhoods of the well-to-do. The manufacturing and building sectors, including the skilled artisans, are prominent in the eastern and north-east residential axes and more will be said about this later. The 'dealing' category was socially mixed, reflecting in its residential distribution both the influence of middle class merchants (in the south-east and St. Peter's Ward) and the poor petty traders of Exchange and Pitt Street.

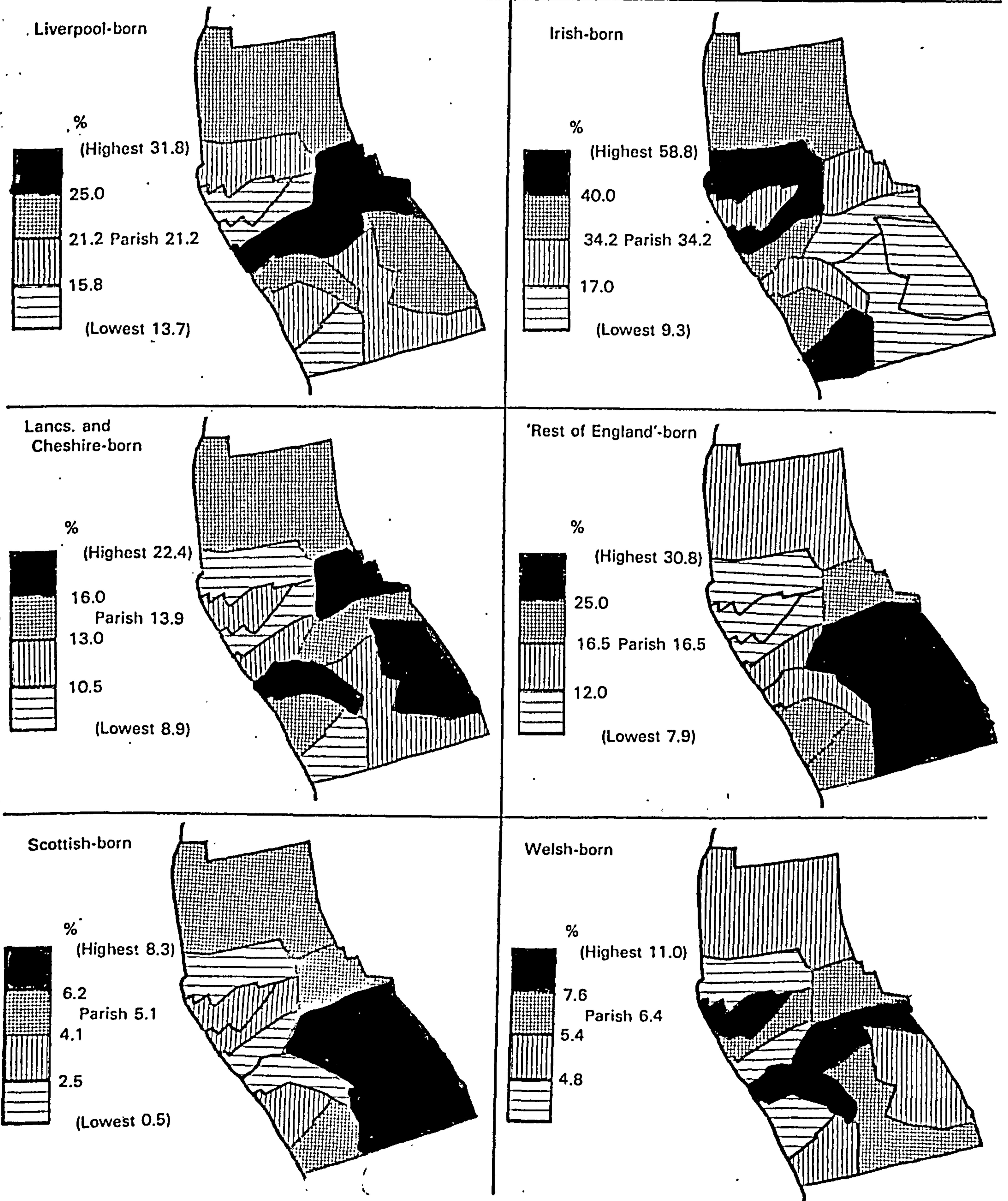
As indicated previously (Chapter 5), birthplace appears to have been an important correlate and, in the sense that it often governed access to education and skills, was a determiner of occupation and social class. Figure 8.5 indicates well how the relative social status⁵³⁸ of the various birthplace groups is reflected in the general social status of the wards in which they congregated.⁵³⁹ The Welsh and, to a lesser extent, the Scots appear to have been the only groups found in large numbers in wards of contrasting social tone. This too reflects the social spread of these groups drawn as they were from different social strata within their own homelands (see Section 5.2).

The Irish were especially 'disposed to

538 See Section 5.2 above.

539 For the larger groups, such as the Liverpool and Irish-born, there is a degree of autocorrelation inherent in this statement, for the others the similarity of ranking is distinctive.

Liverpool Parish, 1851: Birthplace of Households Heads



congregate' and this tendency had been noted as early as 1834⁵⁴⁰ and in 1836 when it was observed that there were in Liverpool "several places called Little Ireland".⁵⁴¹ By 1851, there were three wards with more than 40 per cent of household heads born in Ireland. At the enumeration district level (Plate 40) the pattern is highly distinctive and at this scale the ghetto-like segregation of the group in certain areas becomes apparent. There were eight enumeration districts with over 60 per cent of their population born in Ireland and in one - the notorious Lace Street - every household head was Irish-born!⁵⁴²

Residential choice reflects both economic considerations and social preferences; but unless we knew more than we do about the range of skills contained in individual 19th century occupations, it is impossible to determine whether Irish clerks, for instance, tended to concentrate in Irish areas because they were Irish or because they occupied only the lowest economic rungs of that occupation. Both income and social preferences must have interacted to varying degrees, some groups (such as the Irish) preferring propinquity over amenity. Scottish, Welsh, and Lancashire and Cheshire labourers, for instance, were more likely to be found in the 'better' sub-districts of Mount Pleasant and Islington, not necessarily in housing of far greater space standards but occupying the drier,

540 Purnell, 1834, p. 368.

541 Whitty, 1836, p. 20.

542 Dale St. E. (Lace St.) Enumeration District 305 in my tables had 76.4 per cent of its entire population Irish-born. The south side of Chisenhale St. between Vauxhall Rd. and the canal had 70.4 per cent of the population Irish-born.

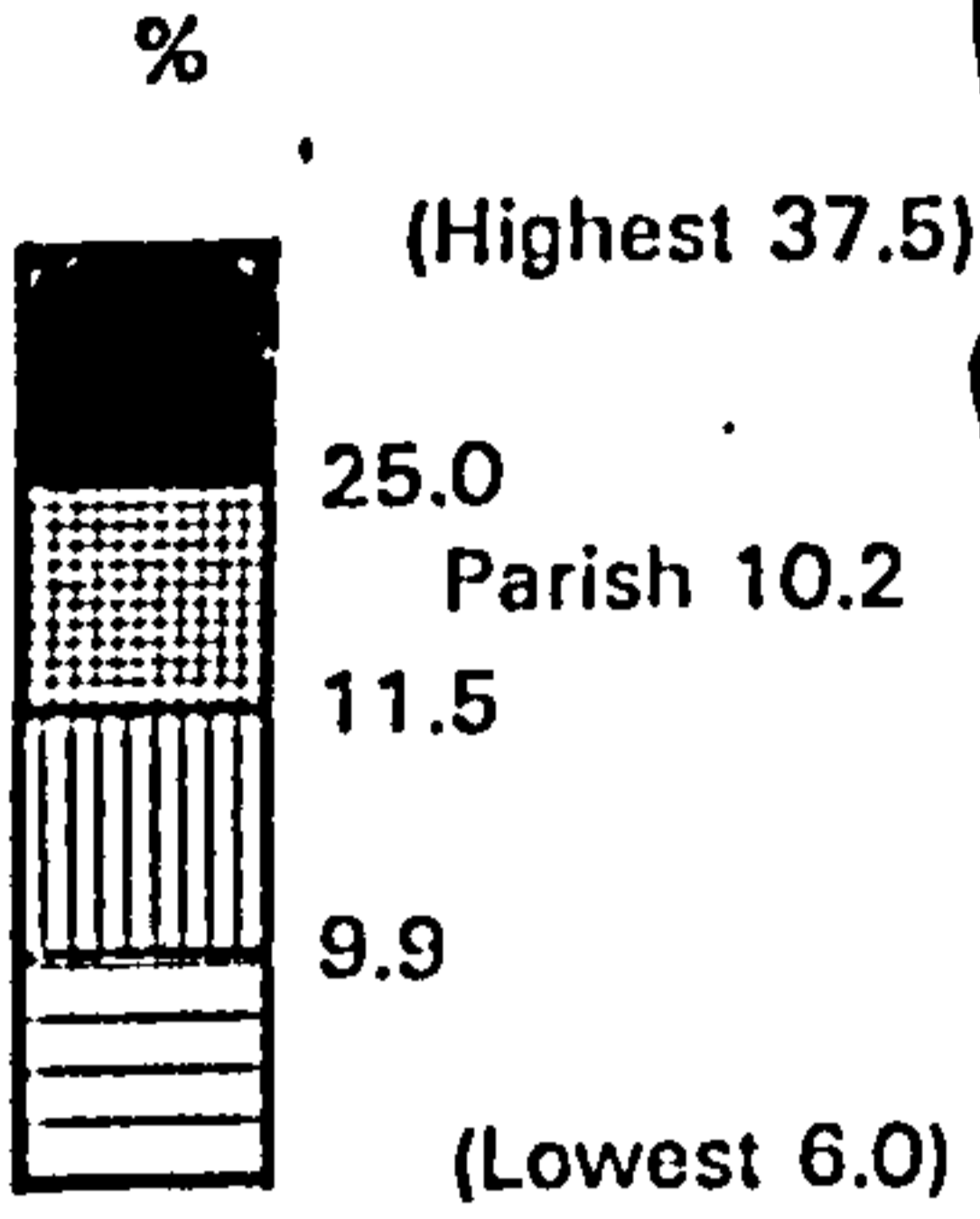
cleaner courts on higher ground.⁵⁴³

Perhaps the most significant single variable is that of social class.⁵⁴⁴ The distribution of classes and any tendency for households of similar class to share the same neighbourhood (to the possible exclusion of others) will throw considerable light on the stage of development of class segregation in Liverpool at mid-century. Figure 8.6 indicates (for each social class) the characteristic residential pattern. Social classes 1 and 2 (upper, Booth's 'public and professional' classes) predominated in the south-east of the Parish (though there were still appreciable numbers on the edge of business core). Social class 3 households (lower white collar) were also found in the south-east but, unlike their social superiors, were not also found close to the town centre but, rather, in those 'declining' neighbourhoods in which older middle class areas were being invaded by the working classes. Skilled manual workers (social class 4) predominated in a wedge running from the centre eastwards. This group tended to rub shoulders residentially with the lower white collar workers and appeared to have spearheaded the move into the declining middle class areas. The semi- and unskilled (social classes 5 and 6) were concentrated in riverside wards north and south of the town centre in the traditional 'north' and 'south ends'. The dependent class predominated in the better-off wards (where they

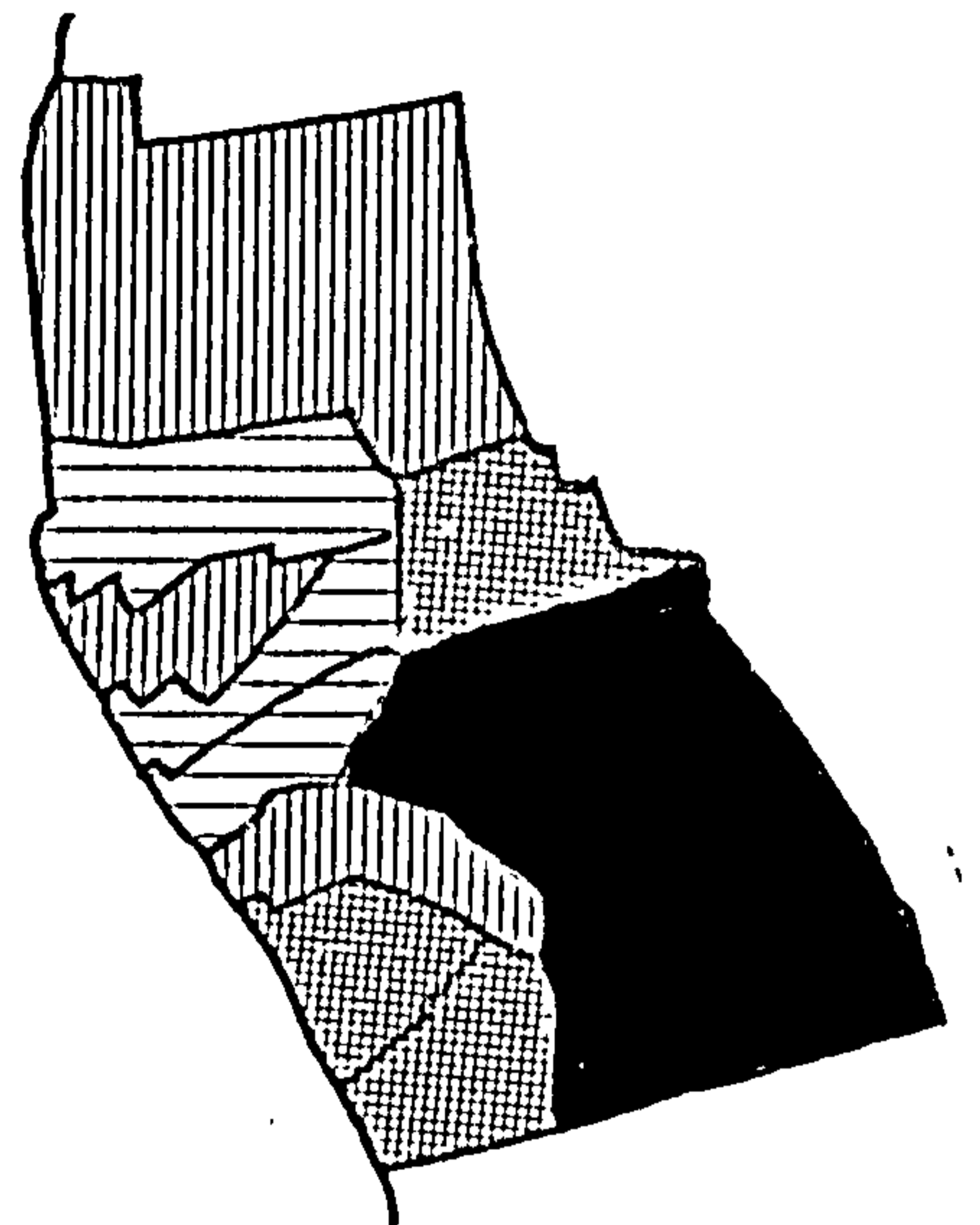
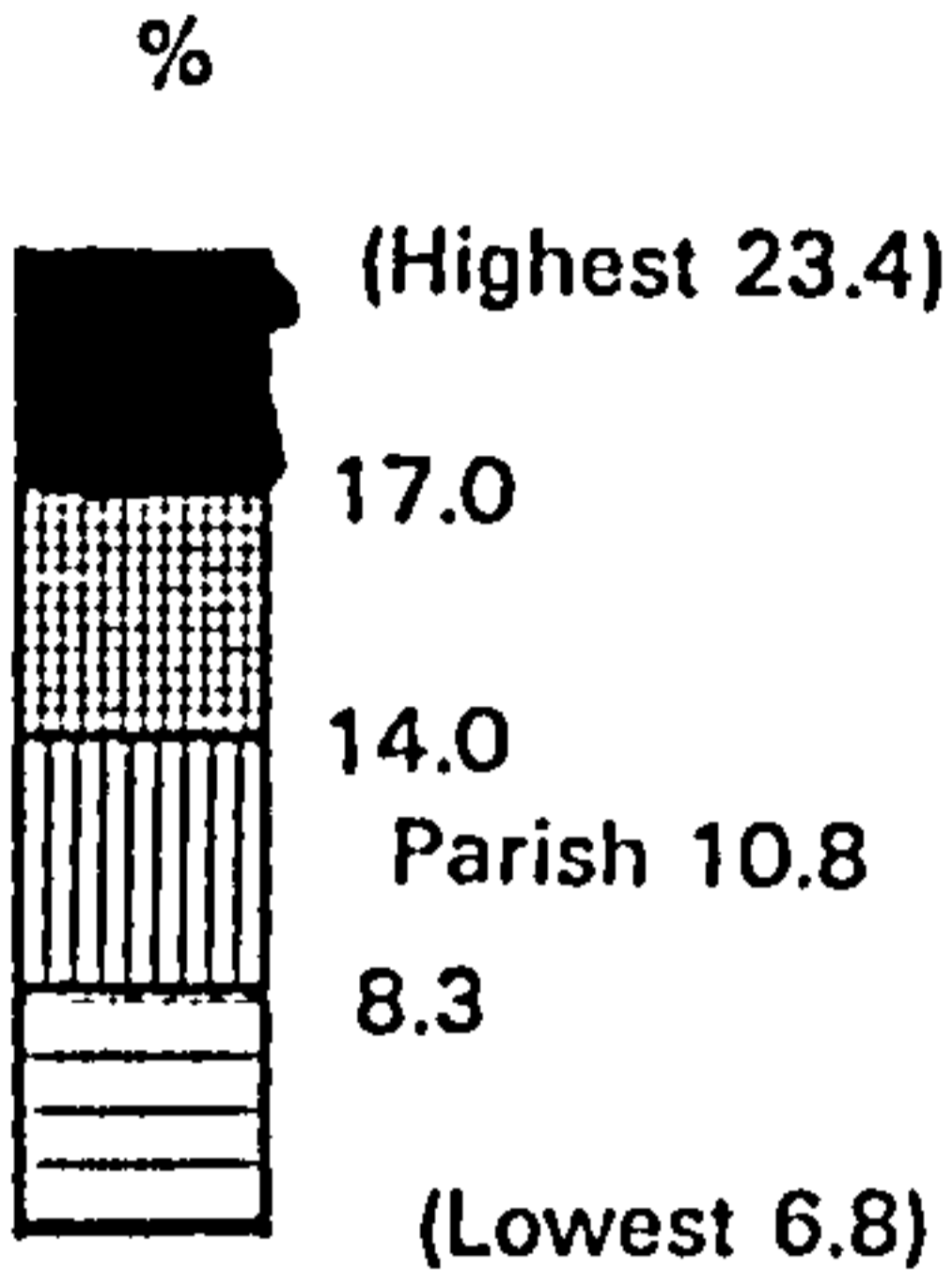
543 The concentration indices for these two groups in Mount Pleasant and Islington Registration Districts were: Lancashire and Cheshire, 3.06, 1.95; rest of England, 1.75, 2.98; Scottish, 1.17, 1.12; Welsh, 2.33, 0.64.
544 See Appendix 5 for definition.

Liverpool Parish, 1851: Social Class of Household Heads

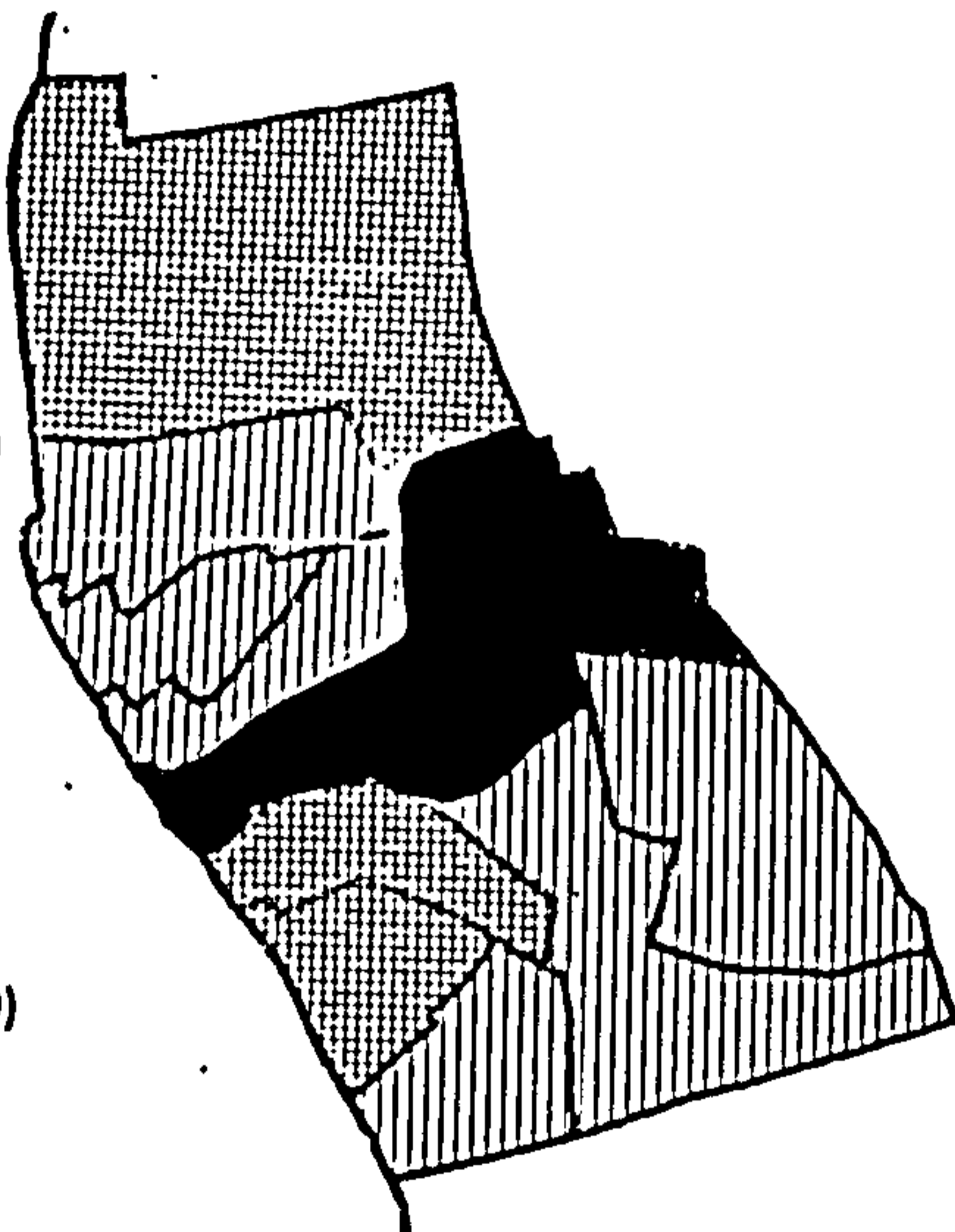
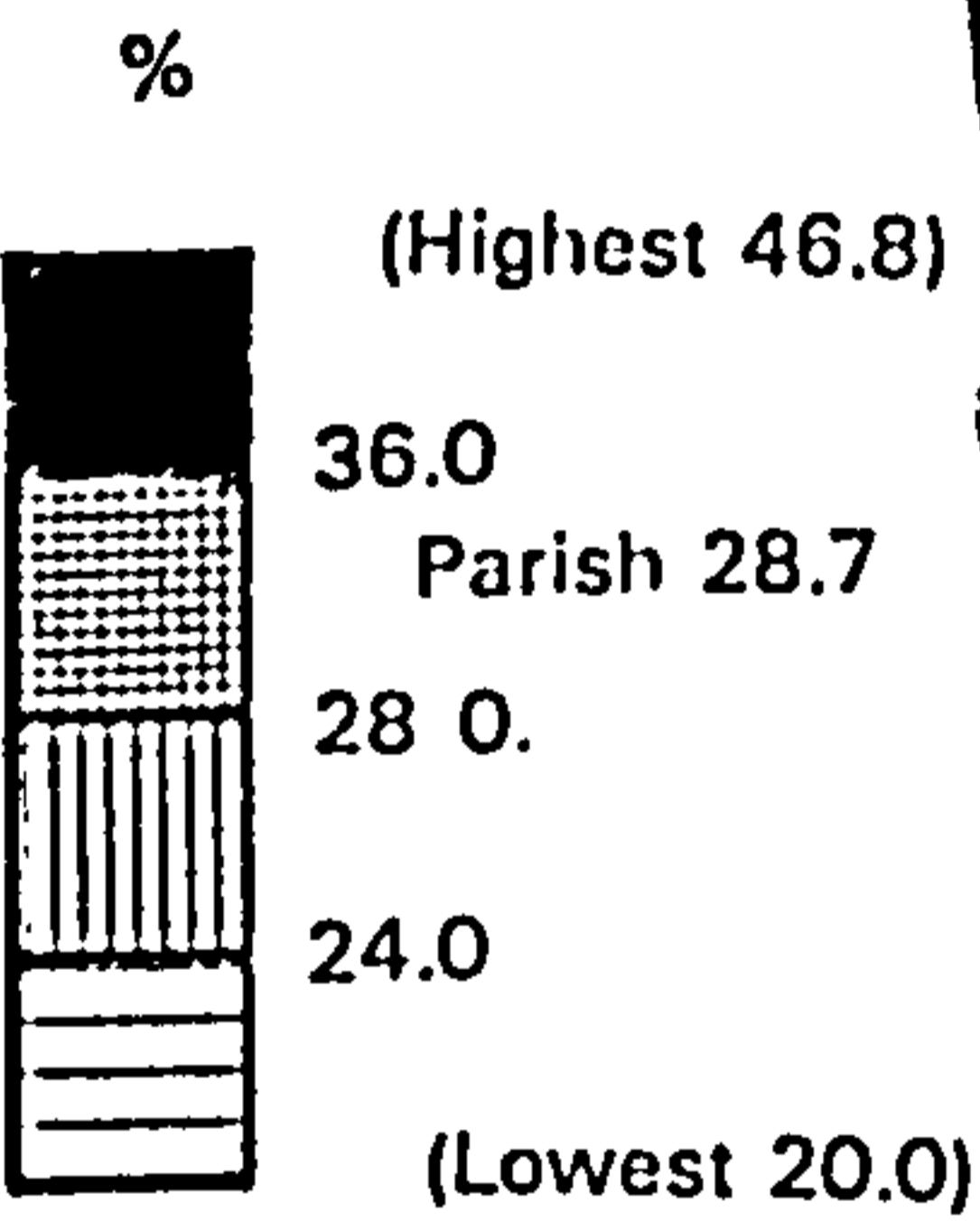
Social Class 1 and 2



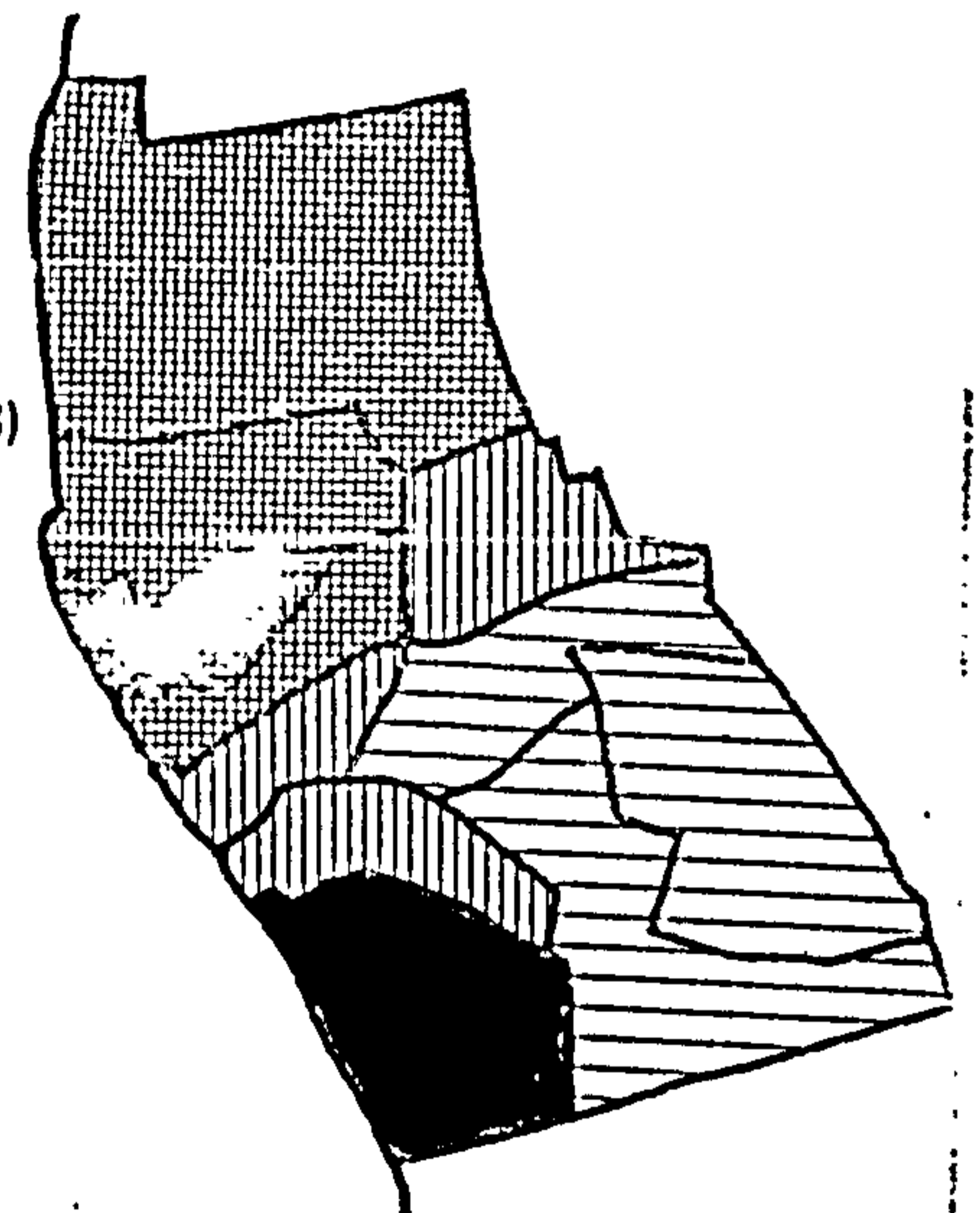
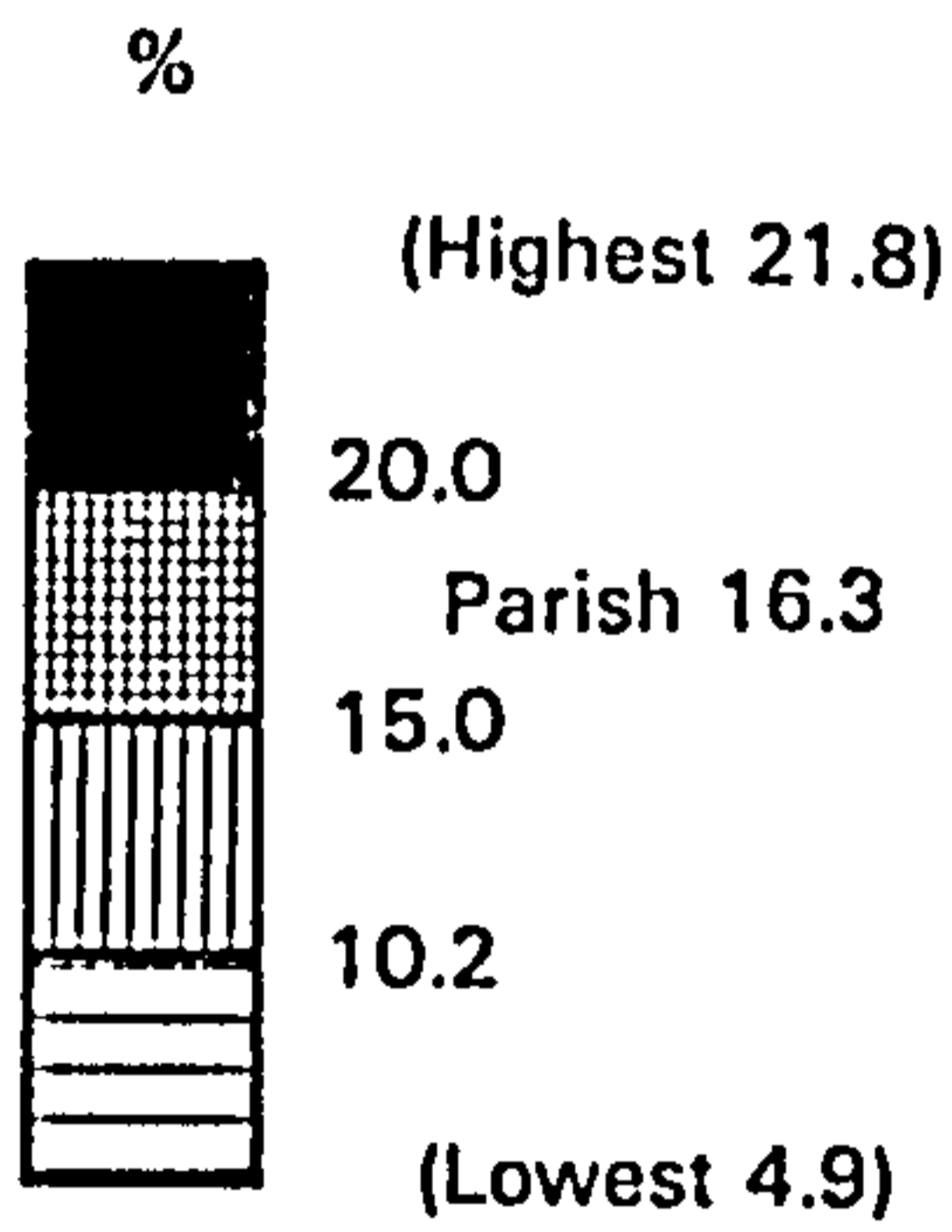
Social Class 3



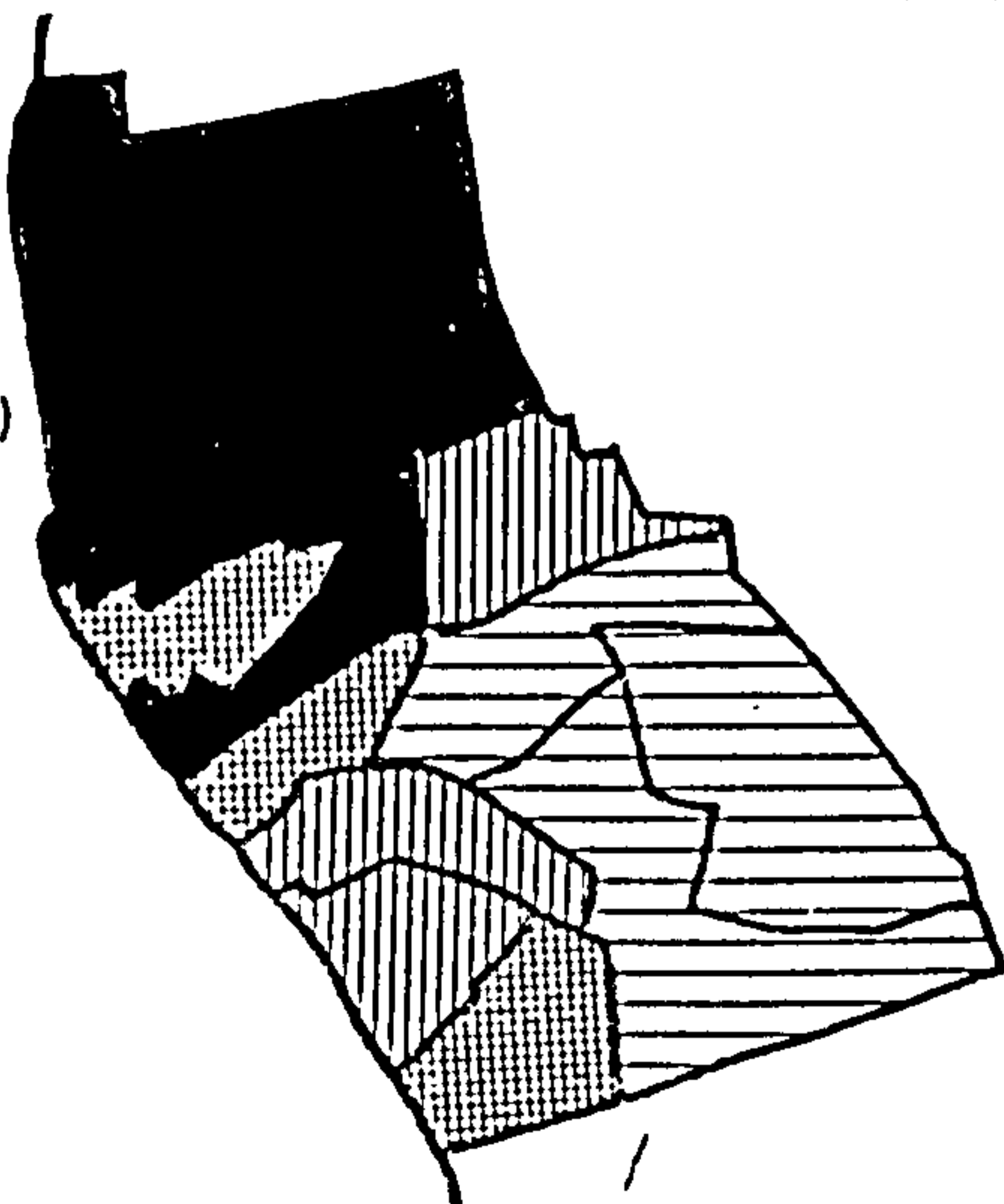
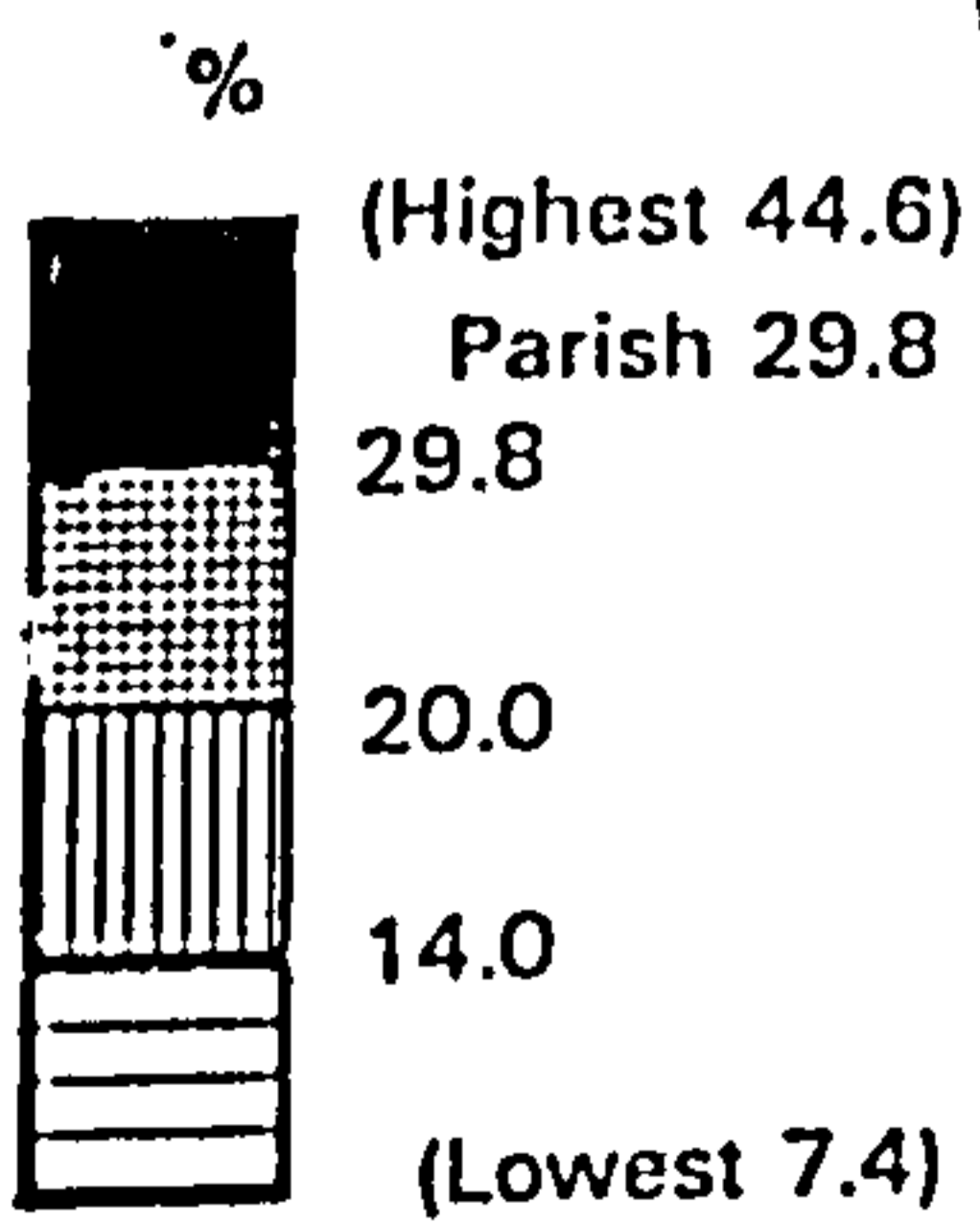
Social Class 4



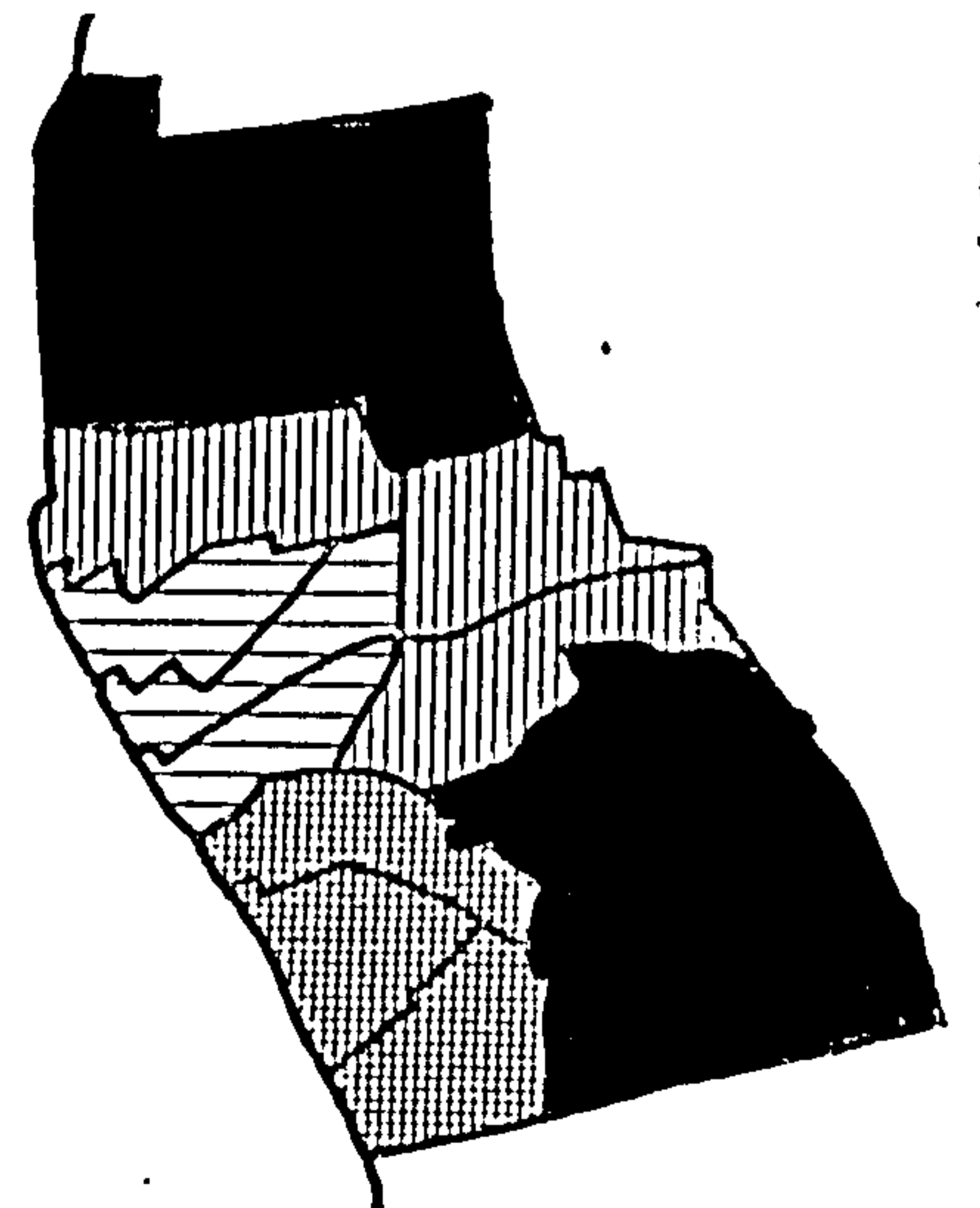
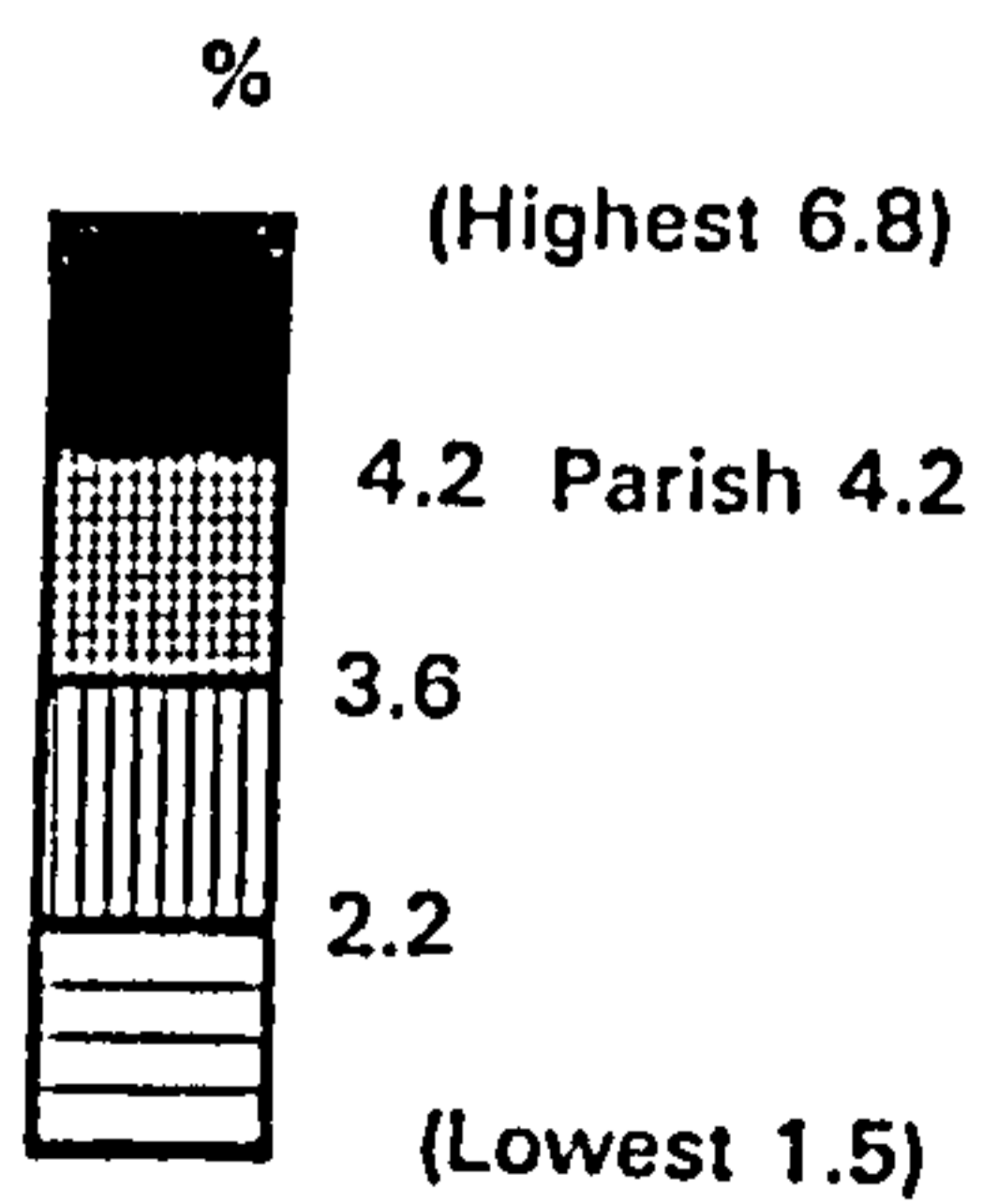
Social Class 5



Social Class 6



Social Class 7



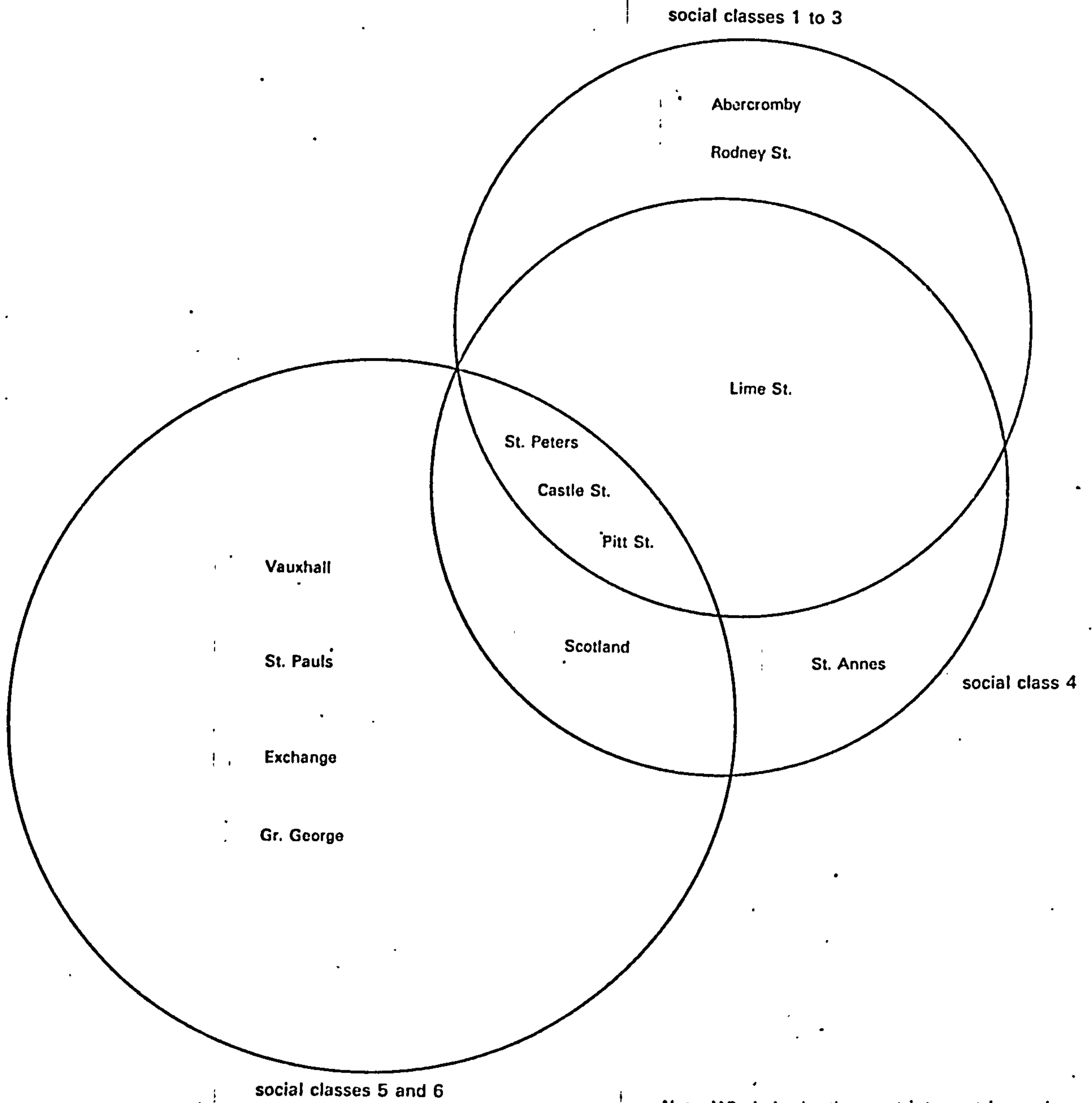
were largely an 'annuitant' group) and in the north and south ends (where they were either poor widows or the wives of husbands temporarily absent - mainly at sea).

There were, therefore, at the two extremes, wards that were highly middle class in character and, at the other end, wards which were predominantly lower working class. Seven of the twelve wards in the Parish had clear majorities in one particular class (Figure 8.7).⁵⁴⁵ All socially mixed wards were in the town centre where houses of various types and various ages existed in close proximity to one another. Furthermore, St. Anne's Ward had an absolute majority of the skilled working class. It would seem, therefore, that Liverpool's social structure in 1851 on the whole displayed a fairly high degree of spatial differentiation and clear tendencies towards social exclusivity. The Liverpool evidence would not appear, therefore, to support Ward's hypothesis, though it is possible that, in Liverpool at least, there existed certain underlying social processes that encouraged an earlier move towards such spatial differentiation. If this were the case, the Liverpool evidence would not necessarily disprove Ward but encourage a reassessment of the temporal aspects of his theory. This argument will be pursued later (see below Section 8.3).

⁵⁴⁵ It might be expected that the extra-parochial wards would also show clear majorities: residential segregation would have tended to have been even more pronounced in these suburban districts.

Parish of Liverpool, 1851

Degree of Social Class Exclusivity by Ward



Note: Wards in the three set intersect have about equal proportions of households in each of the three social class groupings.

8.2. The Residential Development Process and the Growth of Social Areas

"Wherever an open space has been left unguarded the builder has speedily insinuated himself. Narrow courts block up the light and long rows of windows peer impertinently over the privacy of the sacred precincts. A migration of the well to do succeeds. Then follows sacrifice and conversion of the larger property. The mansions disappear . . . the lawn and parterre give way to the alley and back street and the remembrance of them is lost forever."⁵⁴⁶

In bidding for urban space, residential uses usually take a back seat to industry and commerce.⁵⁴⁷ Hence, in 19th century Liverpool, the major determinant of the land-use pattern was the rapidly expanding dock system and, closely tied to it, the warehouses, railway terminals and processing industries of the riverside zone. The Leeds-Liverpool Canal stretching north from the town centre paralleling the northern docks reproduced on its banks a similar landscape three-quarters of a mile inland. Outside these zones, residential development faced no major competitor or physical barriers.⁵⁴⁸ The steep sandstone hillsides were of little agricultural value and their western prospects over the river and to Wales beyond made them highly sought-after residential sites.

The desire for amenity and views, together with the repulsion from undesirable smells and smoke attracted the attention of speculative builders of middle class housing (in

⁵⁴⁶ Picton, 1875, Vol. 2, p. 367.

⁵⁴⁷ Hawley, 1950, p. 280.

⁵⁴⁸ Unlike many 19th century towns, much of Liverpool's railway system was built in tunnel and only at Edge Hill was the town of the pre-1870 era seriously dissected by railways.

the 1820s) to Everton,⁵⁴⁹ Walton, Edge Hill and parts of Toxteth Park. Later, suburbs to the north in Waterloo, and 'over the water' in Wallasey, Birkenhead Park, Wallasey, and Rock Park (where Nathaniel Hawthorne lived in the early 1850s) beckoned. The builder-developer shaped the residential geography of the new suburbs by building with particular income classes in mind. The major decision - whether to build for a middle or working class market - depended on the entrepreneur's perceptions of yield, market, availability of capital, etc.⁵⁵⁰ In general, it may be said that middle class housing, if successful, would yield a better short-term return on investment than working class housing but the risks in a volatile and fickle market were also greater.⁵⁵¹

Middle class housing required wider streets, squares and gardens, but the financial attraction of higher ground rents or sale prices proved sufficient inducement to tempt builders into the market. The result was usually an oversupply of middle class housing and it was this oversupply

549 An early example of middle class resistance to environmental deterioration was provided by two actions brought by residents of Everton in 1831 and 1838 against the Muspratt chimney on Vauxhall Rd. that was pouring out hydrochloric acid on their gardens, trees and lawns (see [Muspratt], 1838 and Roderick, G.W. and Stephens, M.D., 1971). Though the latter action was successful and the emissions ended, Everton's popularity with the rich declined thereafter. For a parallel, see the similar influence of Gott's Mill on the west end of Leeds at this period (Beresford and Jones, 1967, pp. 191-3).

550 See Chalklin, 1974, Chapter 3.

551 Chalklin, 1974, p. 61, stresses the important fact that there were only a few towns with large wealthy classes (London, Edinburgh, Bath and Bristol); elsewhere the independent professional and commercial groups were in a minority and could rarely support the amount of building originally intended for them.

that created a strong element of instability in the social ecology of the town. With many houses to choose from, streets and even districts passed in and out of fashion. Often the middle classes left before the builders' plans for the area had come to a completion which might in turn have ensured greater ultimate stability. In areas where only a portion of the planned development was finished and a market for the remainder was lacking, vacant plots like those alluded to by Picton in the introductory quotation might be infilled by working class housing effectively ensuring the flight of the middle class who were then living in the area. Housing was thereby free to pass down from the middle to the working class sectors of the market.

As Ward rightly points out, the process of 'filtration' of housing stock from upper to lower groups played a smaller role in the provision of housing for the working classes than the construction ab initio of cheap cottage property.⁵⁵² This process has been described in some detail earlier (Chapter 6) so only certain spatial aspects will be considered here. Purpose-built working class housing apparently commenced with the clusters of court properties on the periphery of the 18th century town. These districts became, in the 19th century, the inner nuclei of two extensive working class districts which spread north and south behind the riverside commercial and industrial zones. The most convenient and highly sought-after districts for working class housing were close to the river and town centre but here such housing was in direct

552 Ward, 1975, p. 144.

competition for the expensive land. The rapid growth of Liverpool in the first half of the 19th century saw continued construction of cheap cottage property on the outskirts of the urban area - the 'instant slums' to which Ward refers. At mid-century this growth was still largely confined to the two north and south sectors. However, the rising ground (roughly above the 100 foot contour) provided building sites for the middle class terraces and villas; below lay the 'smoky ranges' of back-to-back courts.⁵⁵³

The majority of working class housing built in the first half of the 19th century consisted of street houses which were physically contiguous with back-to-back court housing. It was only after legislation in 1842 and 1846 that working class houses began to be provided with yards. This change in design was highly significant, for it marked the beginnings of real residential choice for working class families able to afford higher rents (a matter to which we shall return later).

The 'filtering down' of residential property from the middle to the working classes provided a small but significant amount of housing for the poor. This process may well have commenced in Liverpool in the 18th century (see above, Section 2.2A) and by the mid 19th century the effects of this

⁵⁵³ Hume, 1853, p. 104. The view of the town from the river depicted in many early 19th century 'prospects' illustrates this contrast well. The villas and gardens of Everton, Low Hill and St. Marys (Edge Hill) appear above the layer of coal smoke enveloping the lower town.

process of invasion and succession were being felt along the fringes of the middle class sector in most inner areas of the city.

"Gentlemen who were paying their 100 pounds a year have naturally gone into new large houses at the outside of the town and therefore the other large houses have considerably sunk in value because gentlemen would not live in them and the consequence is that the owners have been compelled to get a more moderate description of tenant and take a more moderate rent."⁵⁵⁴

Fontenoy Street⁵⁵⁵ and Pitt Street⁵⁵⁶ were singled out for mention in contemporary literature as having been formerly 'respectable' neighbourhoods.⁵⁵⁷ By 1851, many of inner middle-class residential areas of the late 18th century - for example, St. Paul's Square, St. Anne's, Pitt Street, Duke Street and Great George's Square - had either succumbed to invasion by the working classes or were in the process of being surrounded, infiltrated or threatened by the process. The St. Anne's district proved especially vulnerable and after the 1820s it declined rapidly in social status, contributing to its peripheral neighbour, Everton's, subsequent 'downfall' in the 1850s and 1860s.

The perpetual motion that appeared to

554 Stewart, 1833, p. 290.

555 House of Lords Committee, 1842, Vol. 2, p. 82.

556 Duncan, 1844, p. 154.

557 The case of the still surviving 'Bridson's Buildings' (Duke's Terrace) could also be mentioned. There, a court of five houses was constructed in the rear garden of a late 18th century townhouse probably during the 1840s.

characterise the residential habits of the working classes⁵⁵⁸ was by mid-century beginning to have a sifting and sorting effect as new residential opportunities presented themselves. This 'voluntary classification of the people', as Hume called it,⁵⁵⁹ separated not only the rich from the poor but the poor from the very poor, the respectable from 'the vicious'. The growth of the market in 'decent' housing for the working classes led to increasing differentiation in working class residential patterns as choices based on willingness or ability to pay found spatial expression. The beginning of this process can be seen in the 1840s.⁵⁶⁰ Shimmin was to recollect later that the artisans and tradesmen who had formerly lived in the old courts of the inner town "betook themselves to neat and cleanly little houses in the outskirts".⁵⁶¹ Later, Hume too bemoaned the loss of "the best people . . . outwards and upwards" from Vauxhall to Everton.⁵⁶²

The process that Ward attributes to the last quarter of the 19th century⁵⁶³ was clearly already underway in Liverpool by mid-century. Rather than the two class residential

558 The Domestic Mission noted in 1857 that less than one-quarter of the working classes stayed in the same house or street for two years (Simey, 1951, p. 10), see also Cleaver, 1854, p. 428.

559 Hume, 1869, p. 19.

560 The Scottish Agent noted as early as 1835 that some Scottish artisanal families had moved to "the very outskirts" to obtain new houses and escape "the dissipation of the inner areas" (Scottish Agent, 1835, p. 15).

561 Shimmin, 1866, p. 12.

562 Hume, 1879, p. 31.

563 Ward, 1975, p. 148.

structure postulated by Ward (who cites Engels in support)⁵⁶⁴ the evidence in Liverpool points towards a three- or four-class model⁵⁶⁵ consisting of 1 a) unskilled and 1 b) semi-skilled, 2) skilled manual, 3) lower-middle and 4) upper-middle classes. Spatially, the clusters of relationships which are summarised in the concept 'class' and the links between these and housing characteristics can be resolved into a fairly clear pattern (Figures 8.8 and 8.9).⁵⁶⁶ Two overcrowded and insanitary zones of court housing occupied by the Irish and the unskilled labouring classes lay alongside the river north and south. Professional and commercial immigrants, largely of English and Scottish middle class origin, occupied the discontinuous outer suburban ring of villas and the wedge of the planned Corporate estate in the south east. To the east and north-east lay another wedge of smaller middle class terraces and new post-byelaw working class terraced housing, occupied by the lower white

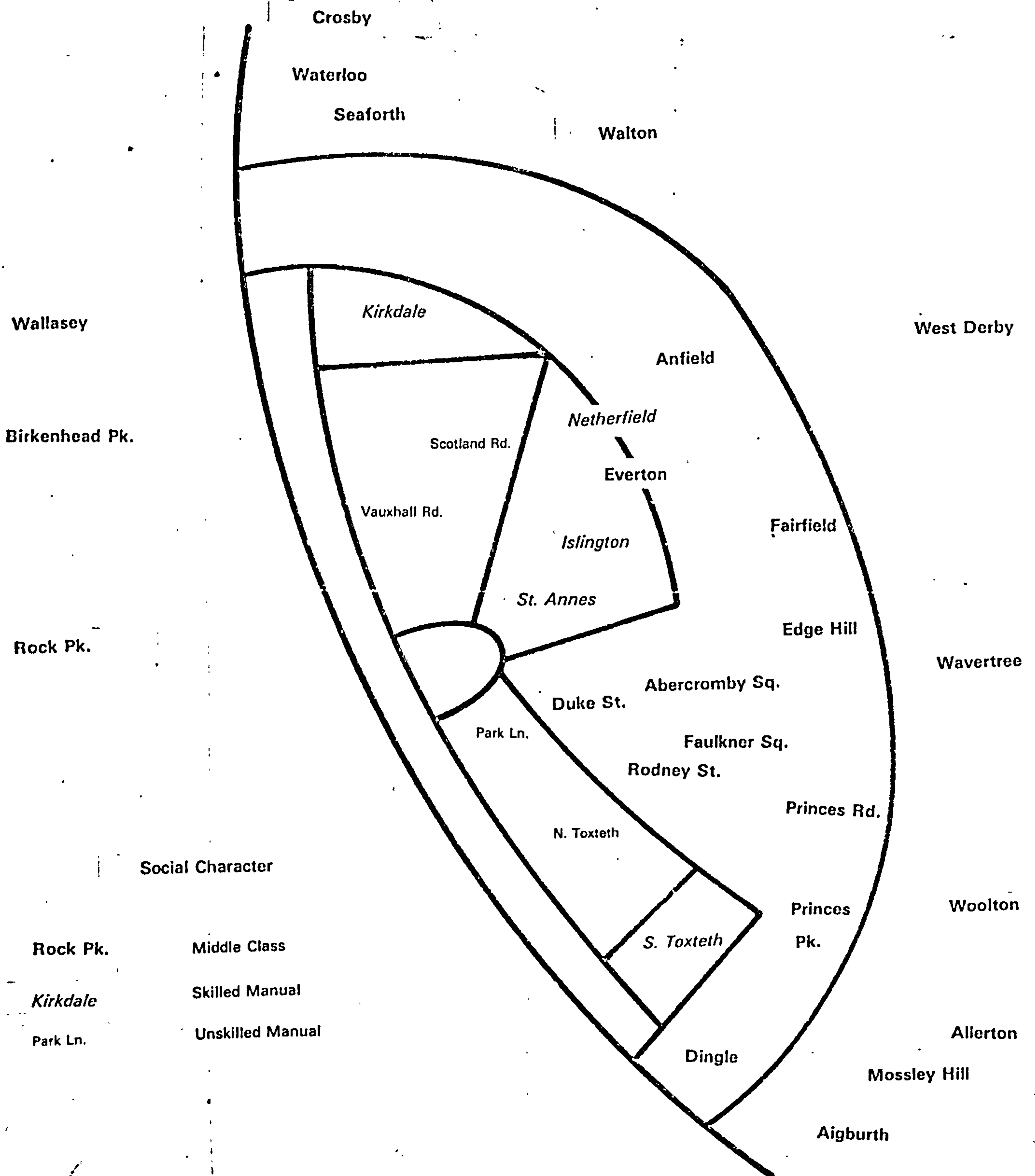
564 *ibid.* p. 151. It is by no means clear to me from an examination of Engels that he directly addresses the question of the internal arrangement of the working class in Manchester. He may have been unwilling (if he felt such evidence detracted from the stark picture of class schism) to discuss the question. He may also have felt that such variations were insignificant alongside the obvious contrast between the residential geographies of the bourgeoisie and the proletariat. His failure to discuss the matter should not necessarily be taken as proving that Manchester's social ecology was thereby "weakly differentiated" (*ibid.*).

565 Neale's discussion of 19th century social classes in which he posits a five class social structure is based on the type of political activity engaged in (Neale, 1968).

566 This generalization is taken from the enumeration district maps (Plates 33, 35 and 36) indicating servant ownership (sex ratios), house occupancy and multi-family occupancy, together with the already discussed maps of social class, birthplace and occupation.

FIGURE 8.9

Mid-Nineteenth Century Liverpool: Residential Social Character



collar groups and skilled artisans.⁵⁶⁷ The picture was a dynamic one and adjustments to new pressures were constant, especially along the edges of these social areas. Business and commercial uses expanded into the inner working class areas and these, in turn, invaded and 'made-down' middle class housing on the edges of the middle class wedge. Further out, the 'Welsh builders'⁵⁶⁸ began to run up the seven shillings-a-week rental terraces in Everton and South Toxteth which were occupied by clerks and skilled tradesmen utilising their slightly higher and more secure wage packets to purchase increased residential amenity.

567 Hume's statistics of pauperism clearly indicates this eastern wedge of 'respectability' in 1858 (Hume, 1858, p. 22).

568 The Welsh origin of the builders may have somewhat been exaggerated, possibly because the term became a synonym for jerry-building. In other senses, however, the term was particularly apt. Ruabon brick became a popular building material; the birthplace of many of Everton's inhabitants was Wales and the brand of non-conformity that thrived in Netherfield was often Welsh in origin (see also, Jones, 1946).

8.3. Conclusion

The explanation for the early development of working class residential diversity in Liverpool may lie in the particularities of Liverpool's social structure. Ward suggests that in the early and mid 19th century city, working class solidarity and a sense of class alienation had the effect of maintaining poorly sorted residential 'egalitarianism' amongst the manual workers. Whether Ward's interpretation of the 'Manchester model' of Engels will stand up to detailed scrutiny remains to be seen⁵⁶⁹ but it should be added that the situation in Liverpool did not entirely fulfil the pre-conditions contained in Ward's model. The town lacked a strong 'lower-upper' class antagonistic tradition that Ward feels operated to produce the residential propinquity between the skilled and unskilled working classes in early and mid-19th century Manchester.⁵⁷⁰ On the other hand, the developments that Ward sees as late Victorian phenomena which led to the splintering of class solidarity (increased income discrepancies based on gradations of skill which were then translated into expressions of social - and physical - distance) were already present in Liverpool by mid-century. The size of Liverpool's unskilled labour force and its Irish immigrant and indigent character was a strong factor in fostering an awareness of differences in status among the English (or more precisely non-Irish), skilled

569 M. Pooley, Department of Geography, University of Liverpool, work in progress.

570 In Liverpool, Chartism, for instance, made comparatively little impact (White, 1951, p. 5).

working class. This increase in awareness was probably encouraged by the rapid growth of the Irish minority in the 1820s and 1830s and by the religious antagonism (exemplified by the Corporation Schools debate of 1836)⁵⁷¹ in which the group conflict was expressed.⁵⁷² The non Irish-Catholic working classes, especially those with skills, had little affinity or sympathy for the 'inferior' Irish occupying a squalid and unhealthy ghetto. The desire by the 'native' working class to purchase amenity in the form of more sanitary housing and healthier surroundings began to increase after the sanitary debates of the 1840s.⁵⁷³

571 See Murphy, 1959. The visitor for the Domestic Mission recounts a number of examples of such antagonisms. "The recent excitement on the 'Papal aggression' [the restoration of the hierarchy in 1850] has reached the abodes of some of the poorest classes in our town" (Liverpool Domestic Mission, 1851, p. 19). "From one house of disreputable character one of the wretched inmates was carried to the hospital with a broken arm which she had got in one of these religious frays, for even that miserable class shared in the agitation and ranged themselves on their respective sides." (*ibid.*).

572 Hugh McNeile, Vicar of St. Jude's, Hardwick Street, leader of the bible-carrying demonstrations, was a founder member of the Liverpool Protestant Operative Association in 1839. In 1840, he was addressing a meeting (a year before the election that overturned the town's Whig administration on the Corporation Schools question) with words that inflamed, but also no doubt in part expressed, the schism in Liverpool's working class. "How long will you permit a horde of beggarly aliens to trample upon you and insult you? Shake off your lethargy and be men."

(Liverpool Standard, 20 March, 1840). Seven years later, he published The Famine, a Rod of God. Its Provoking Cause - Its Merciful Design, February 28, 1847. See also the existence of Liverpool Working Men's Protestant Reformation Society, 1853 - 1854 who organised the petition against the restoration of the Catholic hierarchy which was signed by 10,000 Liverpool operatives. The alliance between Conservatism and Protestantism was an electoral combination of such power that it ensured over a century of almost total political hegemony (see Whittingham-Jones, 1936).

573 A 'Workingmen's Association for Improving the Health of Towns' was established in 1845.

No doubt, the antipathy towards the Irish as a social group combined with the attraction of the terraced house with its exclusive (if still outdoor) water closet, to encourage fairly rapid segregation. This process was given a concrete spatial expression by the significant change in the characteristics of Liverpool's working class housing brought about by Liverpool's sanitary acts of 1842 and 1846. These regulations had the effect of creating a clear morphological boundary between the areas of unregulated back-to-back courts on the one hand and districts laid out in bye-law streets on the other. This change had one very important social consequence: since these new houses could no longer be built for rental at less than twelve pounds per annum (approximately four shillings and nine pence per week), the irregularly employed unskilled working class were virtually excluded from single family occupance of a decent bye-law dwelling. The very poor were confined to the increasingly decrepit housing stock remaining from the court building booms of the 1840s. This 'sump effect' of Liverpool's court housing was increasingly noticeable as the stock of cheap housing was gradually reduced by demolition during the remainder of the century.⁵⁷⁴ The poor and casual work force were more and more confined to an ever-decreasing stock of cheap but insanitary 'convenient' courts.

By mid-century, therefore, Liverpool displayed many elements of the 'modern' industrial city in its urban

574 I have investigated the effects of these trends as they relate to public housing policies elsewhere (Taylor, 1974).

structure. Builders, responding to perceived needs, produced a diverse housing market that offered (for some) a means of expressing their increasingly precise perception of social distance. The spatial interplay between particular types of housing and the groups occupying them established a social geography that was to persist for the next century.⁵⁷⁵ The religious riots of 1911 and the 1920s and the slum clearance programmes of the 1950s and 1960s were acted out in a social landscape that had already, by the mid-19th century, taken on a recognisable spatial form.

⁵⁷⁵ Lawton, 1970, p. 33; Castle and Gittus, 1957. It is of interest to note that in 1971 Vauxhall Ward still had the highest rate of overcrowding in the City of Liverpool - the result of over a century's persistence of social patterns albeit now within the Corporation flats of the twentieth century (Oxford University, 1975, p. 10).

Chapter 9

SICKNESS AND DEATH

"If the map of England were shaded to represent the rates of mortality of last quarter in the registration districts, the eye, travelling from the lighter south to the darker north would be instantly drawn to a spot of portentous darkness on the Mersey."⁵⁷⁶

"Manchester comes next and its death rate usually approximates to ours; for years there has been . . . a sort of rivalry between the two towns, sometimes one, sometimes the other, having the advantage."⁵⁷⁷

"It would require no deep research to prove the influence on the character of Liverpool, of the genialness or inclemency of seasons, of the direction or duration of winds, of the dullness or prosperity of trade, of the political agitation of nations, of the migration of peoples, and the prevalence of distant wars. . . ."⁵⁷⁸

1. Mortality Rates

Liverpool's reputation as a healthy town survived the writings of Dr. Currie and the early 19th century agitation for sanitary improvements (see above Section 2.6). As late as 1831, the increase in the town's population was attributed by the Census (probably reiterating the remarks of the local enumerators) to "the salubrity of the air and the progressive improvement in its Trade, Commerce, Steam-navigation and rail roads".⁵⁷⁹ Even Dr. Duncan recently returned to the town after his medical training in Edinburgh remarked in 1833 that he

576 Registrar General Quarterly Returns, First Quarter, 1866. p. xxxvi.

577 Liverpool Mortality Sub-Committee, 1866, p. 6.

578 Medical Officer of Health, 1863, p. 6.

579 1831 Census Report, p. 304.

thought Liverpool "quite as healthy as other large towns".⁵⁸⁰

The impact of cholera, so important in sensitising the middle classes to the unhealthy state of urban conditions elsewhere,⁵⁸¹ did not appear to have greatly affected Liverpool's self-complacency. But other national events in the 1830s were proceeding on a course that would result in the provision of hard statistical evidence that could not be ignored. Within a few years of the first publication of the Registrar General's reports, Liverpool's reputation had suffered a complete reversal (Table 9.1).⁵⁸²

Largely responsible for this changed view were, locally, the work of Dr. Duncan,⁵⁸³ and nationally, the investigations into health in large towns - the Sanitary Inquiry of 1842,⁵⁸⁴ and the report on the State of Large Towns' and Population Districts⁵⁸⁵ which utilised the newly available registration statistics. Liverpool, far from occupying, in Dr. Duncan's words, "a favourable place in the scale of mortality" was "judging from the annual proportion of deaths to population . . . the most unhealthy town in England".⁵⁸⁶ He supported this sweeping statement with a variety of statistical evidence drawn both from the national registration data and also from a

580 Liverpool Corporation Inquiry, 1833, p. 401.

581 See Briggs, 1961, p. 86.

582 Registrar General, 1842, p. 75.

583 Especially his growing interest in epidemiology during the 1830s (see Duncan, 1833 (a), 1834, 1836).

584 Power, 1842, p. 261.

585 Duncan, 1844, p. 144.

586 Duncan, 1844, p. 124. Scottish registration did not arrive until 1854 so the mortality statistics of Glasgow, Liverpool's northern rival, were not available for comparison at this time.

TABLE 9.1

Liverpool Parish and Borough
 Crude Mortality Rate, 1830-1849

<u>Year</u>	<u>Parish</u>	<u>Borough</u>	<u>Year</u>	<u>Parish</u>	<u>Borough</u>
1830	(26.0)	22.8	1840	39.1	32.4
1	(40.9)	35.9	1	33.9	27.9
2	(44.1)	38.7	2	32.7	26.9
3	(42.1)	34.8	3	32.5	26.4
4	(44.5)	36.8	4	32.7	26.2
5	(36.6)	30.1	5	31.1	27.4
6	(38.7)	31.9	6	40.4	36.3
7	(45.1)	39.6	7	70.9	63.1
8	32.3	28.5	8	37.6	36.1
9	35.3	33.2	9	51.8	48.5

Note: Statistics for the Parish (Liverpool Registration District) are available only after 1838. Prior to this, the rates (in parentheses) are calculated as 13.9% above the Borough rate (the excess in the period 1838-49).

Source: See Appendix 3.

personal file of local material that he had been in the habit of collecting. Liverpool's overall mortality rate was greater than that in any other town (Table 9.2); it had proportionately fewer deaths of those over 70 years and more of those under five years than other towns, while the average age at death was lower than elsewhere - a mere 17 years compared with the Metropolis' 26 1/2 years.⁵⁸⁷

Despite fierce local criticism of Duncan's views,⁵⁸⁸ the events of the 1840s were to bear out these statistical revelations. By the end of the decade, the town was notorious throughout the land for its ill-health and appeared in a consistently unfavourable light in the Registrar General's annual returns in comparison with rural districts such as Ely and Ulverstone. This sudden glare of the national spotlight tends to throw the earlier period into more intense darkness. Lacking the ^{evidence contained in} registration returns and the revelations of sanitary reformers, urban health in the earlier decades of the 19th century is more difficult to assess. How far did the high mortality rates revealed in the 1840s represent a deterioration in life-chances? How far do the statistical revelations of the decade create a misleading impression of sudden crisis?

After a peak of mortality in the early 1800s (Figure 2.15), Liverpool's average death rates appear to have

⁵⁸⁷ Duncan, 1844, pp. 125-6.

⁵⁸⁸ See Halton, 1843, p. 26 who referred to "the fancy abroad against the health of the town" and quoted 18th century authorities in an attempt to refute Duncan. Duncan 1844 (b) effectively demolished Halton's argument. Local debate on the subject was fairly lively (see Grainger, 1845).

TABLE 9.2

Mortality of Seven Principal Towns in England
Average Annual Rate, 1838-40

	<u>Rate Per Thousand</u>
Liverpool (Parish)*	34.8
Manchester (Union)*	33.7
Bristol	30.9
Sheffield	30.4
Leeds	27.2
Birmingham	27.2
Metropolis	26.7

* Mortality for Liverpool and Manchester, average annual rate between 1838 and 1842.

Source: Duncan, 1844, p.125.

declined to a level somewhat below 30 per 1000, though this was much higher than the national average of about 19.3 per 1000 (in the decade 1811 - 1820)⁵⁸⁹ This slow decline lasted about 20 years and seems to indicate that the general downward trend in mortality since the mid-18th century was continuing.⁵⁹⁰ This gradual decline appears to have ceased by the late 1820s and thereafter death rates began to climb rapidly.

This trend corresponds with the generally accepted view of economic historians.⁵⁹¹ The reasons for this apparent decline are subject to debate. In Liverpool, the usual claim of environmental improvement may have little validity. There appear to have been few improvements in drainage, water supply and cleanliness. But the relationship between environment and disease is a complex one. It is mediative rather than deterministic. The comparative freedom from serious epidemics in the decades around the turn of the century⁵⁹² appears to have been the main reason for the period's healthiness rather than the quality of the urban environment.

The arrival of an epidemic of the dreaded cholera signalled the end of decline in death rates and marked for

589 Flinn's introduction to Chadwick, 1965, p. 13 quotes the calculation of the Friendly Societies Committee for Liverpool as 26.0 per 1000.

590 This was interrupted by two 'unhealthy decades', the 1780s and the 1800s.

591 The view that the death rates were generally declining in the early 19th century has been challenged by Krause. Appendix 3 indicates that there are good reasons to feel that the present study has overcome the statistical problems he feels give the illusion of a decline in mortality rates.

592 Excepting the 'dearth epidemic' of typhus between 1799 and 1802, see Creighton, 1894, Vol. 1, pp. 133-67.

Liverpool the commencement of four decades of recurrent epidemic and high death rates (Figure 9.1).⁵⁹³ The worsening of life chances was generally appreciated at the time. Compared with the late 18th century, average life expectancies had deteriorated sharply and it was the working classes who were most seriously affected (Table 9.3).

The 1840s were years of terrible mortality with rates probably higher than in any other British city (possibly even than any other large city in the world) since medieval times. Peaks were reached in the epidemic years of 1847 to 1849 during which over 50,000 people died.⁵⁹⁴ Death rates in the Borough rose to 63.1 in 1847 (70.9 in the Parish) and 48.5 in 1849 (53.2 in the Parish). Though national death rates rose, Liverpool's rose even faster and the average mortality for the Parish for the decade was just under 40 per 1000, almost 50 per cent above the national average. The 1850s, though a better decade, with only a minor cholera epidemic in 1854, still had rates above 30 per thousand.

Those health reformers who had hoped that the efforts and expenditure of the Corporation would be justified by a continuously falling death rate were cruelly disappointed.⁵⁹⁵

593 Only twelve of these years had a Borough death rate below 30 per 1000, the lowest being 25.8 per 1000 in 1860.

594 An unknown proportion of these were immigrant Irish but it is not correct to entirely dismiss these deaths as not Liverpool's responsibility. Many of the immigrant Irish caught disease in Liverpool though admittedly their physiological resistance must have been extremely low.

595 Dr. Duncan did not live to see the return of the high rates. He retired for reasons of ill-health in 1863 and died the same year aged 57.

FIGURE 9.1

Parish (R.D.) of Liverpool, 1830-70

Crude Mortality Rate

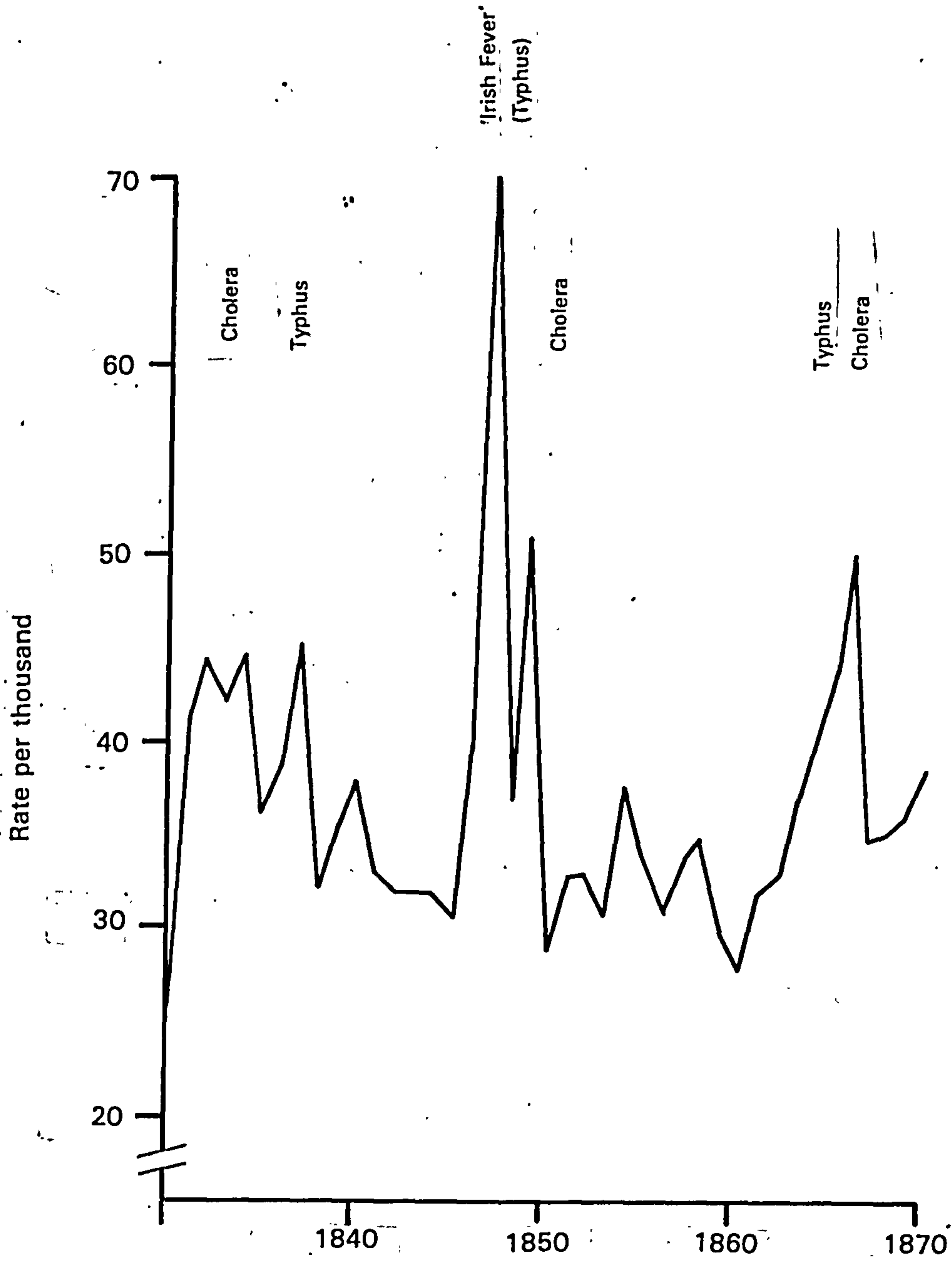


TABLE 9.3

St. Nicholas District, Liverpool 1784-1810 and 1841-2
 Comparison of Average Life Expectancy

<u>Class</u>	Average Life Expectancy		Death Rate Per Thousand	
	<u>1784-1810</u>	<u>1841-2</u>	<u>1784-1810</u>	<u>1841-2</u>
Gentry	43	43	23.2	23.2
Tradesmen	23 1/2	19	42.5	52.6
Operatives	18 1/4	16	54.8	62.5
All classes	25	20	40.0	50.0

Source: "An Analysis of the Registration Books of St. Nicholas."
 Chadwick (quoting Playfair), 1857, p.588.

The 1860s saw mortality rates rise to levels just below those of 1801, 1847 and 1849 and, while they began to decline thereafter, it was not until the beginning of the present century that Liverpool's death rate dropped below 20 per 1000.⁵⁹⁶

The excessive mortality rates were largely the product of a few serious diseases - some epidemic, some endemic - which were particularly virulent in Liverpool.

Cholera

Cholera was the first great epidemic to affect 19th century Britain and played a major role in alerting the public to the increasingly insanitary conditions in towns. The cholera bacilli (vibris cholerae) are ingested in contaminated water and/or food. The disease is marked by severe diarrhoea, vomiting and dehydration. Death usually occurs quickly - often within 48 hours - unless saline transfusions are available. The manner of its transmission meant that it found an ideal environment in the poor, insanitary and overcrowded urban districts, though it was by no means confined to these areas.

In 1832, cholera hit Liverpool, a town as medically unprepared as most and the pathetic attempts to meet the emergency were even less energetic than elsewhere in the country. The Parish which refused to "take any steps or vote any money to meet the attack of cholera"⁵⁹⁷ were unable or unwilling

⁵⁹⁶ Not until 1912 did the last ward's (St. Annes) mortality rate finally drop below 30 per 1000.

⁵⁹⁷ P.P. 1831-2, XXVI, p. 485.

to act because of an internicine dispute within the medical profession and the factionalism that marked the unreformed council.⁵⁹⁸ The epidemic of 1832 which affected 6,000 to 7,000 persons killed between 1,500 to 2,000, many of the deaths going unreported.⁵⁹⁹ In this year, there were more cholera deaths in Liverpool than in any other provincial town. The experience of treating the poor in this epidemic probably stimulated Duncan's interest in epidemiology, and his realization of the important relationship between disease and the domestic conditions of the poor.⁶⁰⁰

The disease was noted at the time to be selective of those "obliged to inhabit wretched dwellings".⁶⁰¹ Duncan found the cholera especially prevalent among the Irish. One third of his patients were Irish and the disease also appeared more virulent among them - one quarter of them died compared with one sixth of English cholera patients.⁶⁰² Though some inspection of houses took place at this time,⁶⁰³ no systematic 'Sanitary Police' or active local board of health was apparently established in Liverpool, as it was in Manchester and other places.

598 The Lancet, 1831, Vol. 2, p. 305.

599 Duncan, 1836, p. 18 and 1840, p. 144. Creighton reports 4,912 cases of which 1,523 died (Creighton, 1894, Vol. 2, p. 826).

600 ibid. pp. 821-2.

601 Baird, 1832, p. 44.

602 Duncan, 1836, p. 19. The Irish also formed the bulk of the cholera mob who rioted against removal of patients to hospitals (ibid. p. 23).

603 The town clerk mentions "pigs frequently kept in top rooms" (Liverpool Corporation Inquiry, 1833, p. 429).

The spread of cholera was usually an indication of a contaminated water supply. That it was not spread in Liverpool in this manner but rather by the less efficient method of case to case contact indicated that "exceptional circumstances" would need to be present for a large epidemic to occur.⁶⁰⁴ The malignant cholera picked out these exceptional circumstances with unerring accuracy. In an address to Liverpool medical men in 1832, Baird described a scene which some of his audience knew well.

"All narrow confined passages, all courts where the rays of sun seldom enter, or where the current of air is interrupted in its progress - all low, ill-ventilated hovels and especially all miserable apartments, tenanted by a congregation of wretched creatures, ill-fed and worse clothed, these are the main haunts of malignant cholera and it is from these places the disease will first emerge and in which it will commit the more destructive ravages."⁶⁰⁵

Cholera was to strike the town three more times - in 1849, 1854 and 1866, and each time it appeared first in the lower town and then spread to other areas.

Typhus

It was not cholera alone, however, that was responsible for the high death rates of the 1830s. For instance, 1837, a year without cholera but with a typhus epidemic, the

⁶⁰⁴ The fact that the disease in Liverpool was not waterborne probably restricted it to the poor and insulated the upper classes against its effects (See also Briggs, 1961, p. 78).
⁶⁰⁵ Baird, 1832, p. 44.

death rate of 1832 was exceeded.⁶⁰⁶

Typhus fever -- the disease of indigence and overcrowding carried by body lice -- was one of the most important causes of high mortality in Liverpool in the 1840s. After the epidemics of the late 18th century (which had led to the opening of the Liverpool Fever Hospital), its virulence had apparently waned somewhat.⁶⁰⁷ During the 1830s, however, it again became endemic to the town.⁶⁰⁸ Between 1835 and 1840, 5,000 cases were treated annually by the Dispensaries⁶⁰⁹ and a further 1,558 cases were admitted into the Fever Hospital.⁶¹⁰ Other cases of sickness and deaths from fever occurred in the workhouse where special 'fever-sheds' were erected.⁶¹¹ Mortality from the disease was three times as prevalent as it was in other parts of Lancashire⁶¹² and it represented a larger proportion of all deaths than in any other town (Table 9.4).

The influx of starving Irish in 1847 brought with it the worst epidemic in the town's history. From among the 300,000 who landed in Liverpool in the first 6 months of 1847, 60,000 - 80,000 Irish paupers "driven from their miserable cabins by the fear of starvation"⁶¹³ took up residence in

606 Duncan, 1840, p. 144. Duncan's conclusion is correct, my calculation indicates the death rate in 1832 was 38.7 and that in 1837, 39.6 per thousand.

607 Duncan, 1833, p. 470.

608 There were also epidemic outbreaks in 1818 and 1826.

609 Duncan, 1840, p. 143 and Duncan, 1842, p. 283.

610 Power, 1842, p. 257.

611 In 1836, coffin-boards, intended largely for fever victims, cost the workhouse 441 pounds, 9 shillings and 4 pence (Wood, 1840, p. 429).

612 Power, 1842, p. 261.

613 Duncan, 1851, p. 5.

TABLE 9.4
 Fever Mortality in Large Towns
 1839-1843

	<u>Deaths by Fever</u>	<u>Percent of Fever Deaths to Total</u>	<u>Annual Rate per 1,000 Fever Deaths</u>
Liverpool Parish	1795	6.78	2.45
Liverpool and West Derby Registration Districts	2060	6.23	2.05
Manchester	1121	5.61	2.01
Metropolis	9150	4.83	1.45
Leeds	661	4.48	1.12
Birmingham	502	4.10	1.09

Source: Duncan, 1844, p.136.

Liverpool. Some brought the fever from Ireland⁶¹⁴ and the majority were soon exposed to it locally as the great epidemic took hold.

"The cases became so numerous as completely to baffle the attempts of the parish authorities to provide the requisite hospital accommodation. Hospital after hospital was opened in different districts of the town, the lazarettoes in the river were by the consent of government converted into hospital ships and still the cases accommodated in hospital were more than twice outnumbered by those for which no hospital accommodation was provided. . . . In the beginning of May, the epidemic burst through the barrier which had hitherto seemed to confine it to the poorer classes of the inhabitants; it invaded the better districts of the town, established itself among the English population who had previously escaped its ravages; gradually creeping up among the wealthier classes of society."⁶¹⁵

In May the deaths from fever alone amounted to 155 - "a number fully equal to the average mortality of Liverpool from all causes and affecting an instance of mortality from that disease unprecedented in the history of any English town".⁶¹⁶ In August, the epidemic reached its peak when in a single week 537 persons died compared with the usual average of 160.⁶¹⁷ By the year's end, it was estimated that almost one third of all the Borough's inhabitants had suffered from fever, diarrhoea or dysentery.⁶¹⁸ Typhus fever remained in Liverpool for many years and disappeared only at the century's turn. It was particularly virulent again in the 1860s when, together with the last cholera epidemic, it pushed mortality rates over the 40 per 1,000 level.

An 1866 analysis of the occupations most

614 Rushton, 1847, p. 60.

615 Duncan, 1851, p. 8.

616 Liverpool Health Committee Minutes, 16 June, 1847, p. 223.

617 Duncan, 1851, p. 9.

618 *ibid.* p. 18.

susceptive to the disease highlights its distinctive class selectivity (Table 9.5). Typhus was "the characteristic disease of the poor of Liverpool"⁶¹⁹ and recognized in the 19th century as the product of environmental deprivation and social distress, or as Dr. Trench put it "the debased and indigent conditions of the people".⁶²⁰

Bronchitis and Tuberculosis

Two other killer diseases of the 19th century were bronchitis and tuberculosis. Flourishing in environmental conditions found most frequently in urban areas, these diseases were accepted as an almost inevitable and unexceptional hazard of everyday life. Tuberculosis (consumption) accounted for 17.9 per cent of all deaths in Liverpool in 1838 - 1840⁶²¹ and 18.7 per cent of those over five years in 1870. Bronchitis (pthisis) accounted for 33.1 per cent of all deaths in those over five years old in 1870.⁶²² In the 'normal' years free from great epidemics, these two diseases accounted for about half of all deaths. The proportion of deaths from consumption in Liverpool were the highest in the country in the period 1838 - 1840.⁶²³ Liverpool also had the country's highest rate of deaths from pulmonary diseases in 1857.⁶²⁴

Infant Mortality

The chief victims of disease were children under

619 Duncan, 1844, p. 133.

620 ibid. p. 16.

621 Duncan, 1844, p. 41.

622 Parkes and Sanderson, 1871, p. 61.

623 Duncan, 1844, p. 142.

624 Greenhow, 1857, p. 350.

TABLE 9.5
 Borough of Liverpool, 1866
 Deaths from Fever by Occupation

	<u>Number</u>	<u>Percent</u>
Labourers	649	42.6
Tradesmen	632	41.5
Servants	66	4.3
Nurses	5	0.3
Seamen	98	6.4
Soldiers	10	0.7
Professional and Mercantile	24	1.6
Unknown	<u>39</u>	<u>2.6</u>
TOTAL	1523	100.0

Source: Liverpool Medical Officer of Health, 1866, p.17.

five years of age; 52.8 per cent of all deaths in Liverpool were in this age group and in the 1840s this figure was the highest in the country (Table 9.6).⁶²⁵ The earliest intensive study into the problem of infant mortality was conducted in 1871 and its findings are probably representative, but conservative, estimates of the situation prevailing at earlier times.⁶²⁶ In an examination of a cross-section of streets of differing social class, Parkes and Sanderson found in 'poor' streets that the proportion of deaths to those under five still accounted for 40 to 60 per cent of all deaths (Table 9.7). These conditions, they felt, were representative of the poorer parts of the town and in some areas mortality was even higher than in the streets selected.⁶²⁷ It was, they stated, Liverpool's high infant mortality rates that produced death rates that were so high even in non-epidemic years.⁶²⁸

The infant mortality rates reflect poor sanitation, child neglect, malnutrition and maltreatment, together with congenital conditions probably associated with the mother's health (Table 9.8). Deaths of children due to lung ailments bear witness to insufficiency of clothing and exposure to damp and cold; the contagious and intestinal disorders, to infections and bad nutrition. The health of infants was the most sensitive monitor of their playground, the filthy environment of

625 Duncan, 1844, p. 125. The Bills of Mortality indicate between 30 to 40 per cent of the deaths occurred under two years of age.

626 Parkes and Sanderson, 1871, p. 54.

627 *ibid.* p. 56.

628 *ibid.* p. 59.

TABLE 9.6
Infant Mortality in Large Towns, 1839-41

	<u>Infants Below 5 Years Mortality Rate per 1000</u>	<u>Teething and 'Convulsions' Percentage of Total Deaths</u>
Liverpool (Borough)	528	14.9
Manchester	510	13.7
Leeds	480	12.2
Birmingham	482	5.7
Metropolis	408	7.3

Source: Duncan, 1844, p.141.

TABLE 9.7
 Infant Mortality in Selected Liverpool Streets
 Parkes, Sanderson Investigation, 1871

RATE PER THOUSAND

<u>Street</u>	<u>Mortality Under 1 Year</u>	<u>Mortality Under 5 Years</u>	<u>Percent of Deaths Under 5 Years Total</u>
Rodney	0.5	38.46	15.4
Egerton	230.7	106.25	44.7
Henry Edward	212.5	114.5	46.9
Adlington	298.1	127.2	47.5
Bispham	261.9	140.0	60.9
Lace	583.3	163.9	39.2
Addison	236.8	126.4	36.0
Sawney Pope	398.4	259.8	46.7

Note: Rodney Street was a 'rich' street provided for comparison's sake.

Source: Parkes and Sanderson, 1871, p.54.

TABLE 9.8
Liverpool
Cause of Death in Infants in Six Poor Streets
1867-70

Number

51	Small pox, measles, scarlet fever
34	Diarrhoea
35	Convulsions
59	Bronchitis and pneumonia
<u>56</u>	Atrophy and debility
235	

Note: For streets see Table 9.7. Rodney Street was not a 'poor' street.

Source: Parkes and Sanderson, 1871, p.59.

slum houses and courts with their fertile sources of infection.⁶²⁹

The people among whom these death rates prevailed lived out a precarious existence in a culture of poverty with a mode of life in the words of the doctors, "not only poor but . . . careless, ignorant and barbarous".⁶³⁰ Born into poverty where he ~~they~~ represented only another mouth to feed, the infant's health often reflected the effects of family privation.⁶³¹ Indeed, the loss of a child was a commonplace occurrence and often treated with indifference. They frequently told the medical man "they ought to be thankful to God for taking away a child when they have so many lives to provide for".⁶³²

Such high infant mortality rates depressed the life expectancy at birth of Liverpool's inhabitants to an average of 17 years in 1840.⁶³³ This figure varied considerably from class to class (Figure 9.2). The life expectancy of the artisan and tradesmen classes were as low as 15 years, 10 months, and 19 years, respectively, while that of the gentry

629 Referring to the evils of the common privy, found in most courts, Dr. Trench described how "the little creatures sit and idle away time in those receptacles of filth, climb on seats stained with dejections and even pursue their infantile games on the floor beneath the pestiferous shelter of the roof" (Medical Officer of Heath, 1866, p. 31).

630 Parkes and Sanderson, 1871, p. 59.

631 "Parents are unable to procure them proper food when they are taken from the breast." (Franklin, 1842, p. 133)

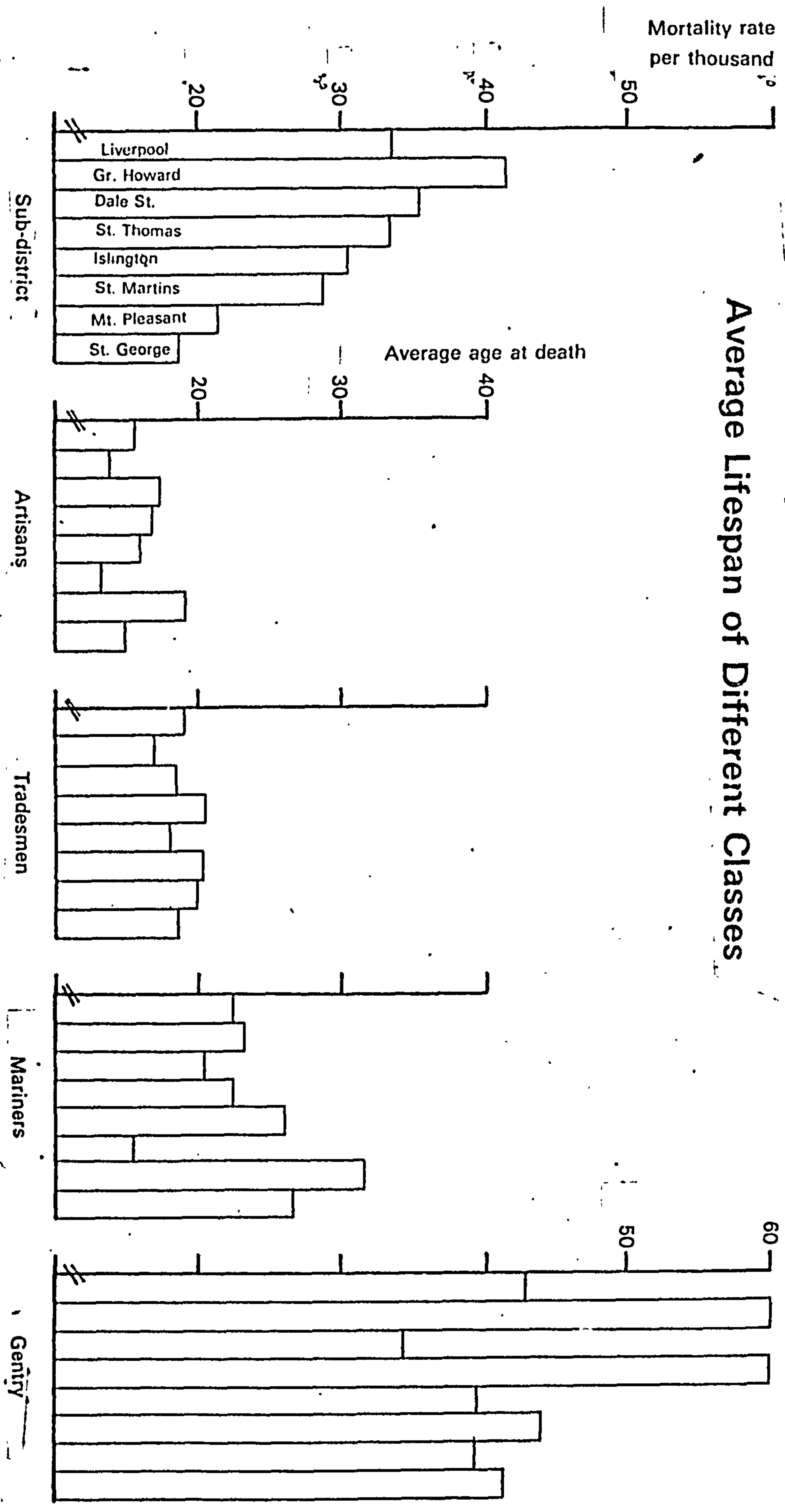
632 Duncan, 1836, p. 18. Anderson feels that many 19th century statements about the cruelty of the working classes to their children are exaggerated. Even if this were so, it would not have prevented an attitude of 'calculated instrumentality' by parents about the very young found in many cultures around the world (Anderson, 1971, pp. 74-8).

633 Duncan, 1840, p. 126.

FIGURE 9.2

Parish of Liverpool, 1841-2

Average Lifespan of Different Classes



attained 43 years. Once maturity had been achieved, the class differentials narrowed substantially. Nevertheless, more than 10 years still separated the life expectancy of adults in the artisan and tradesman classes (47 years, 6 months, and 48 years, 10 months) from that of the gentry (58 years, 10 months).

9.2. Geography of Disease and Death

The variations within the town from district to district were also significant. Only rarely, however, did the variations between districts exceed the differences between classes. Tradesmen and artisans in the healthier districts without exception had a shorter life expectancy than the gentry residing in the worst districts. Life expectancies of those over 21 were similarly ranked primarily by class, then within each class according to the health of the district. A difference in life expectation of about 10 years was again general. The reason for these variations lay principally in the unequal exposure to disease of the different classes. An occupational breakdown of cholera victims in 1849 (Table 9.9) indicates that deaths among the labouring and artisan classes made up 77.8 per cent of all cholera deaths (about 10 per cent more than their share of the population).

The class selectivity of disease and death is sharply borne out by their distribution. The 'worst conditioned' and poorest wards were the ones with highest mortality rates. Even in good years such as 1850 when death rates fell below normal for the Parish as a whole, many poor wards had rates as high as those of the Parish in poor years. In epidemic years, the differences widened. Figure 9.3 indicates the distribution of mortality by sex for the period 1848 to 1850. In general, male mortality rates were higher than female, but in both, the inner wards, especially those of the north and south ends, were worst.

TABLE 9.9
 Liverpool, 1849
 Cholera Deaths by Occupation

<u>Occupation</u>	<u>Number</u>	<u>Percent</u>
Gentry, Professional Persons, Merchants	47	0.9
Master Tradesmen, Shopkeepers, Clerks	384	7.3
Mechanics, Skilled labourers	1657	31.6
Mariners, Pilots, Riggers, etc.	425	8.1
Carters, Grooms, etc.	141	2.7
Police Officers	32	0.6
Customs and Excise Officers	30	0.6
Soldiers and Pensioners	37	0.7
Servants	30	0.6
Hawkers, etc.	38	0.7
Porters and Unskilled labourers	1861	35.5
Unknown [*]	<u>563</u>	<u>10.7</u>
TOTAL	5245	100.0

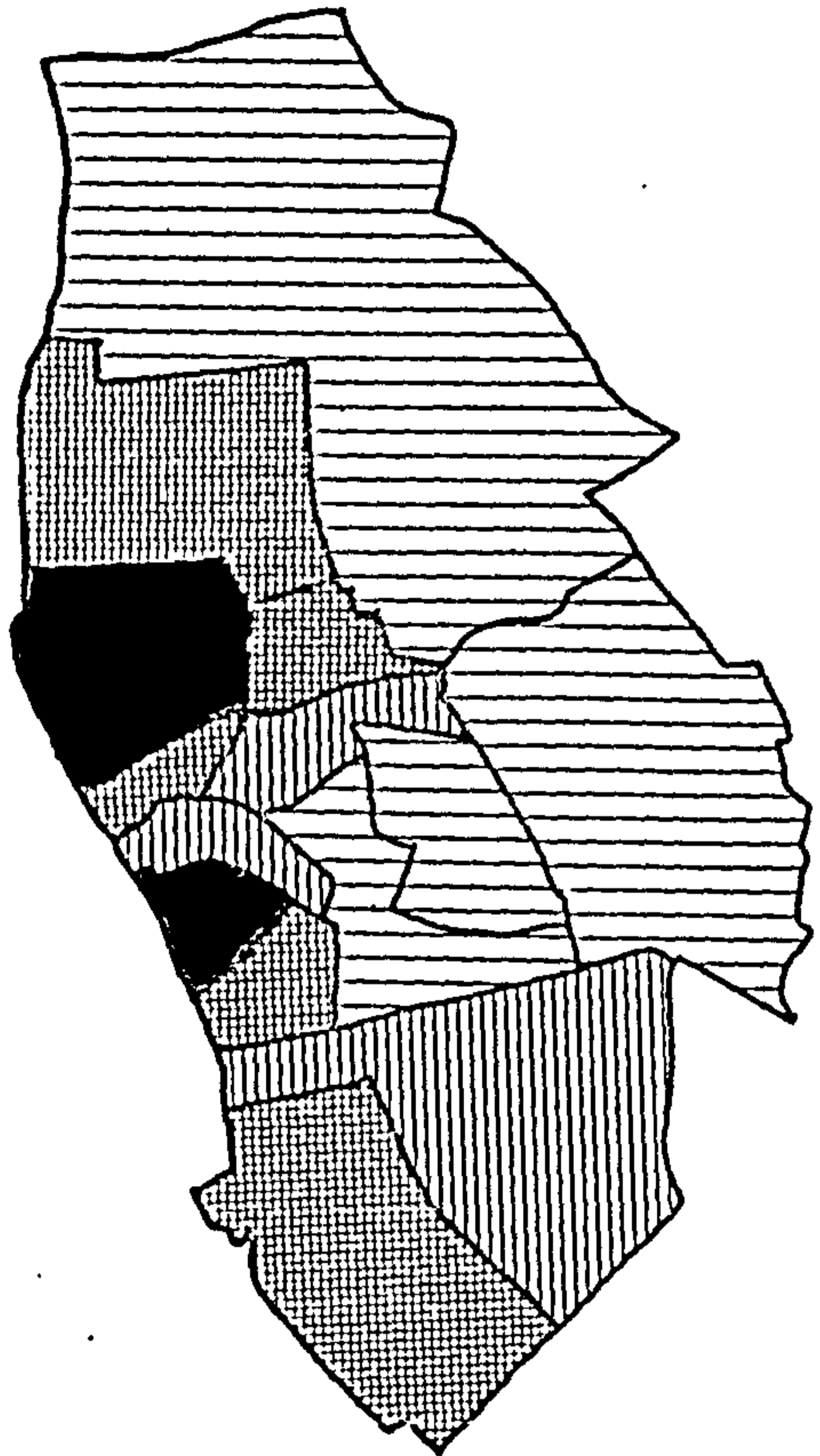
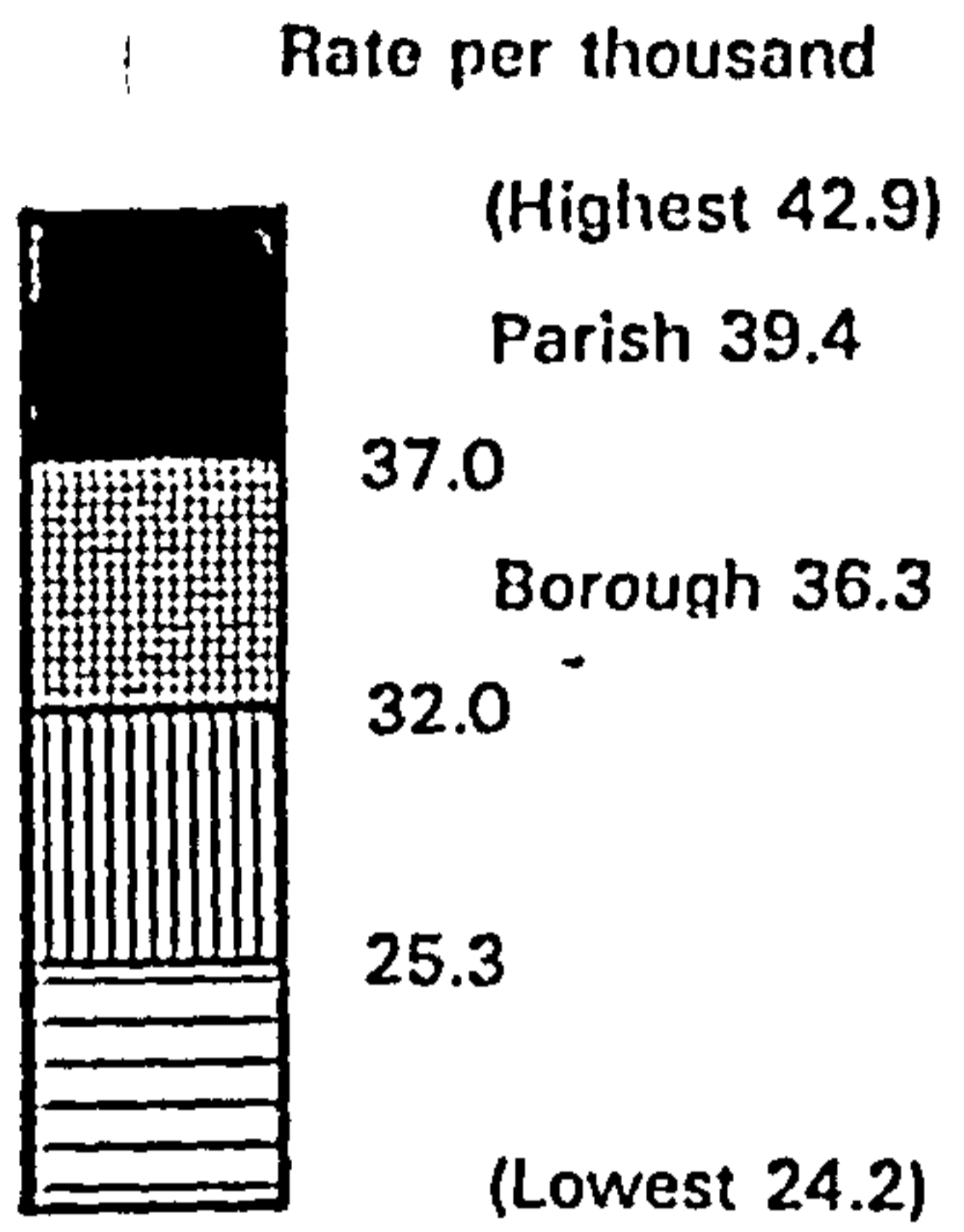
* "Nearly all who had an occupation under this class belonged to the class of Unskilled labourer."

Note: Females and children classed under occupation of the head of the family.

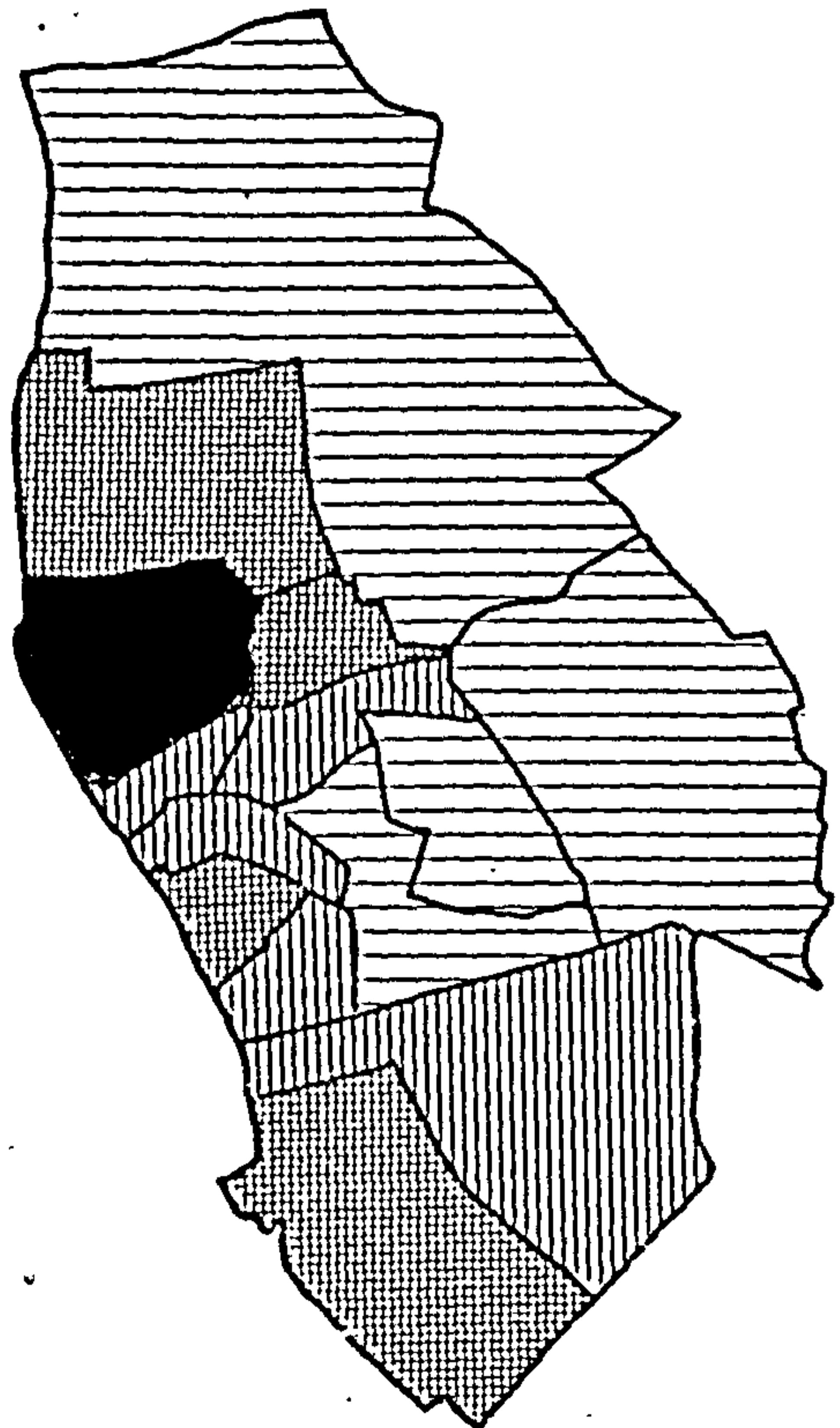
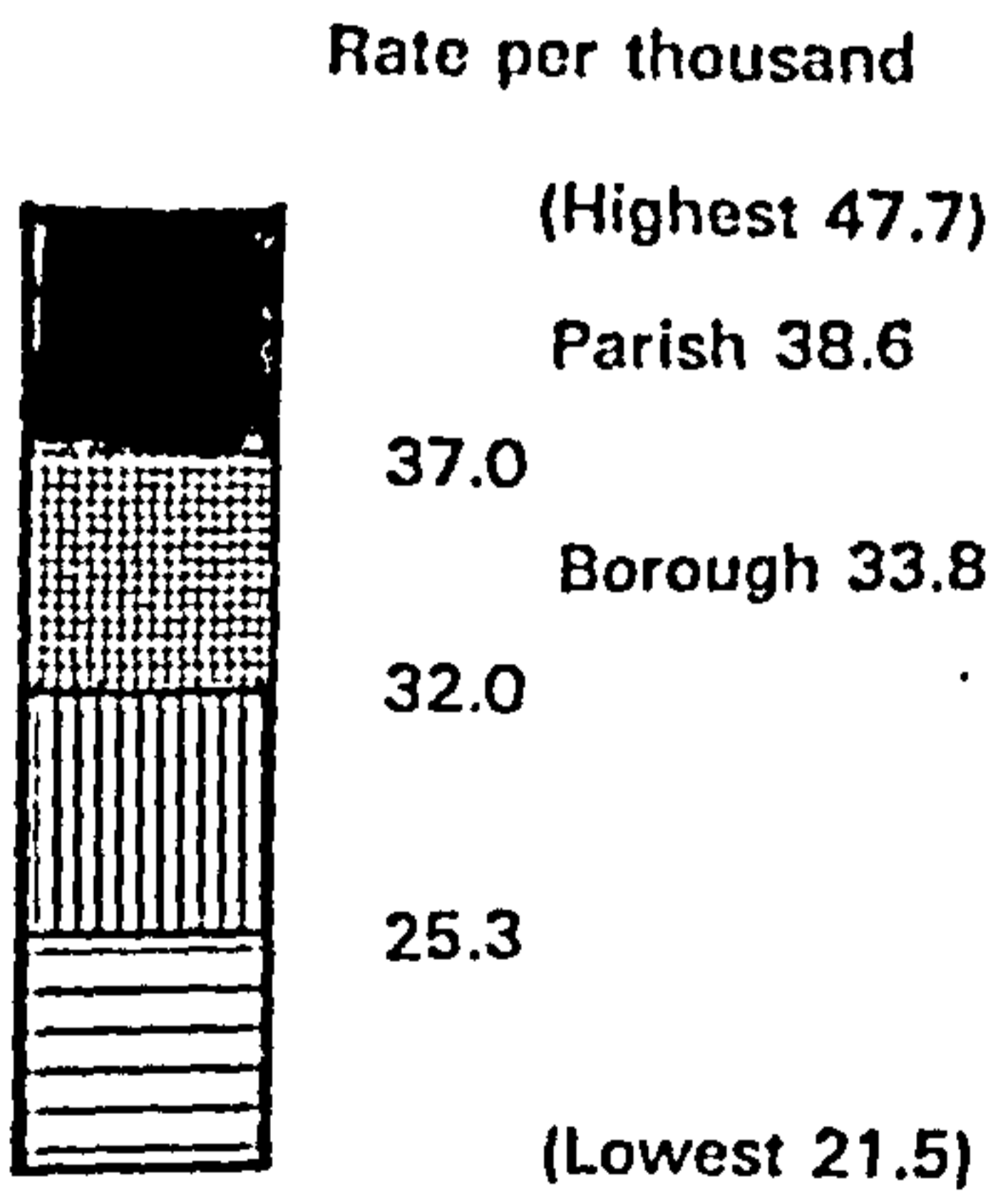
Source: Liverpool Medical Officer of Health, 1851, p.75.

Liverpool Borough, 1848-50: Crude Mortality Rates

Male Mortality



Female Mortality



These differences in mortality rates from the 'best' to the 'worst' districts were maintained year by year (Figure 9.4). Peaks like that of 1847 and valleys like those of 1850 or 1860 were reflected in each of the sub-districts. In epidemic years, the gap between healthy and unhealthy was widened but, even in average years, there could be considerable variations between healthy and unhealthy areas. In the 'healthy' decade, 1851 - 1861, the mortality of Great Howard Registration Sub-District was almost double that of West Derby Registration District (39.9 compared with 20.8).⁶³⁴

In Merseyside as a whole (Figure 9.5) the healthiest districts could be compared favourably with most parts of the country, and this increased the intra-conurbation contrasts. Wavertree, and even industrial Birkenhead, were more than two and a half times as healthy as Great Howard Registration Sub-District.

1847, the year of the great epidemics, illustrated the extremest contrasts between districts. Great Howard Registration Sub-District (Vauxhall Ward) was most heavily affected by the Irish immigration. The worst of the epidemic occurred in the summer, but even by the previous spring the Registrar had written to London to the Registrar General that "there is not a parallel case to Liverpool for the last two months in the history of the country".⁶³⁵ The statistics bear

634 P.P., 1862, XVII, p. 303.

635 Registrar General's Report, First Quarter, 1847, p. 13.

Liverpool Registration Sub-Districts, 1847-66

Mortality Rates

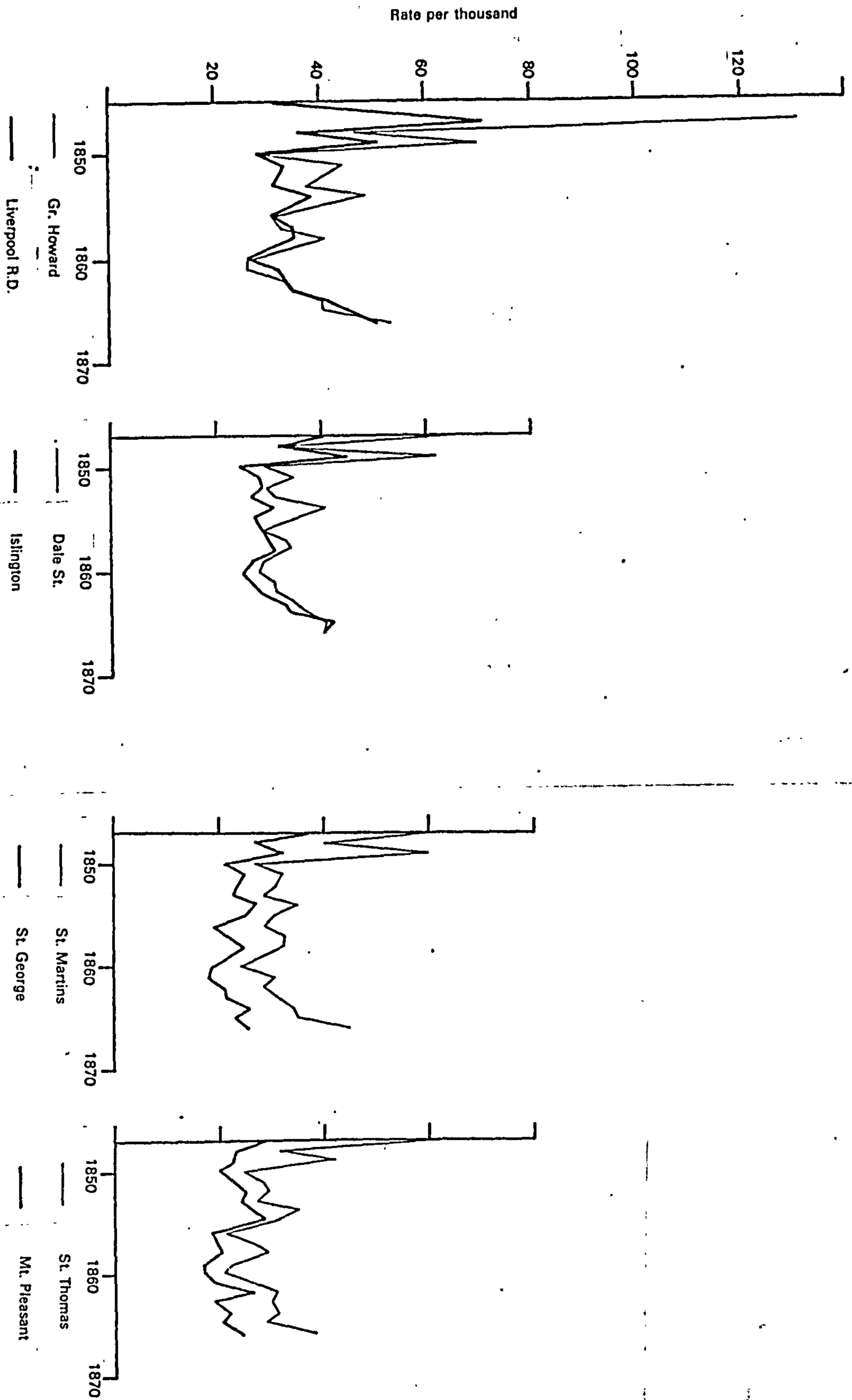
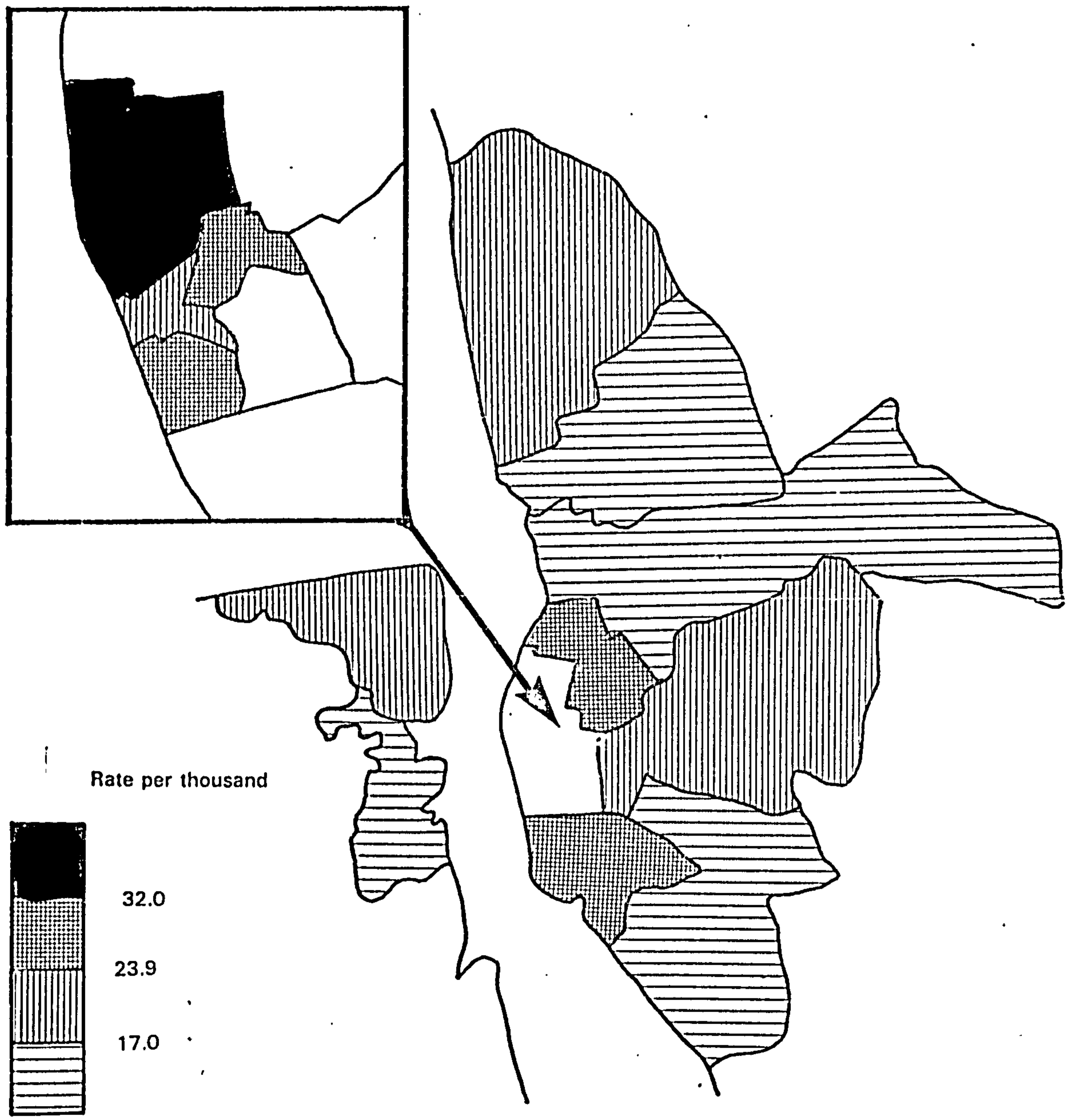


FIGURE 9.4

Merseyside, 1851-61: Crude Mortality Rates



out his claim. In 1847, Great Howard Sub-District achieved a mortality rate of 131 per 1,000: one street, Lace Street, with a population of 1,400 had more deaths in that quarter than was normal for the two middle class wards, Abercromby and Rodney Street, with a combined population of 20,000. In that one year, one third of Lace Street's entire population died.⁶³⁶

The variations in general mortality rates were made up of variations in the incidence of the major classes of disease. All the statistics reflect the unhealthiness of the blocks of wards making up the north end of the Parish (Figure 9.6).⁶³⁷ The geographic incidence of mortality by disease group is also reflected in the map showing deaths of children under five years (Figure 9.7). The north end is again prominent with over half of all deaths in this age category.

The group of spatially interlinked variables measuring disease incidence also relates outwards to the general patterning of social and housing conditions described in earlier chapters. (Figure 9.8). In particular, the Irish population, housing and population densities, and lower social classes were variables that were statistically linked to infectious diseases. The more modest correlation of the mortality rate with house occupancy rates ($r = 0.56$) points to a distortion introduced by variations in house size. Without an accurate count of persons per room, we cannot judge the variation (if any) between the

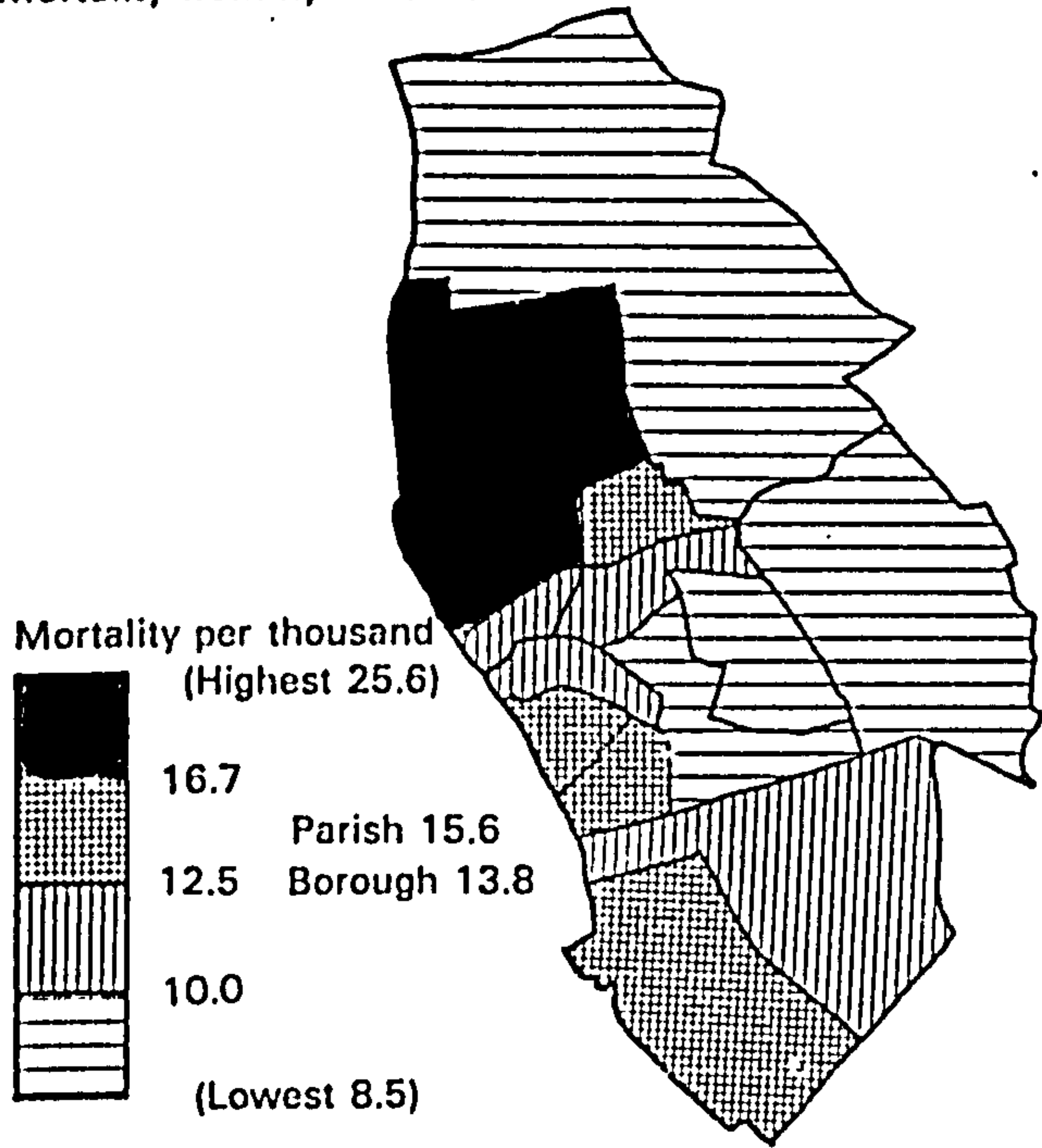
⁶³⁶ Duncan, 1851, p. 17.

⁶³⁷ Due to some extent to the more varied social composition of the wards of the 'south end'.

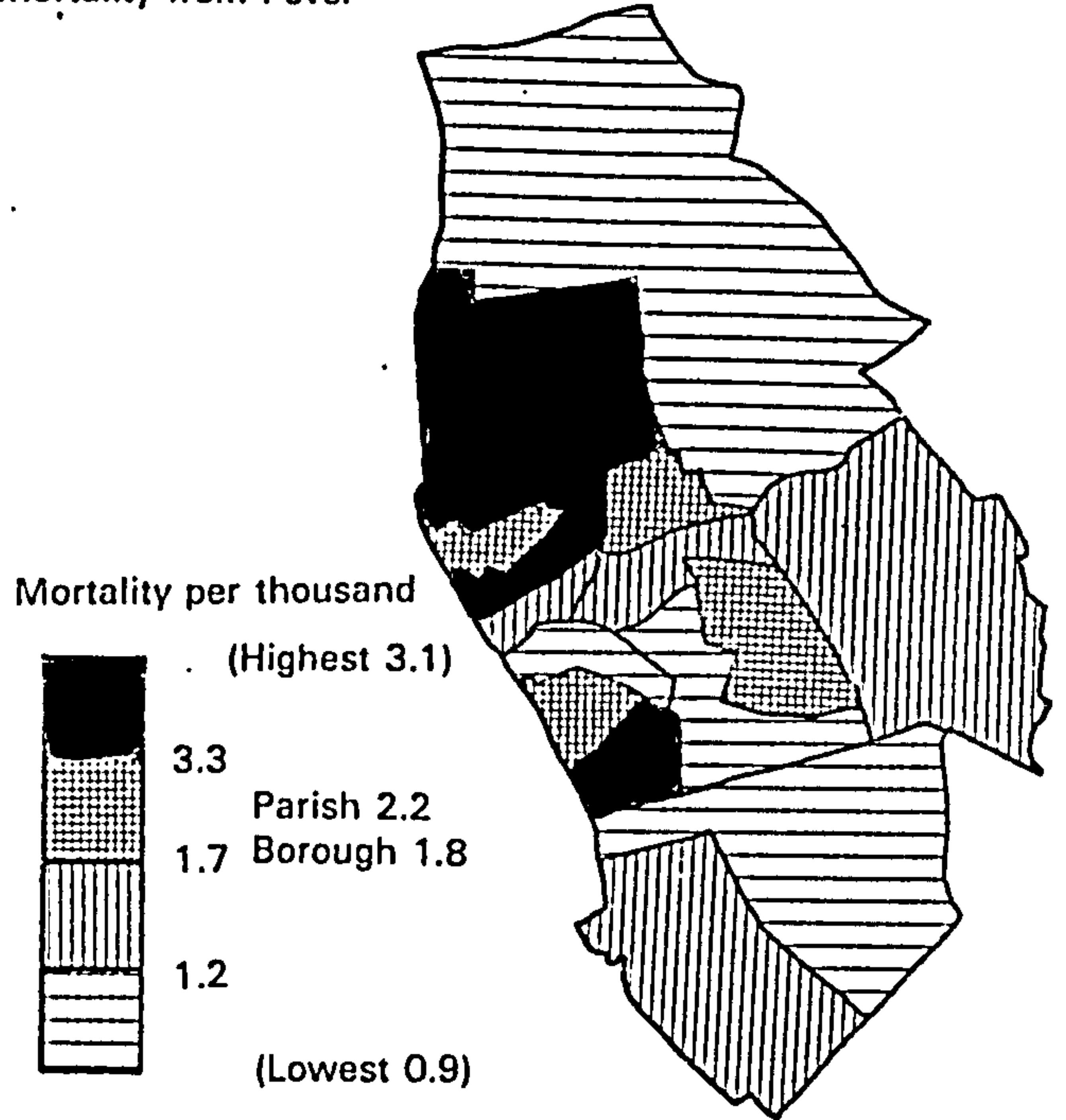
FIGURE 9.6

Liverpool Borough, 1848-50: Mortality From Various Diseases

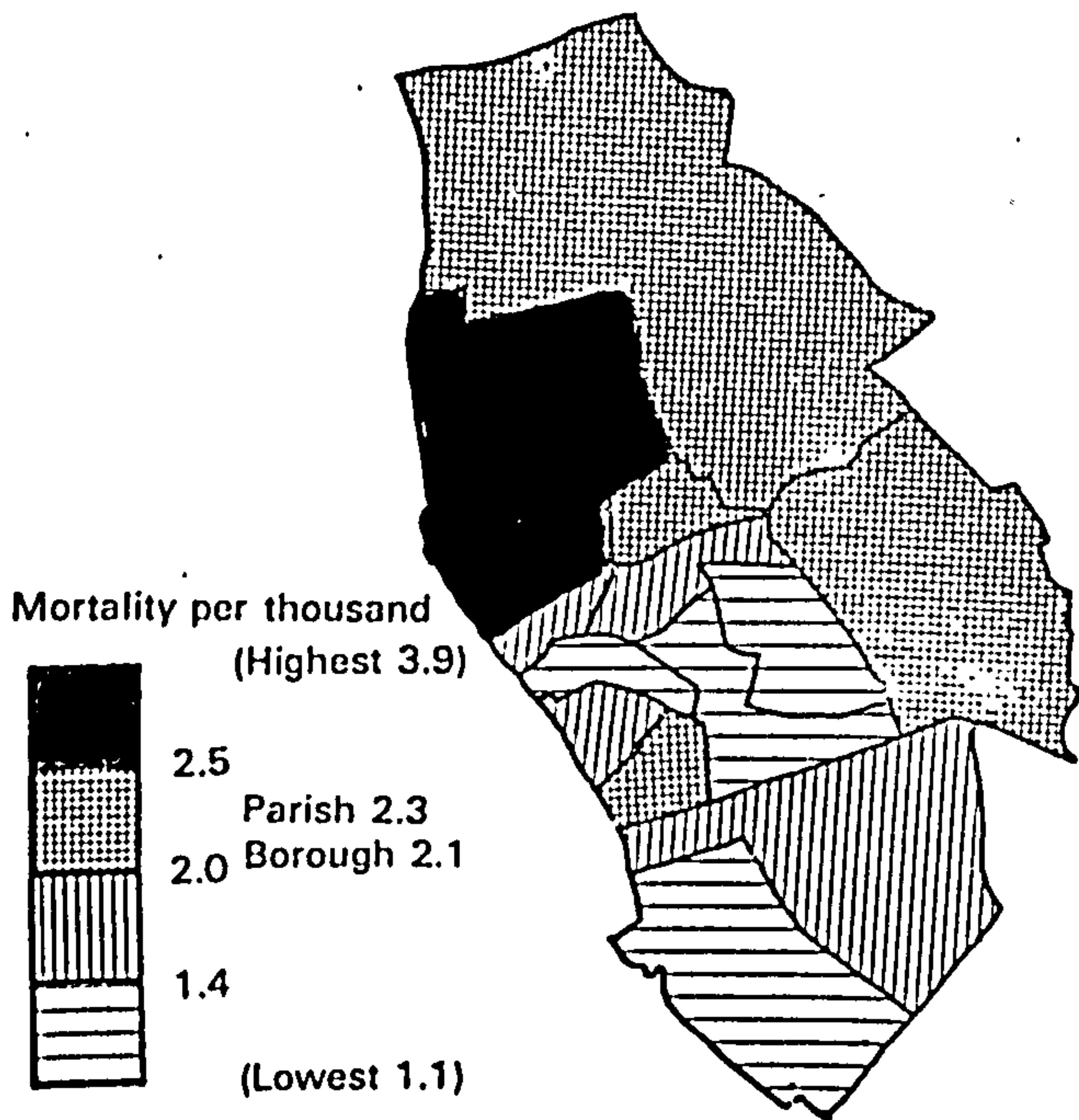
Mortality from Zymotic diseases



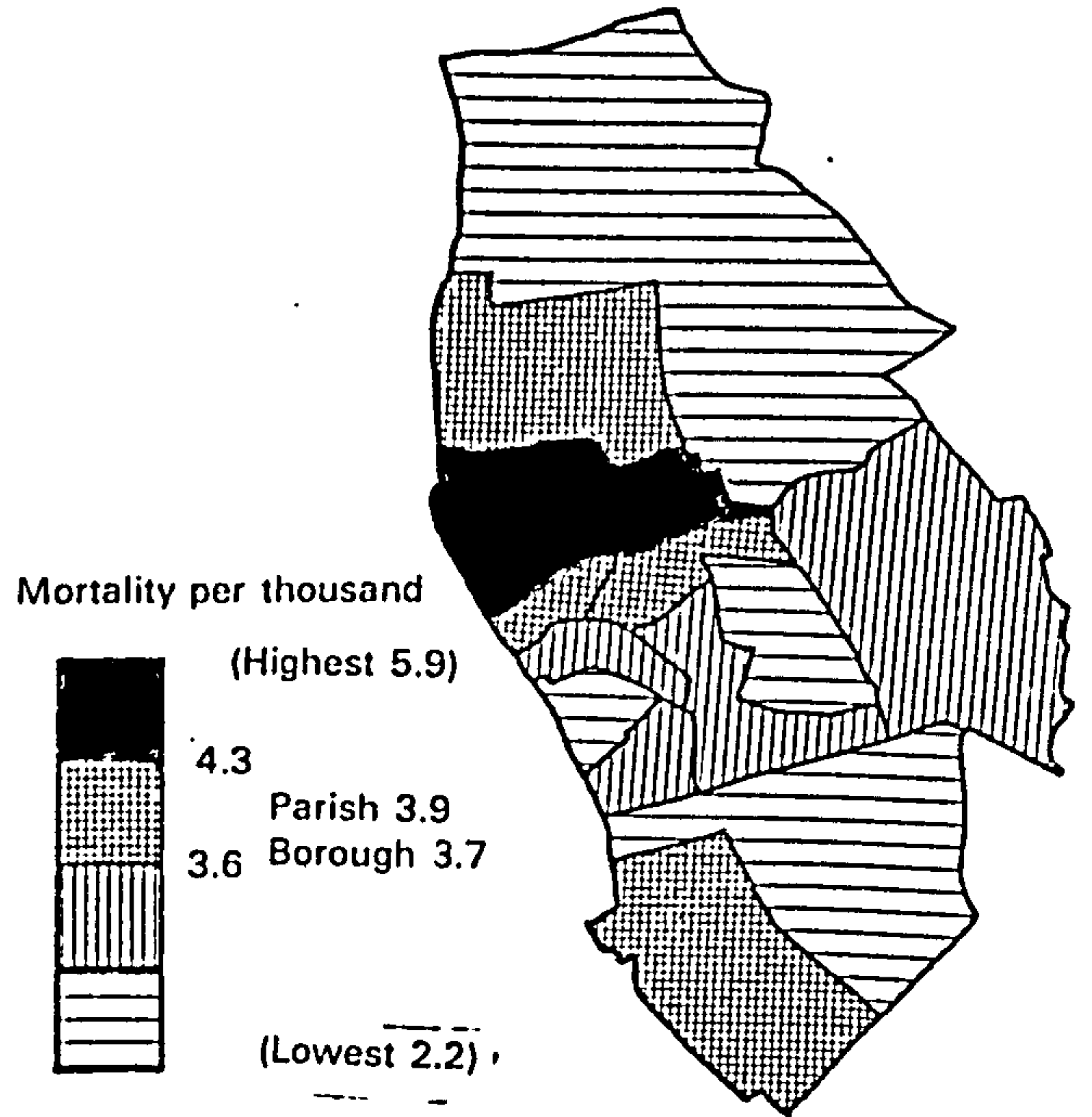
Mortality from Fever



Mortality from 'Convulsions'

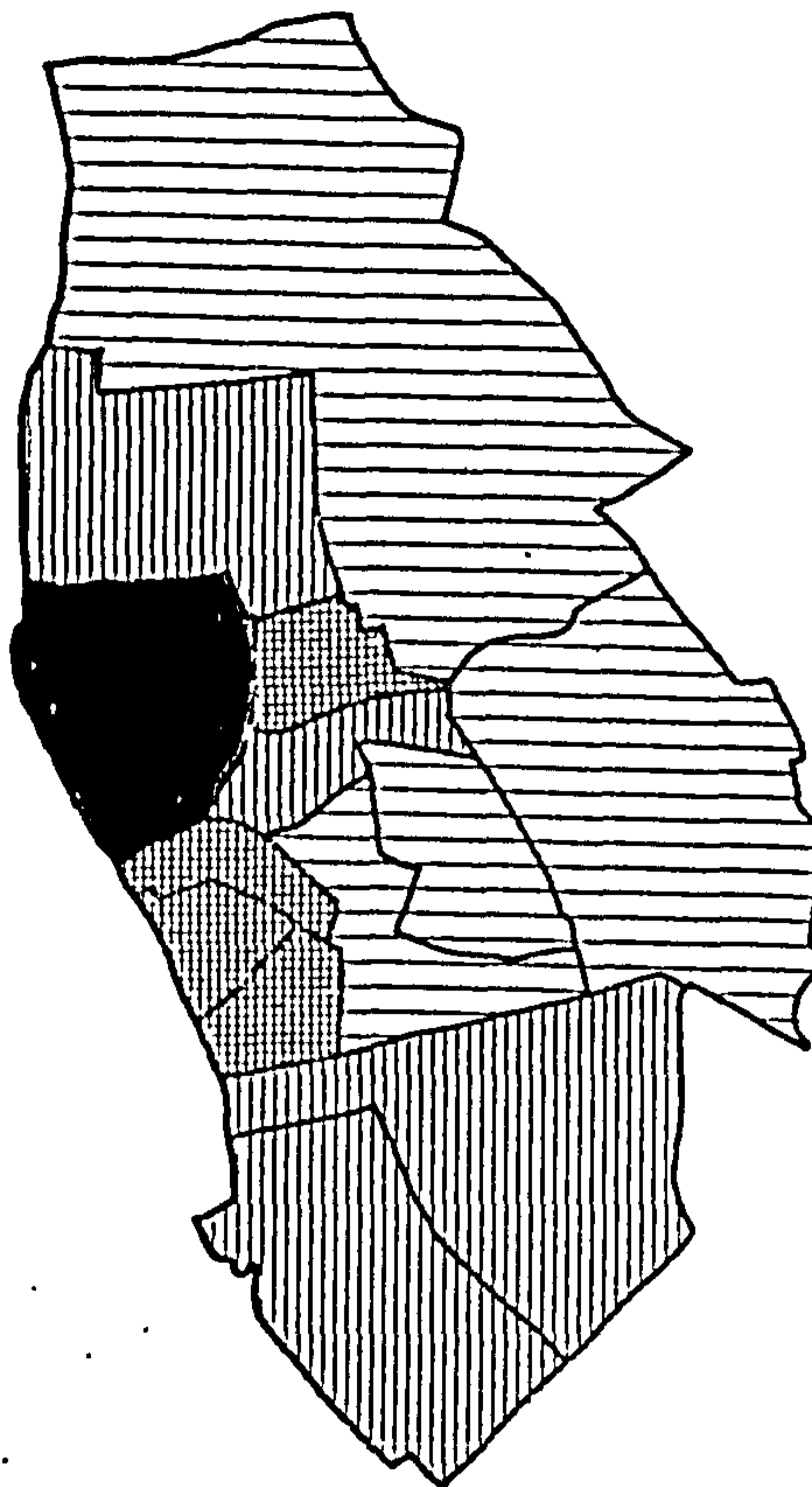
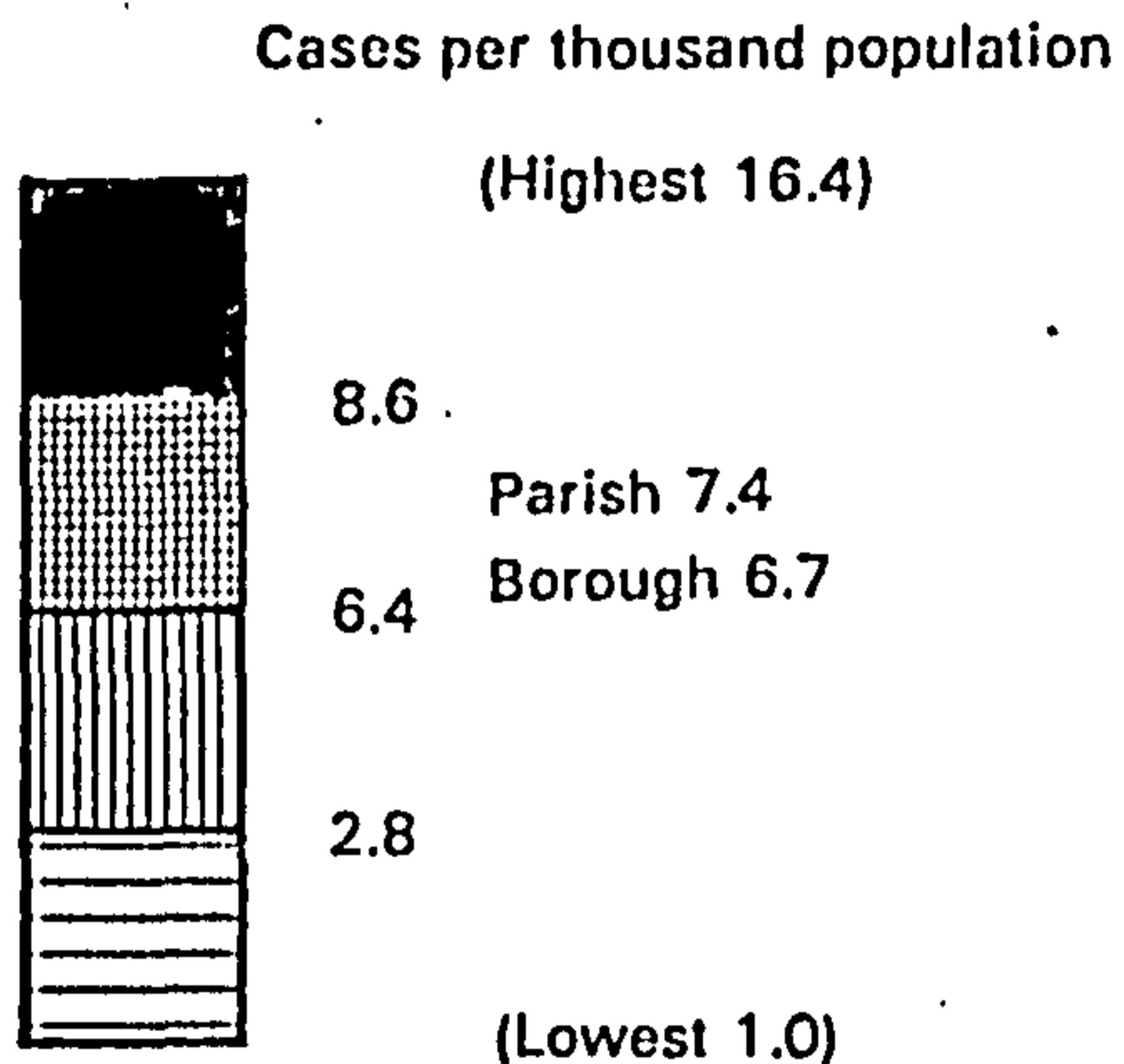


Mortality from Consumption



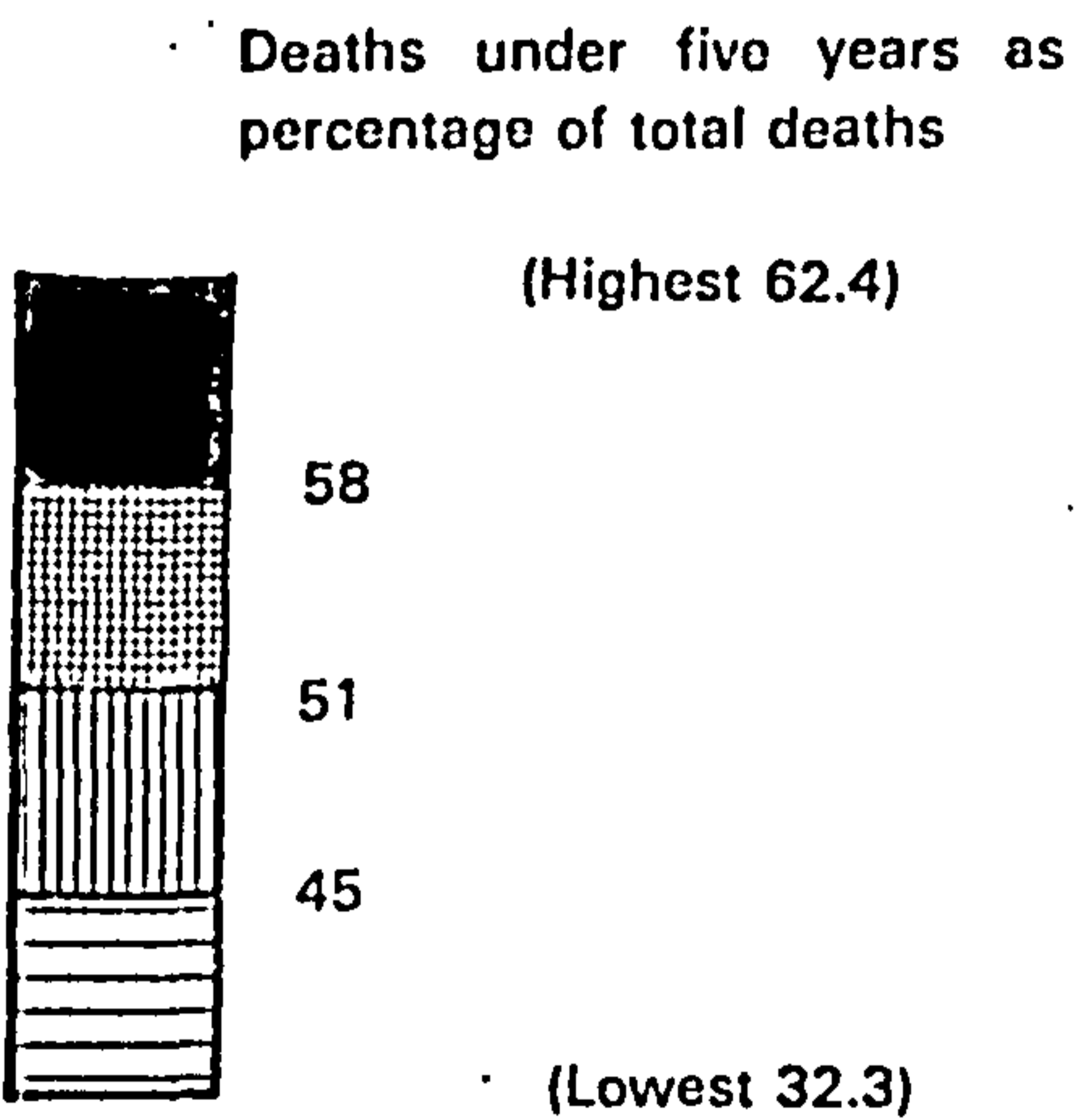
Liverpool: Fever, 1834-9 and Infant Mortality, 1868.

Annual Average Cases of Fever, 1834-9



Source: Power 1842: p 257

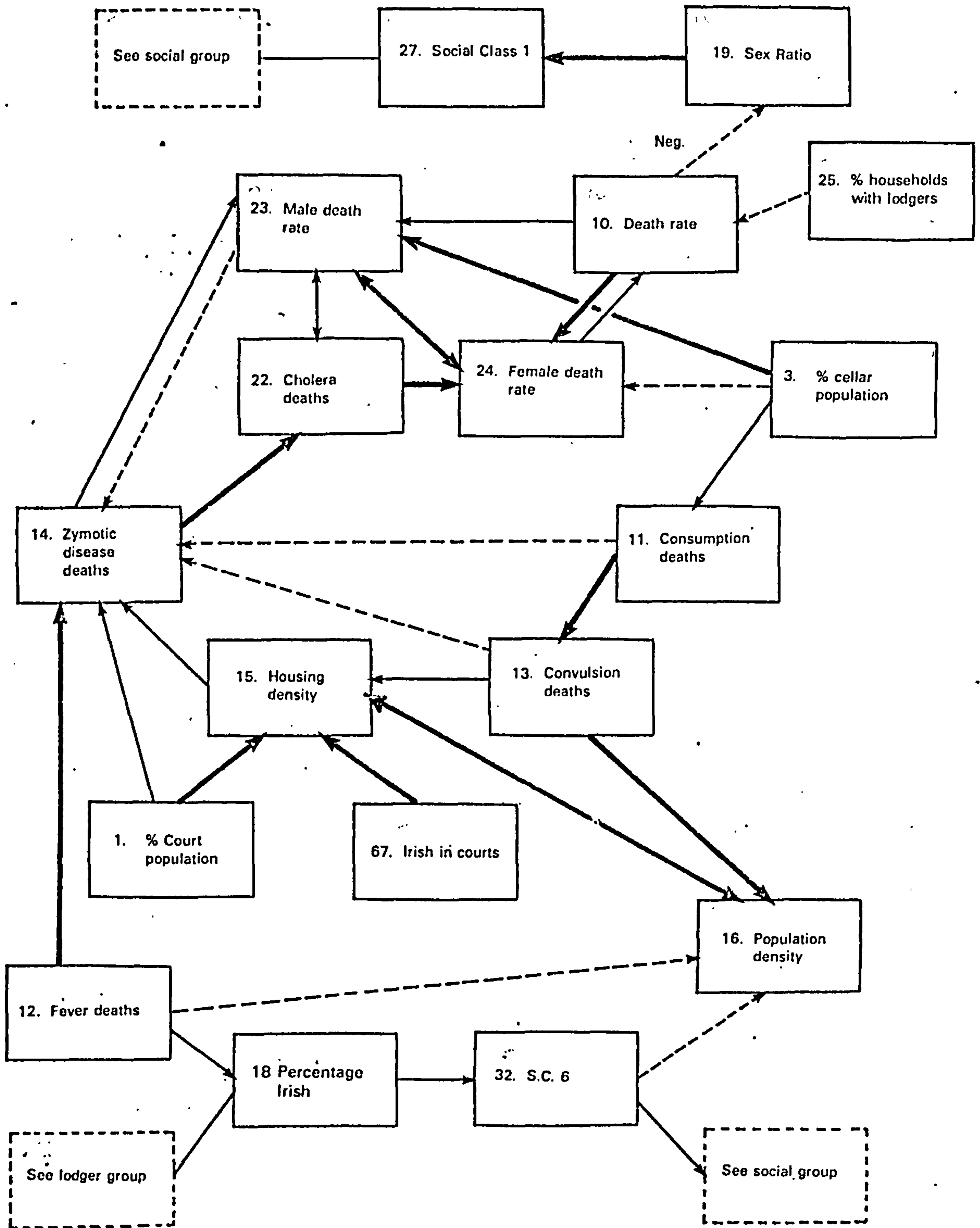
Infant Mortality, 1868



Source Parkes and Sanderson, 1871, p.58

Mid-Nineteenth Century Liverpool

Correlations of Disease Variables



- First Order Correlation
- Second Order Correlation
- Third Order Correlation (if above r = 0.4)

death rates of the overcrowded small court house of the north end and the multi-occupied street houses of the south end. Certainly the proportion of the population living in cellars was statistically significantly related to death ($r = 0.73$) and disease of most types. In seeing this relationship, Duncan and the sanitary reformers were clearly not tilting at windmills. Yet any pair of related variables, if extracted, simplifies what was in reality a nexus of cause and effect describing the linkages between society and its environment. The final chapter investigates this broader perspective.

Chapter 10

CONCLUSION

"Out of the bodies of the battered and congested people who crowd there, Liverpool contrives a suave unguent, more dreadful than adipocene, which enables the great ships to slide so smoothly to their berths."⁶³⁸

"These people have been marooned here by the necessities of her own prosperous voyages and, though her passion for efficiency will never permit her to reduce the blackness by decreasing the efficiency, that very passion has always made her supremely anxious to beat down the price as far as possible."⁶³⁹

Debating the nature of the post-war reconstruction of the House of Commons, Churchill commented "we shape our buildings, and afterwards our buildings shape us." In the same way, the total built environment, created by the interplay of countless human decisions, moulds and fashions the nature of urban society. In the present work, these ecological relationships as displayed within a 19th century city have been seen to have had far-reaching implications for the life-chances of many later generations of urban dwellers. Each chapter of the present work has examined a major aspect of urban living insofar as it was part of the mosaic of prevailing social and environmental conditions. However, the characteristic of any ecological analysis is the difficulty of separately analysing variables which exist within a complex mesh of interactions and interlinkages. The present chapter will attempt to re-integrate

638 Scott, 1907, p. 143.

639 ibid. p. 155.

these separate elements into an explanatory, descriptive model. This model will draw its elements from the various topics discussed throughout this thesis and attempt to fit them into a coherent representation of the social-environmental system.

The first task in creating this broad framework of analysis is to gather a comprehensive set of geographically relevant statistical data on all aspects of social and environmental conditions within Liverpool. An analysis of these data will provide clues to the links and strength of the connections within the social-environment system. The mass of correlational data once examined (Table A.2.4) seemed to suggest that there were several, rather different underlying statistical trends present. If this could be demonstrated, it would help define the fundamental structural character of the social-environmental geography of mid 19th century Liverpool.

The best procedure for making this examination appears to be that of factor analysis, a statistical technique that is capable of handling large data sets and reducing them to manageable proportions. Factor analysis is now a fairly common procedure used to 'boil-down' large numbers of variables and consolidate them around principal statistical axes. These axes then serve as a concise statement of the statistical variations contained within the original variables. In essence, the technique eliminates the high degree of statistical overlap contained in large data sets. The interpretation of the resulting axes has, however, given rise to certain problems since, as a purely statistical construct, their significance in

the real world may be difficult to determine. The output has often been interpreted in terms of 'independent' components, though when the variables relate essentially to the same population, the 'independence' of these components may be questioned. In reality, all the variables are often interrelated to a relatively high degree. The 'components' are only derivations of the data actually input and claims for the relative 'independence' may therefore be a distortion of reality.

Factorial urban ecology usually derives two or three main principal axes in the data. These are usually described as a 'social class' group and a 'demographic group' (sometimes an 'ethnic group' also emerges). The spatial resolution of the variables relating to these two groups is usually fairly distinctive, the social usually sectoral, the demographic usually zonal.⁶⁴⁰ But since the technique is used here principally as a device to establish linkages between variables which might have expression in the urban structure and since the input lack demographic data, spatial patterns reflecting family and life-cycle status are not to be expected. A varimax rotational factor analysis was employed. Quartimax and equimax solutions were compared but no great differences emerged.

A 67 variable analysis was performed for the twelve wards of the Parish of Liverpool and a smaller 24

640 See Murdie, 1969.

variable analysis for the 16 wards of the Borough.⁶⁴¹ The principal axis contained 28 variables with factor scores in excess of 0.6, the second principal axis, 10 and the third, 6 (Table A2.3).⁶⁴² Each resulting axis identifies a discrete and distinctive group of variables. The large number of variables which load most heavily on the principal axis, can be termed the 'social characteristics/disease group'. This cluster is one, statistically highly interrelated, set of housing, health and social variables.⁶⁴³ The second principal axis defines another group of variables which can be termed the 'cellar group', for it contains a number of highly scoring variables relating to cellars and overcrowding. The third component can be termed the 'lodger' or 'household' group, as variables scoring heavily on this component consist largely of measures of lodging in Irish households, unskilled and semi-skilled social classes and a measure of the number of persons per household.

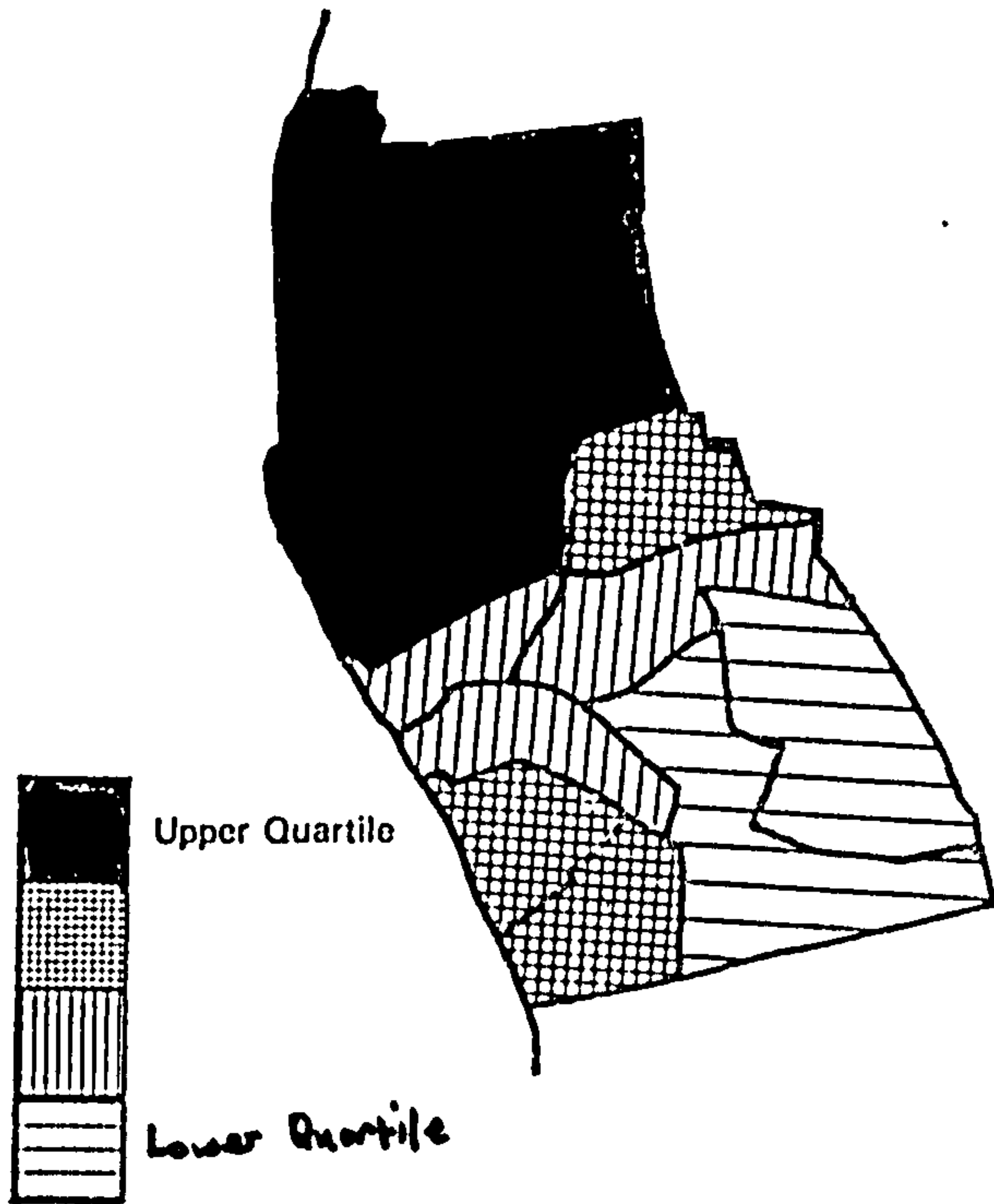
641 The factor analysis used was that for the Parish as it could take advantage of a number of key variables which were never published for the Borough; the sample from the Census Enumerators' Books also only covered the Parish. Comparison of the correlation coefficients of the variables used in both Borough and Parish analyses revealed few differences. It is difficult to say whether a change of scale from the ward to the enumeration district would have affected this analysis but as much of the data are not available below the ward level, this is impossible to determine. If such an analysis were possible, it would, no doubt, have identified pockets of court property in the south end, for instance, that would have been similar in character to the northern wards.

642 In the unrotated factor matrix, the first principle axis accounted for 44.5 per cent of total variance, the second, 13.8 per cent; the third, 10.8 per cent (total 69.1 per cent). In the varimax rotation, the first principal axis accounted for 32.3 per cent of total variance; the second, 16.0 per cent; the third 11.5 per cent (total of 59.8 per cent).

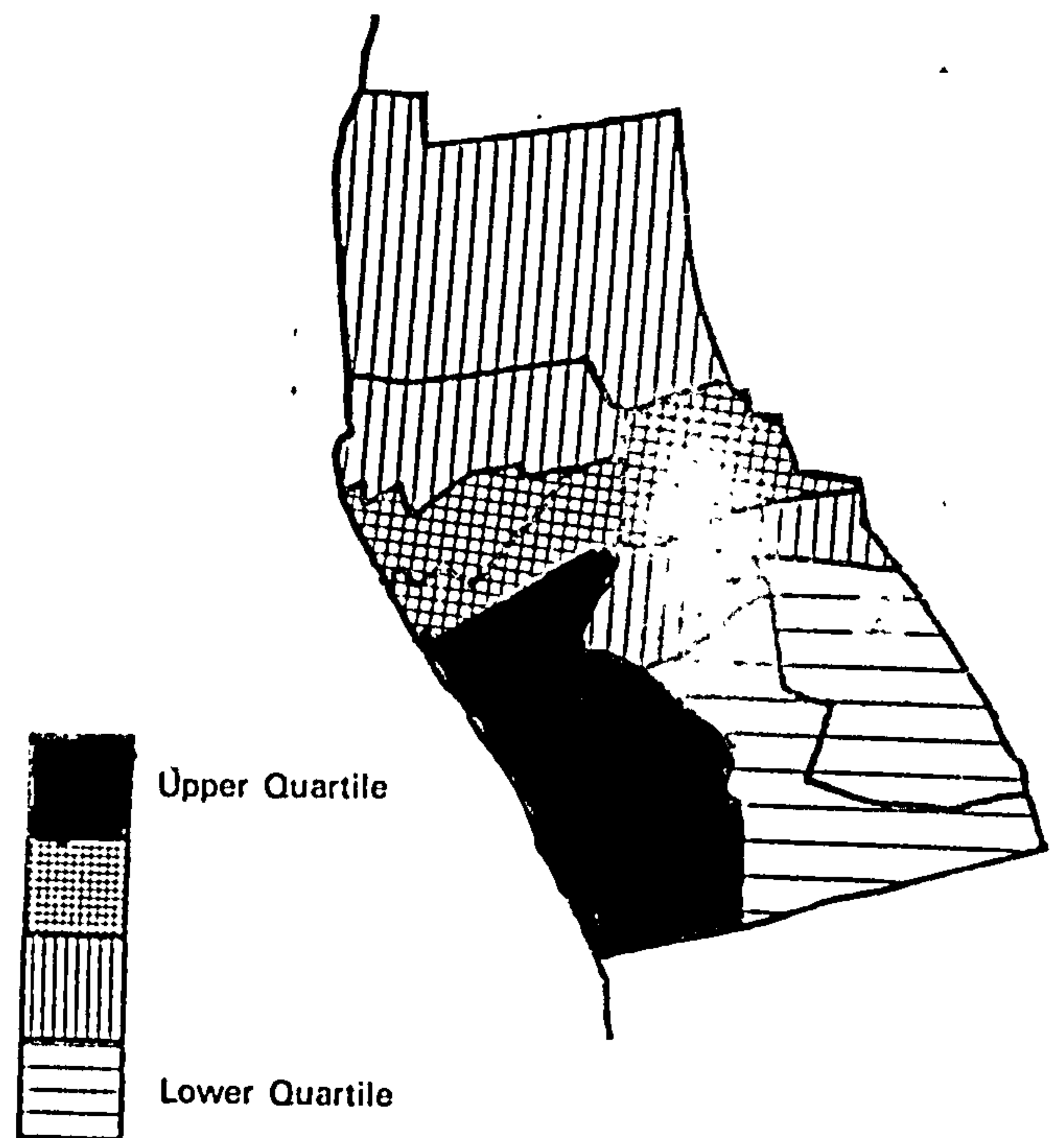
643 For convenience' sake, this group has been split and diagrammatically displayed as two groupings - those of 'social' and 'disease' characteristics.

Liverpool Parish: Mid Nineteenth Century Principal Components Analysis

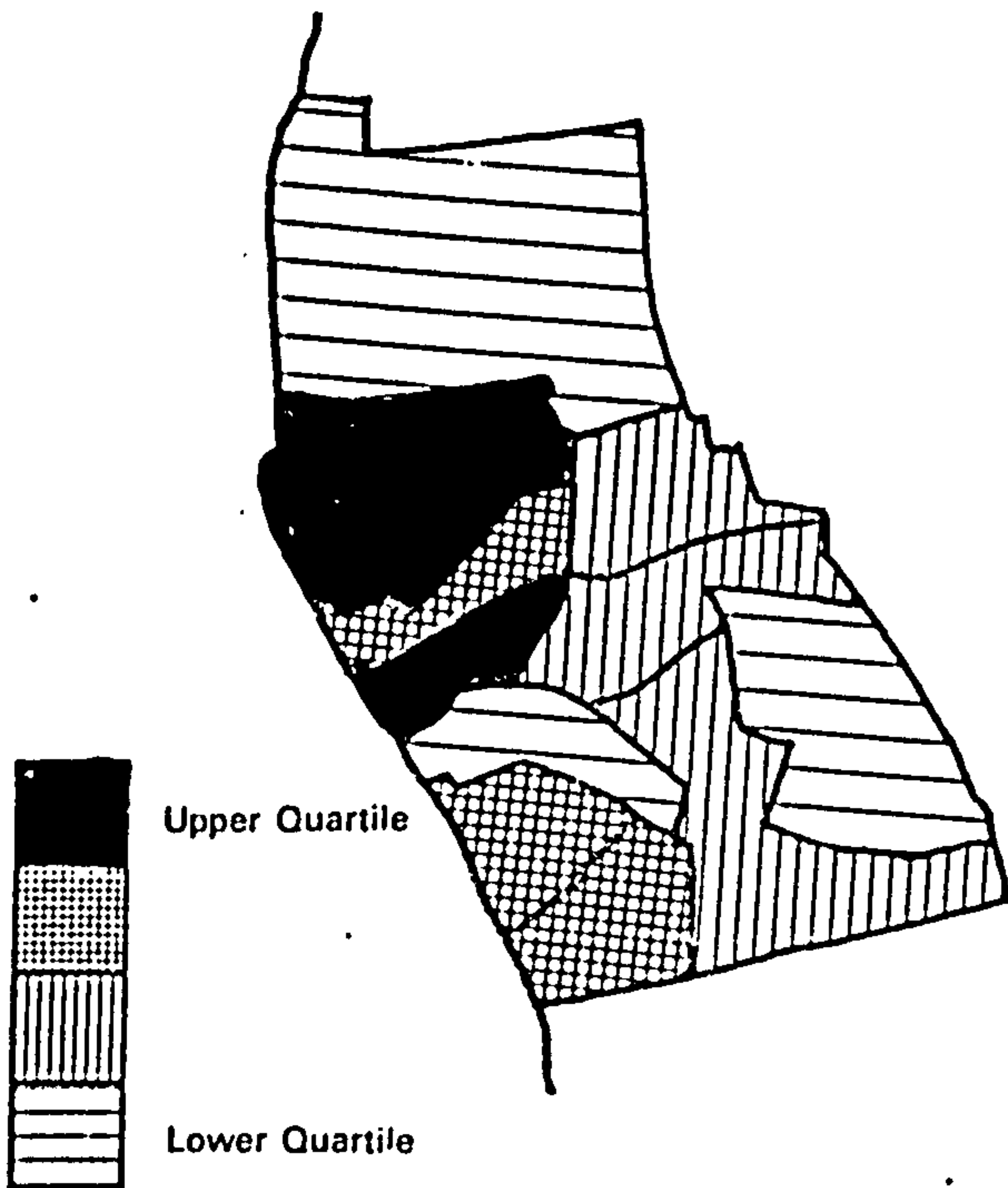
First Principal Component



Second Principal Component



Third Principal Component



Each of these components has a distinctive spatial expression (Figure 10.1). The first component is strongly represented in the wards of the north end; the second in the wards of the centre and south; the third in the inner core. The explanation for these clusters, both statistical and spatial, stems logically from the conditions discussed in our earlier chapters. The clusters of variables termed here 'social/disease' and 'cellar' are closely connected with the physical properties of the environment. The contrast in geographic distribution emphasises the environmental differences between the two major working class areas with their historically distinct origins. To the north lay the 'instant slum' of purpose-built court housing and in the south the failed middle class suburb 'made down' into overcrowded and cellared street housing. The third component is perhaps less environmental than locational in nature in that it was the central wards which were apparently in greatest demand for lodging.⁶⁴⁴

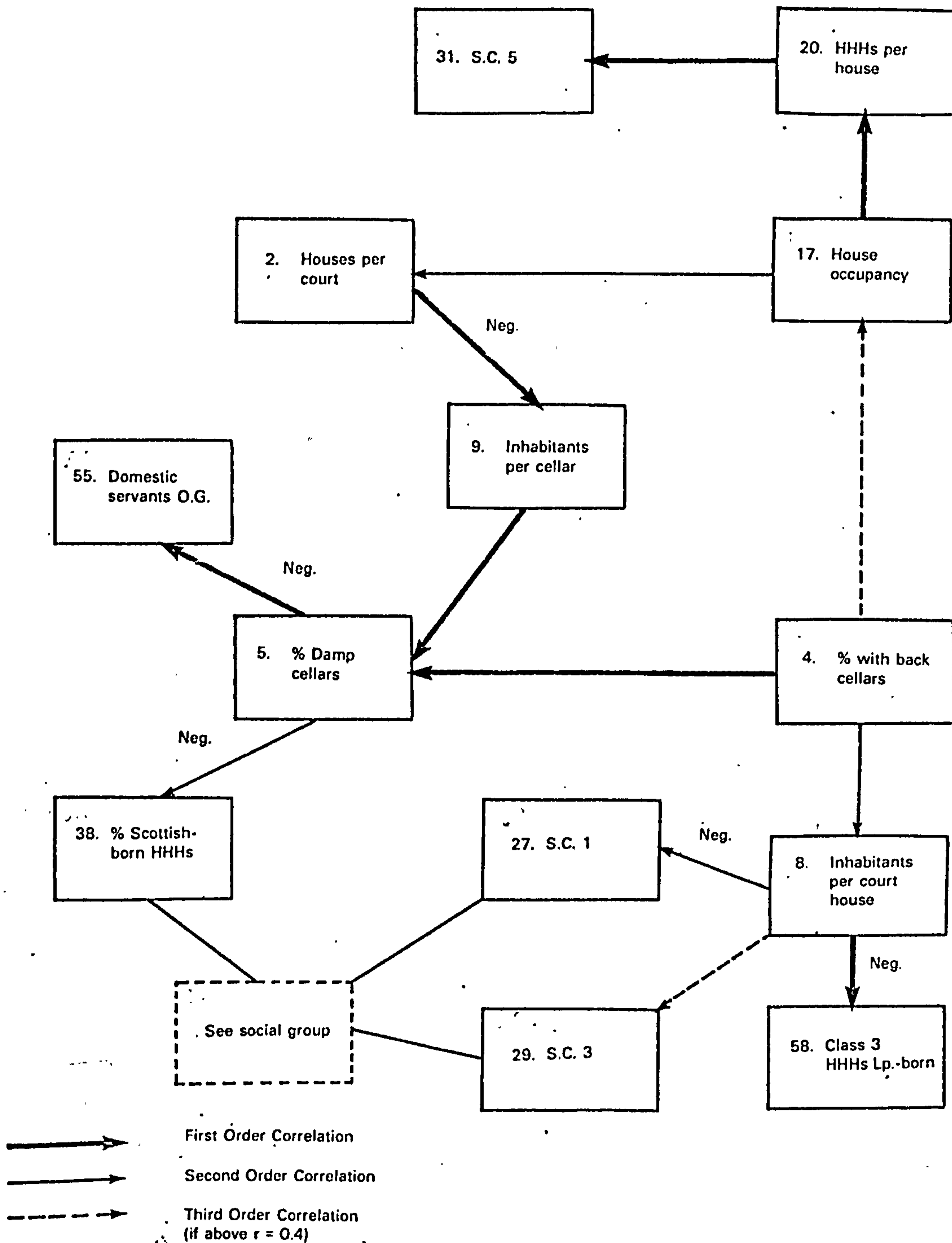
In terms of the associations among the variables, some interesting and revealing connexions appear (see Figures 10.2, 10.3, 10.4).⁶⁴⁵ One striking relationship that emerges

644 Interestingly, the otherwise firmly working class Scotland Ward appears to have had some 'suburban' characteristics in terms of its relative lack of lodging and consequently higher 'family' status.

645 These diagrams were based on first, second and third order correlations and include a few variables which do not score highly on the components. Nevertheless, the clusters of variables displayed do concisely express the statistical links within the data.

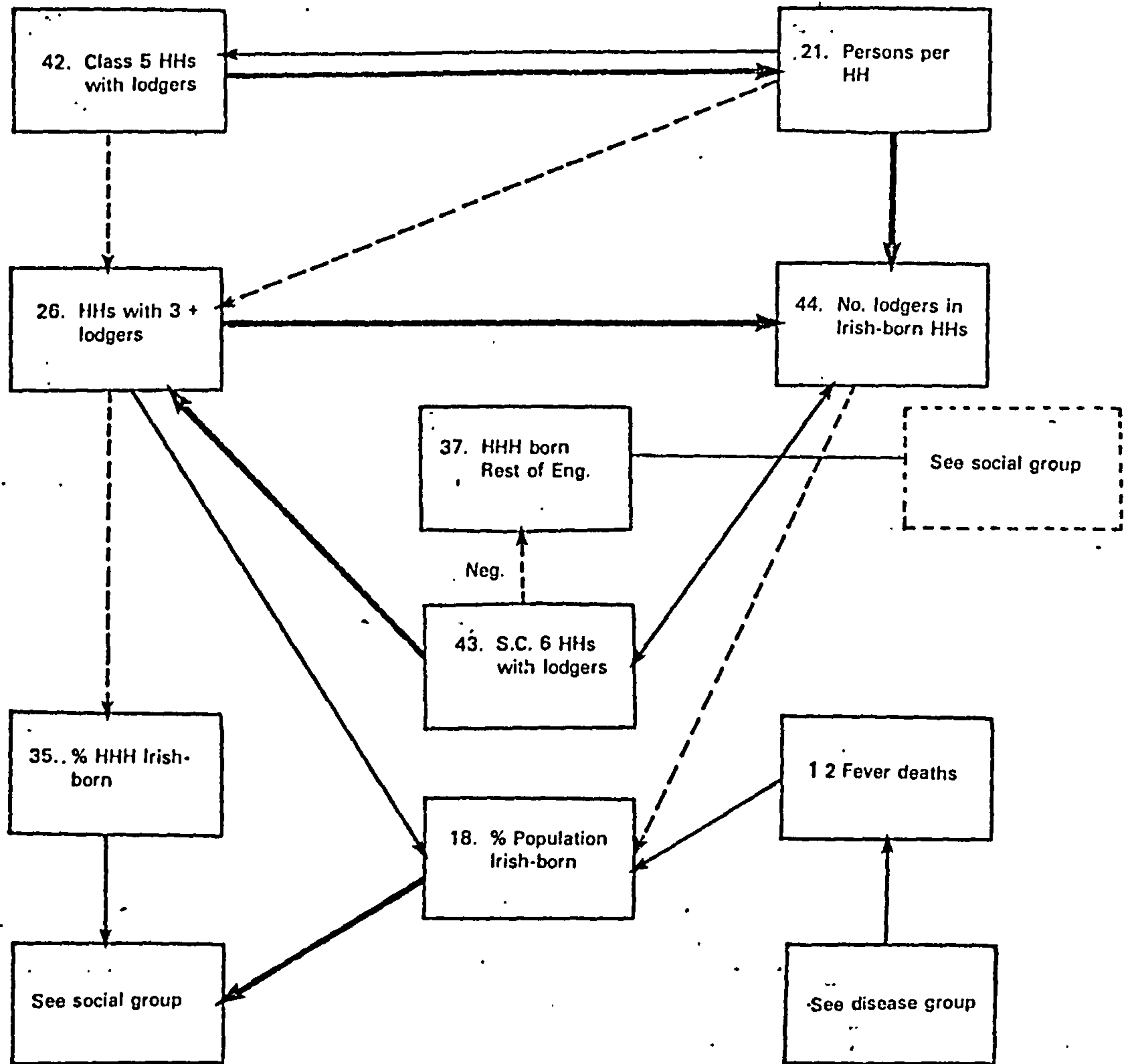
Mid-Nineteenth Century Liverpool

Correlations of Cellar Group Variables



Mid-Nineteenth Century Liverpool

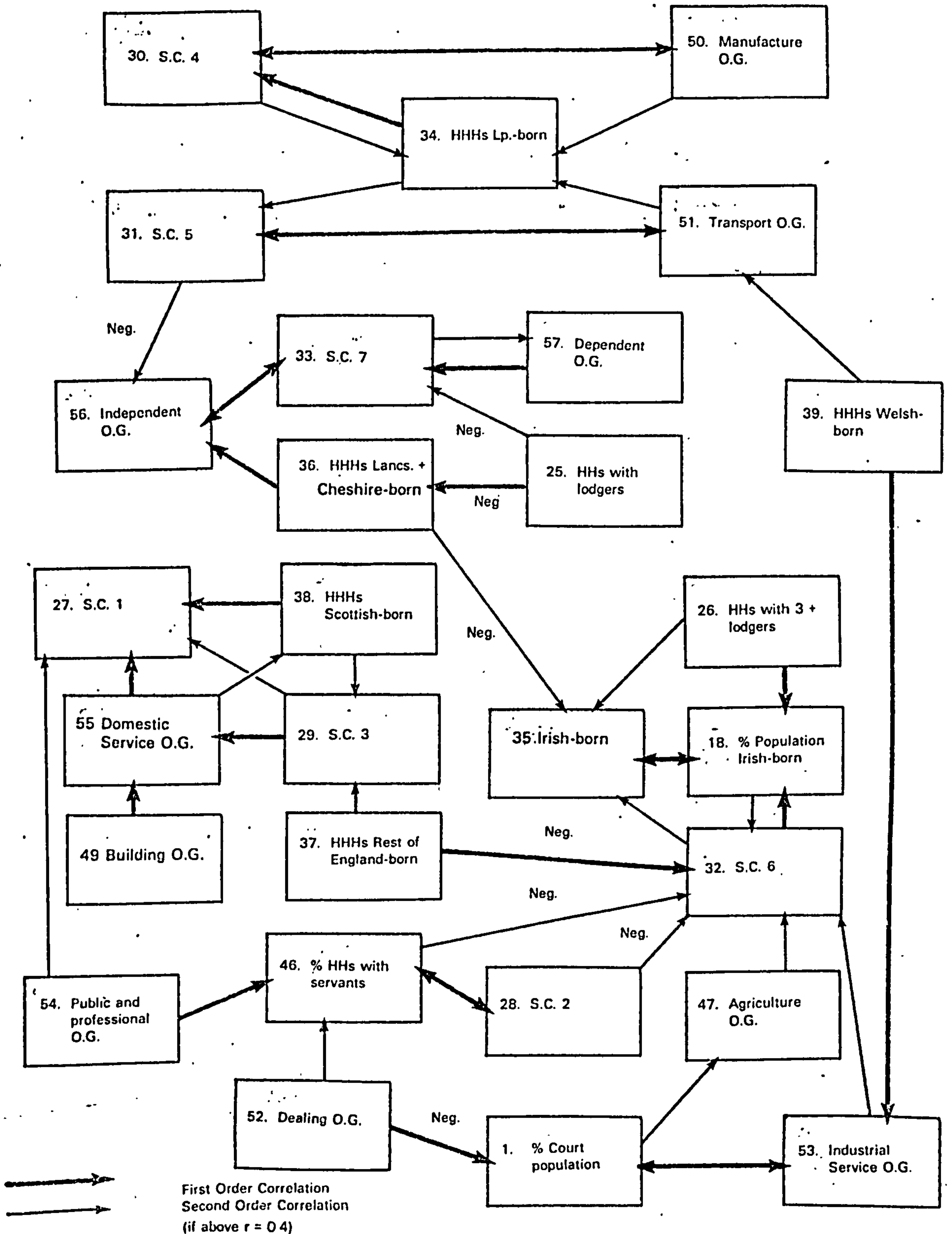
Correlations of Lodger group Variables



→ First Order Correlation
 ==> Second Order Correlation
 - - -> Third Order Correlation (if above $r = 0.4$)

Mid-Nineteenth Century Liverpool

Correlations of Social Variables



from an examination of the first component is the close connexion between disease (social structure) and the residential environment. The inference drawn by the health reformers of a relationship between 'environmental' factors (such as housing, population densities, and court populations) together with 'social factors' (such as unskilled dock and general labour, and an Irish born population) with disease (overall death rates and diseases such as zymotic, convulsions, cholera, and consumption) is borne out in this statistical analysis.

However, a number of environmental and residential factors that were proposed by the reformers as important contributors to disease incidence do not emerge as statistically linked but, rather, appear as statistically independent variables. Cellar dwelling and overcrowding (inhabitants per house, households per house, inhabitants per court house) for instance do not appear to relate directly to disease incidence, for these variables loaded highly on the second independent component. Neither too did the group of variables relating to lodgers which made up the third principal statistical axis. This is not necessarily to say that these variables did not contribute in some measure to the incidence of disease, (indeed that must often have been the case) but that the geographic distribution of cellar dwellings and the incidence of lodging makes it apparent that other relationships

were more universal.⁶⁴⁶

The above analysis contributed to a better understanding of the relationships between variables but while suggestive of causal relationships such a correlational analysis is not of itself explanation. Perhaps 'explanation' is too immodest a goal to attempt, for once it is apparent that the single factor explanation of causality is too great an oversimplification, the complex interaction among contributory causes makes it virtually impossible to assign exact weightings to particular relationships. Today research recognises that human disease must be studied as a dynamic system consisting principally of four major variables - host, pathogen, environment and 'culture'.⁶⁴⁷ In the present work 'culture' has been further differentiated by an analysis of social background, class, occupation, income, housing type, dwelling characteristics, and urban infra-structure. Comparable data for many of these factors are absent or inapplicable, so it would be over-optimistic to expect predictive modelling of the total system. Nevertheless, a model may be proposed as explanatory description and a summary of the topics discussed here.

Such a model must be able to indicate the factors likely to affect or be present within the environmental/social

646 One distribution already noted has indicated that the presence of cellars was not universal. Unless the health conditions in cellars were to have been so much worse, over and above the conditions found elsewhere, it cannot be expected that cellaring would have been statistically linked to disease incidence.

647 May, 1960, p. 790.

urban system, as evidenced in mid 19th century Liverpool. It should also be capable of providing a framework for future study of different cities in different time-periods in order to be able to judge the relative importance or impact of similar factors.

One such a model is proposed in Figure 10.5. It attempts to depict the relationships between four major facets of the 'cultural' aspect of May's model - economic, demographic, residential, and level of urban services as they might apply to an urban environment. Some variables are relatively 'independent' in the sense that they are exogenous to a particular urban area (national and world markets, for instance). Some are 'dependent' in the sense that they are the result of the operation of other forces. Housing conditions, for instance, are depicted as largely the product of the interaction of economic and demographic factors. 'Health' in this context is seen as an end-product - the result of a series of complex social and environmental interactions which bring together in circumstances of varying favourability, host and pathogen.

In the context of the mid 19th century city, it might be advantageous to review some of the critical elements in this model. Commencing from the point of host-pathogen contact, the main factors governing the spread of infection have been enumerated.⁶⁴⁸ They include the characteristic of the germ or parasite (including the source and duration of infection, the

648 Boyd, 1974, p. 347.

method of spread and the method of entry), the resistance of the exposed individual, and the social factors interacting between these two. In the mid 19th century, there appears to have been no shortage of sources of infection for most communicable diseases, with the exception of that occasional visitor, cholera. Methods of spread varied however. Food, water, vectors, soil, personal contact were variously effective dependent to a large extent on the social habits and dwelling characteristics of the individual. Close proximity indoors encouraged the spread of infections inhaled (tuberculosis, measles) or passed via vectors such as lice (typhus). Inadequate sanitation, poor water, or inattention to food or personal hygiene encouraged spread of diseases borne of faecal contamination (typhoid, diarrhoeal diseases). Yet within all diseases there is commonly a wide range of severity. The severity of the response to infection depends on the intensity of exposure and the resistance of the exposed individual. Among the most important factors reducing resistance to infection are poor nutrition, exposure at age of maximum severity and pre-existing other infections.⁶⁴⁹ Nutritional standards are clearly related to wage levels and constancy of employment.

With these elements in mind, the model can be discussed as it applied to Liverpool. The foregoing chapters have indicated a situation that would be hard to imagine as less conducive to the public health of a great city. The fundamental factor was economic. Britain was the world's industrial giant

649 ibid. p. 349.

and Liverpool was the means by which new materials were imported and goods were distributed to the world. The capital investment in facilities and the organizational skill to handle trade was such that other economic activities became secondary to the demands of the port. Liverpool became a single industry town. There were thousands of employers but in another sense there was ultimately only one - Commerce. When it faltered, the effect was immediate and the economic life of the whole town slowed.

Within Liverpool itself, the economic system that was transforming the country translated into a labour market that demanded many and barely skilled 'hands' on call at all times. There was no lack of willing takers and the town became the great market for unskilled casual labour. Unorganised and without bargaining power, the wage earner took what was offered - a subsistence payment that was barely enough to feed a family in good times. When times were hard, as they were both seasonally and cyclically, a day's wage might have to suffice a family for a week.

With rentals adjusted both to the ability of the renter to pay and to the demands of the land for a competitive ground rent, the builder had to erect houses of the cheapest sort. The economic system saw to it that back-to-back court housing and cellar dwellings were the only 'reasonable' solutions under the circumstances. Overcrowding on the ground was the legacy of the builder, overcrowding inside was produced by the tenant striving to reduce his per unit costs.

Municipally, Liverpool's outstanding success as

an innovative, ingenious and aggressive creator of a harbour system second to none, contrasted with almost total inactivity in providing its population with municipal services. Water and sewer pipes were not new inventions, but urban government viewed the responsibility as lying elsewhere. The town was constructed therefore without these essential services. The Corporation's vast income from the docks and its huge estate went to keeping down its tax burden (indeed it was not until the second half of the century that a 'general rate' was levied at all). With little water and a system of sanitation that was essentially that of an overgrown village, it was hardly surprising that disease, once it had taken hold, would only reluctantly let go.

Finally, Liverpool's migrant work force was drawn heavily from Ireland. The 'sister kingdom', as it was known, in the 1840s passed through a crisis that was almost beyond belief. Virtually no provision was available for relief from the Famine and the starving hordes arrived daily in their tens of thousands. Liverpool had already an overcrowded Irish colony that inhabited the worst of its slums, whose habits were primitive and adjusted to the exigencies of a poverty-stricken rural society. Hygiene, sanitation, even cooking, were often unknown. The best went to America, those without money or hope, 'the dregs' as Fr. Nugent called them, were left behind to swell the ranks of the casual labour market.

Disease and death was, therefore, an integral part of the structure of Liverpool's urban life. The conditions which gave rise to them were not fortuitous or accidental but

stemmed from a particular combination of economy and society inhabiting a built environment in an economic landscape that controlled the price of a square yard on Lace St. as surely as it did the price of a bale of cotton in New Orleans. The benefits of such a system included super profits that could be ploughed back into industrial enterprise, a low wage bill that kept Britain the most competitive country in the world, an Empire built on the ability to trade cheaply, middle class villas and Balmoral Castle. The other side of this golden coin was of baser metal. It was inscribed 'the Black Spot on the Mersey'.

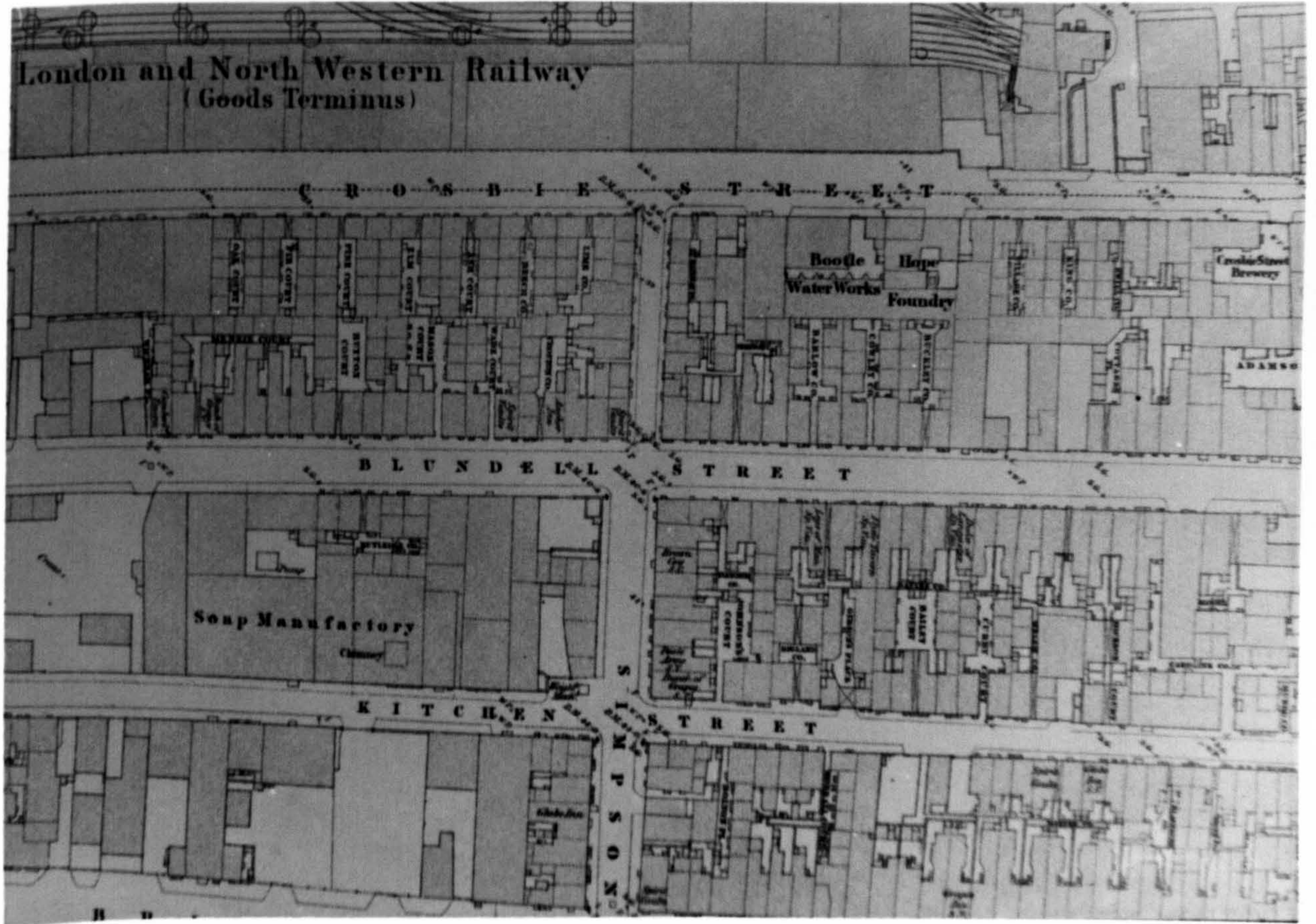
PLATES 1, 2, 3 & 4

Differing Court Layouts: Crosbie, Oriel, Preston and Chapman Streets.

Crosbie Street and surrounding area was developed in the 1780's and by the 1840's was a notoriously unhealthy Irish Street. The area around Preston Street was also developed in the late 18th century but the smaller lots allowed for fewer court houses. The area became notorious for prostitution and crime. This notoriety became a strong reason for the route chosen for Victoria Street, a 'street improvement' scheme of the 1870's.

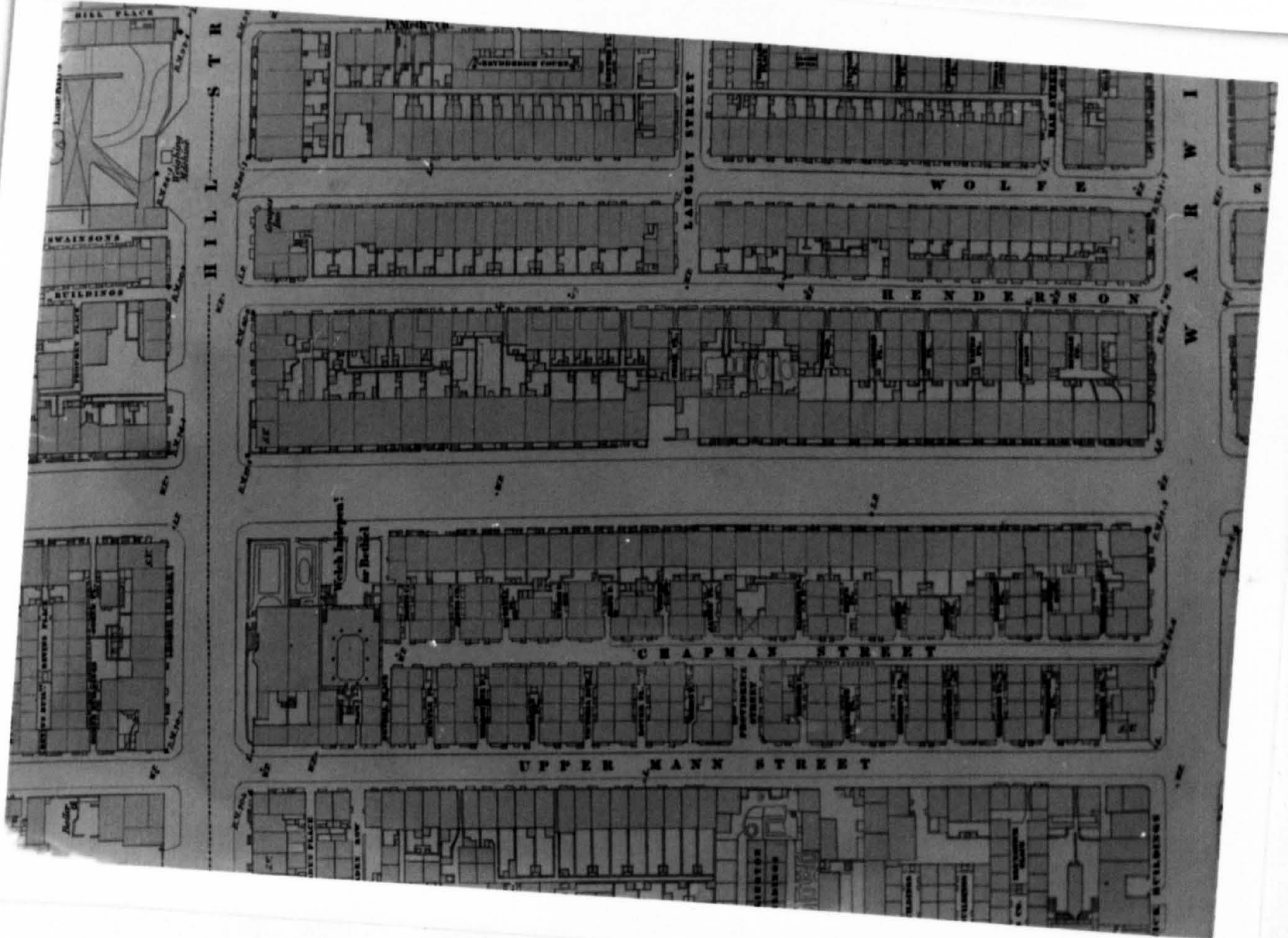
Oriel Street was developed in the late 1820's and quickly became a notorious Irish Street. Open entrances to courts, such as the ones shown, became common after the 1820's though they were by no means universal (see Plate 18).

Upper Mann and Chapman Streets were developed in the 1830's. The courts were relatively small, probably as a result of the lot width. The grid-iron street pattern of Toxteth Park is evident a legacy of the late 18th century plans for 'New Harrington'.









PLATES 5, 6, & 7

Gibraltar Row

The street is not shown on Eyes' plan of 1785 but was enumerated by Simmons in 1789-90 and houses were probably under construction at that time. Running from Gr. Howard Street to the Prince's Dock, the street became notorious for its connections with underworld maritime activities. It was visited by Melville in the 1830's who described the street and area as "putrid with vice and crime to which perhaps the round globe does not furnish a parallel . . . These are the haunts in which cursing, gambling, pick-pocketing and common iniquities are virtues too lofty for the infected gorgons and hydras to practise." (Melville, p.192).

Housing was inter-mixed with warehouses and narrow passages led to microscopic courts barely 8 feet across.





PLATE 7

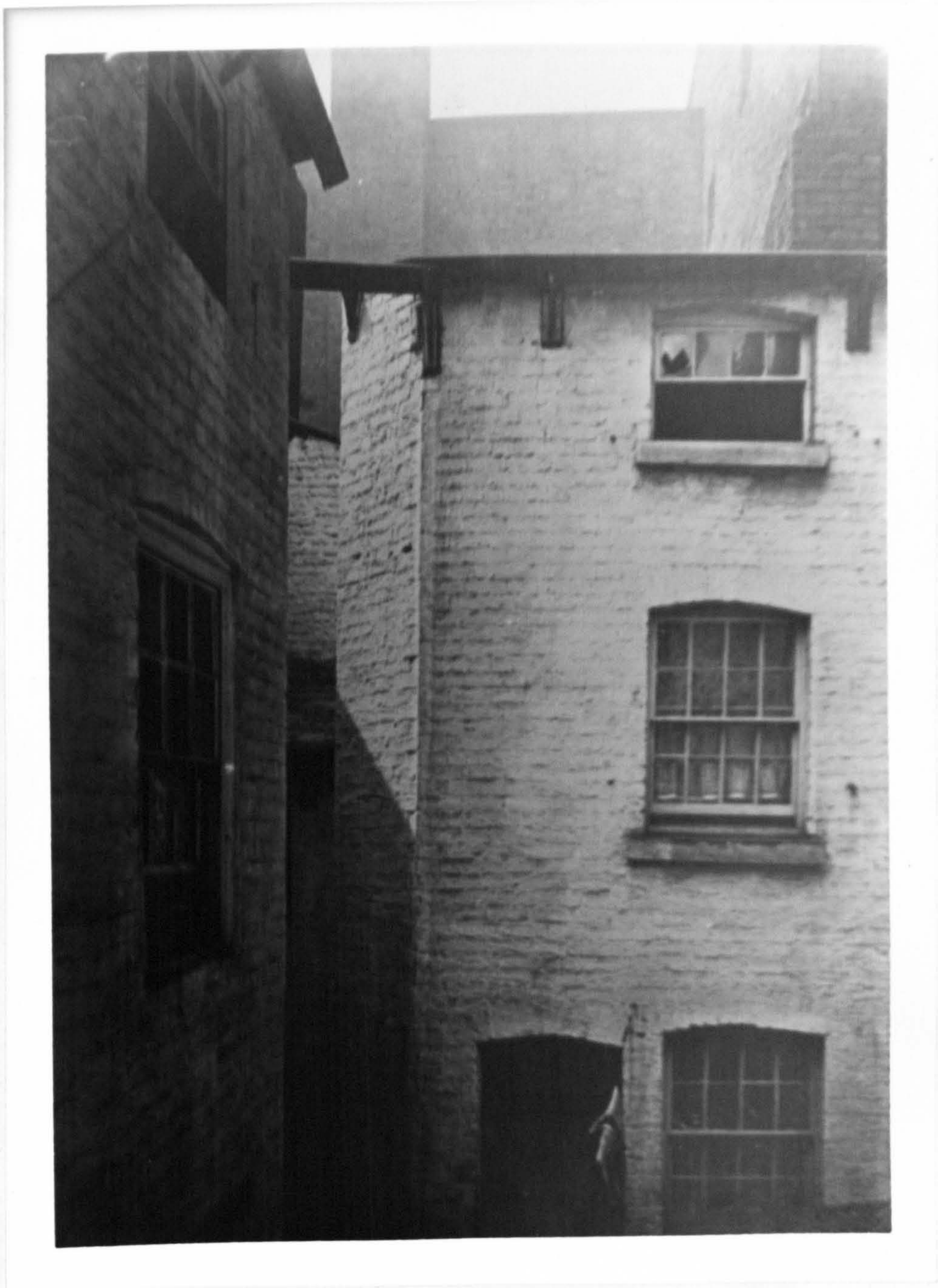


PLATE 8

Number 10 (Smith's) Court, Smithfield Street

Photographed in the 1890's for a health report, this eight house court was characterized as having a 'double entrance' (two feet, four inches wide). The second tunnel linking it to Upper Milk Street is evident. The area was developed at the turn of the 19th century. Despite re-touching, the photograph is also an interesting human document.



PLATE 9

Henry Edward Street and District

This represents a portion of the Cross estate sold and built upon after 1804. The area included the notorious Lace Street, heart of the Irish Ghetto of Vauxhall Ward. Lace Street lay immediately to the south of Adlington Street (just off this map).

These courts of seven feet width and with four or six houses were similar to that indicated in Plate 10.



PLATE 10

Number One Court, Vandries Street

Probably built in the early 1830's the style is still that of earlier periods - tunnel entrance, narrow court (about six feet in width), brick arches. The court shown here must have been similar in type to those of Lace - Henry Edward Streets displayed in Plate 9.



PLATES 11, 12, & 13

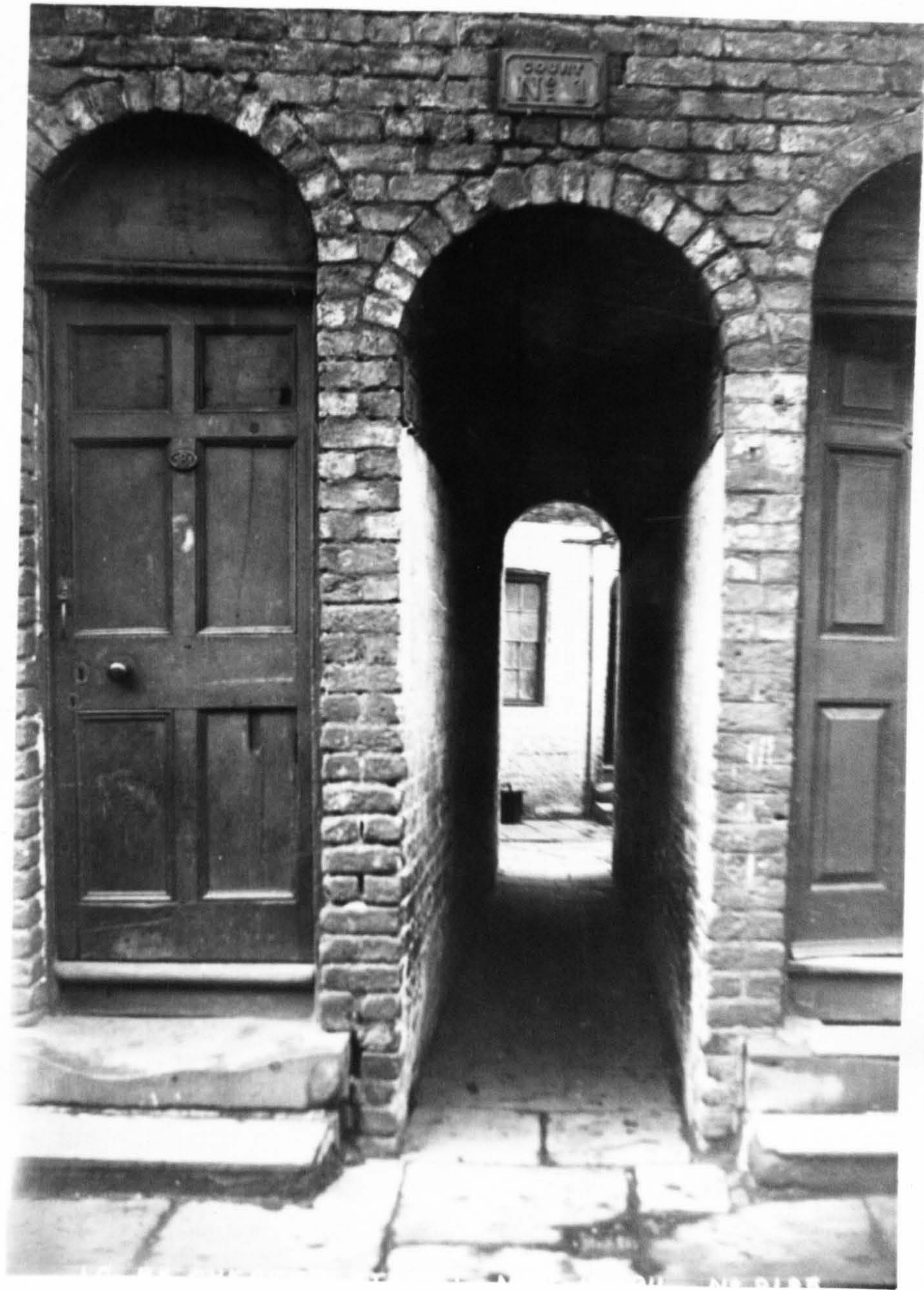
No. 1 (Henderson) Court, Back Chester Street, Toxteth Park

Probably developed in the early 1830's the land bounded by Back Chester, Head and Dexter Streets was a triangular site too small to use for the substantial Georgian terraces of this middle class sector of Toxteth Park. The site produced an unusual development of 18 small houses, 9 of which faced inwards towards the court. The court displays details that were common in those built before the 1840's (brick arches over doors and windows, rather than the stone lintels of later working class housing, and small 12 light windows). Cellars were provided but were without separate entrances.

The picture of the interior was taken from the bedroom window of a 'through' house. The privy block occupies the foreground, the entrance to the court, lies in the third doorway on the left.

PLATE 11







PLATES 14, 15, 16, & 17

Burlington Street

The northern half of Burlington Street was developed in the early 1830's and most of the southside in the 1840's. Court entrances types ranged from 'covered', to 'privy entrance' and 'open'. The courts were mainly of the six and eight house variety and the stone lintels indicate their later vintage. Separate cellar dwellings were constructed in the street houses and in a number of courts (though not in the ones indicated here).

The photographs taken in the 1920's preserve a number of informal glimpses of slum-life - domestic animals, window cleaning, and the ubiquitous barrow.

The background of Plate 15 shows the new construction of Corporation dwellings destined to replace the houses of Burlington Street.

PLATE 14

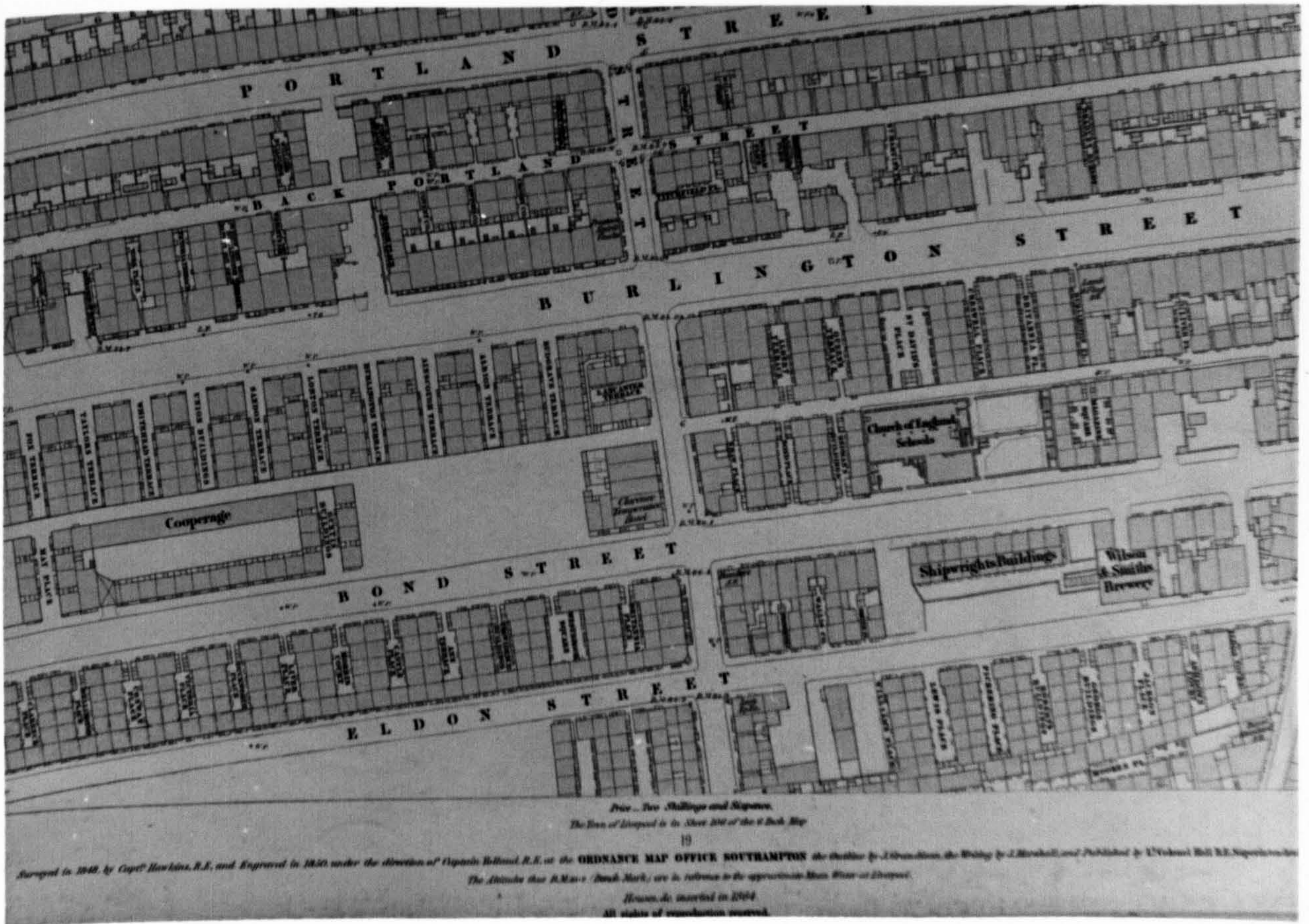
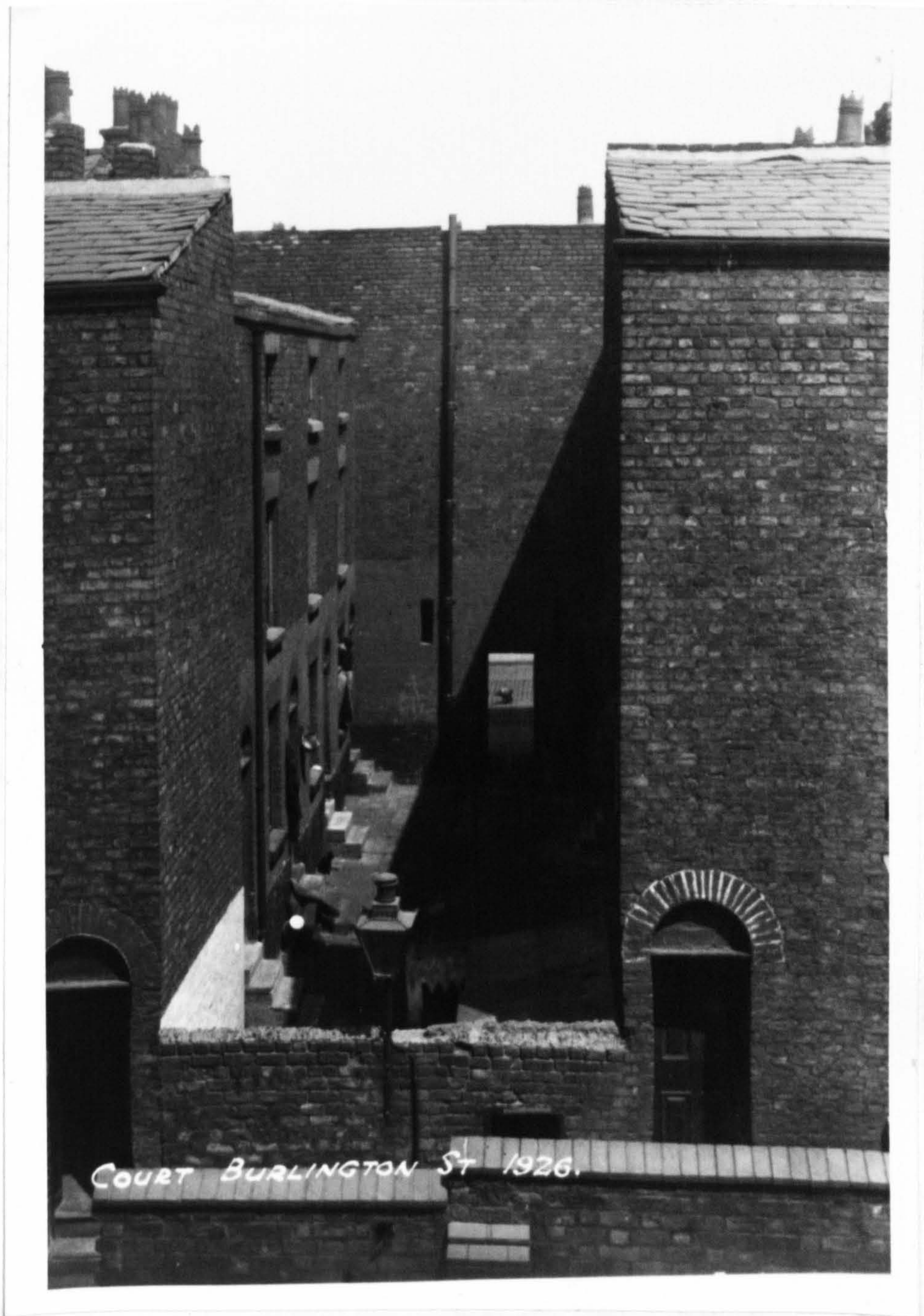




PLATE 16





COURT BURLINGTON ST 1926.

PLATES 18, 19, & 20

Number 2 Court, Silvester (formerly Oxford) Street

Not shown on Gage's plan of 1836, this court was one of several built probably in the early 1840's.

The street houses are typical of this period, of 15 to 20 foot frontage, 3 storied with the 'blind' windows inserted presumably for the sake of a lingering concern with Georgian symmetry. Separate cellars were constructed in all the houses.

The court entrance shown in Plate 18 (probably to No. 1 Court - formerly Church Place) was the typical later tunnel entrance, 4 feet in width running the 15 feet width of the street house. Slightly unusual, was the entrance to the house above the tunnel situated inside the passage itself. The late vintage of these tunnel entrance courts indicates that such a feature persisted until the 1842 Act.

Inside (Plates 19 and 20) the court was, for Liverpool, a generous 15 feet in width, but built to a height of three stories on three sides. The 'side to back' structural link of the court and street dwellings is apparent. Note, too, the court cellar entrances, rear privies, washing pail, and the 'civic improvements' - the paving, rubbish bins, gas light - the number of children and the shawled matriarch.

The Church in Plate 19 is St. Martins in the Fields, a 'Commissioners Church', opened in 1829.





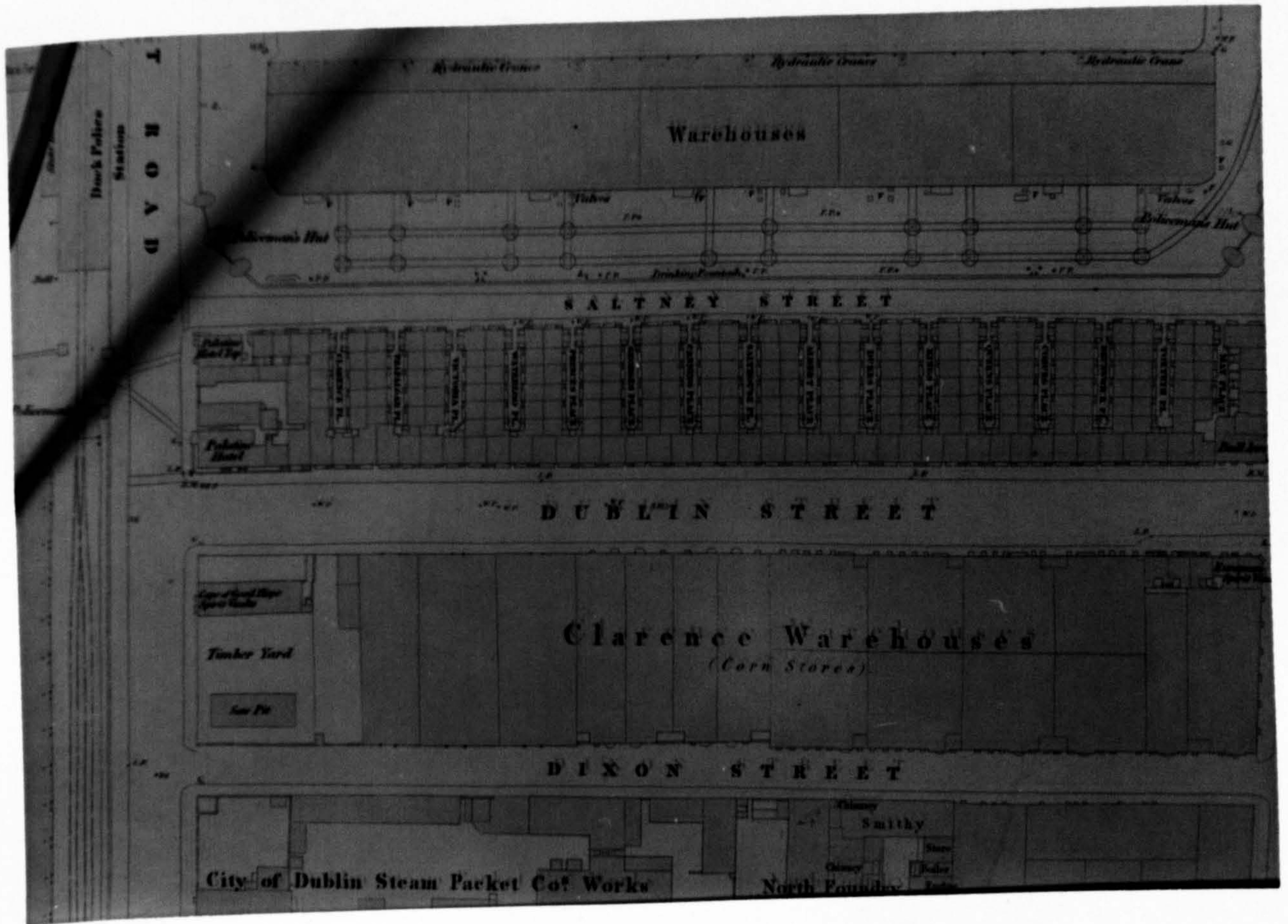


Saltney Street

Saltney Street was a block of dense court property developed in the 1840's which contained about 240 dwellings on less than 2 acres. The general view (Plate 22) is from the east and shows commercial property (including two pubs) fronting Great Howard Street.

The courts are shown with 'privy entrances' in the plan (Plate 21) and probably indicate a construction period between the 1842 and 1847 Acts). These privies were removed when court improvements (1870's?) took out a line of middle court houses and replaced them by new privies. The extent of Corporation 'improvement' is evident from the paving and gullies, the bins, water pump and gas lamps.

The area was photographed in 1911 presumably as a record prior to its demolition and replacement by Corporation-build artisan dwellings in the same year.









PLACE SALTNEY ST JAN 23 1911. N° 1954

PLATES 25, 26, & 27

Rathbone Street

The eastern edge of the Corporate Estate had a number of small court properties intermixed between large middle class residences. Courts were usually fitted into lots too small or with undesirable street frontages for better class housing. Plate 26 (Cresswell Place?) for instance, shows a small court on the north side of Rathbone Street which faced the garden walls of houses fronting Great George Street. One court (Bethel Place) is shown on Gage's Plan of 1836; the others were probably built soon after.

Plate 27 shows Number 2 Court (Hughes Place), Mount View in 1890. The court is probably of the mid 1840's built with cellar dwellings and terminated by the formidable looking yard wall of houses fronting Washington Street. The religious slogan on the privy door indicates the Liverpool-Irish nature of this district in 1890, though originally this may have been one of the 'respectable', higher - both in elevation and social tone - courts.

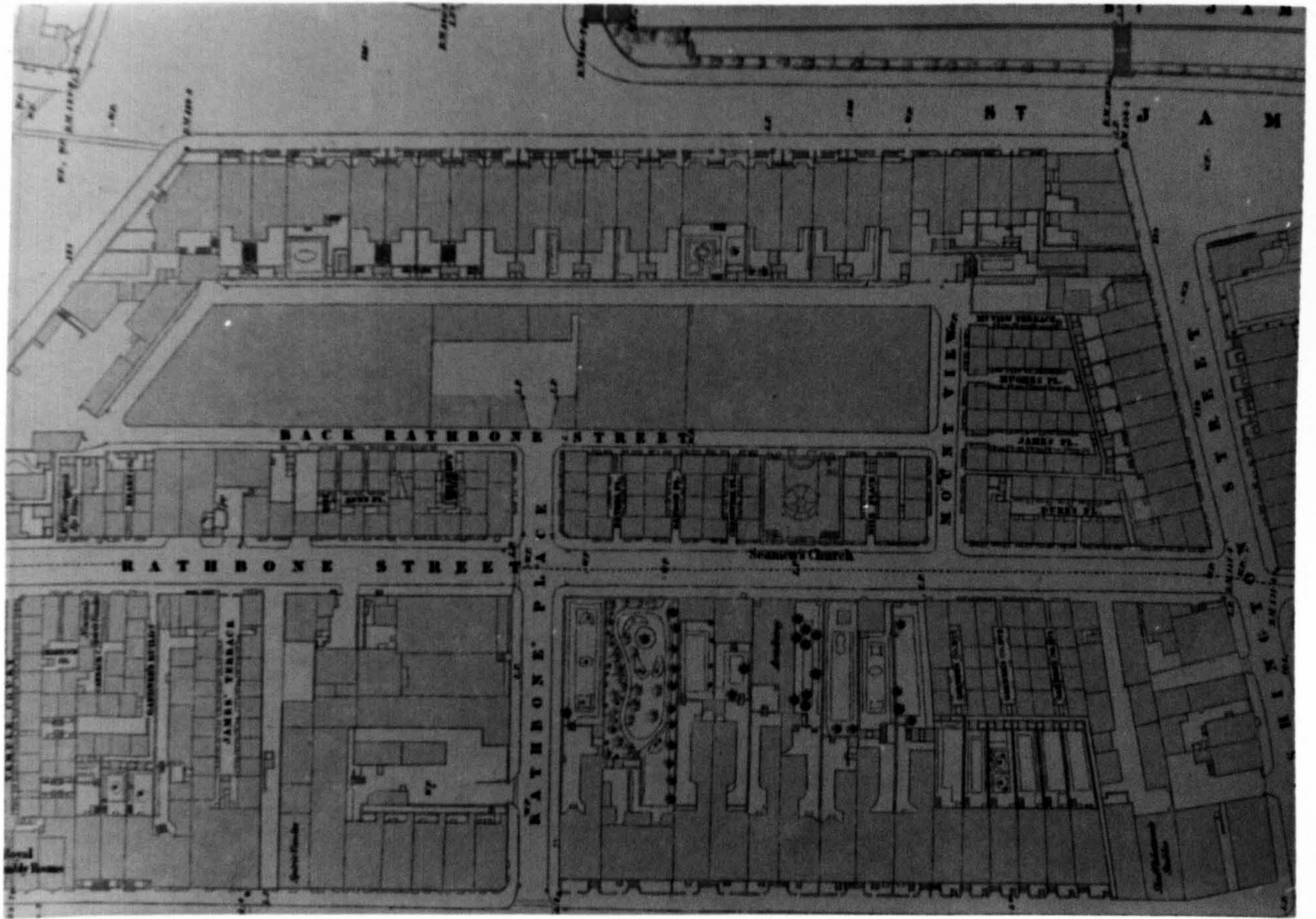






PLATE 28

First Floor Front Bedroom, Hunter Street (?)

Photographed in the 1920's prior to demolition to make way for Gerard's Gardens, this plate indicates the size of rooms in the larger street houses built in the early 19th century. The room is approximately 6 feet by 8 feet of lathe and plaster construction, with an under-stairs cupboard and fireplace covered by newspapers. Note the religious print.



PLATE 29

Street 34, Ordnance Survey Five Feet Series of Liverpool, Surveyed 1848 (Portion of Docks and Surrounding area Revised 1864).

The revision of this street consisted largely of re-surveying the area near Wapping Dock, where a considerable amount of housing was cleared in the late 1840's to make way for Wapping Basin.

The residential area shown indicates the contrast between the court district West of Park Ln./St. James St. and the former middle class district to the east. The western part was developed in the late 18th century, the eastern part in the first decades of the 19th century.

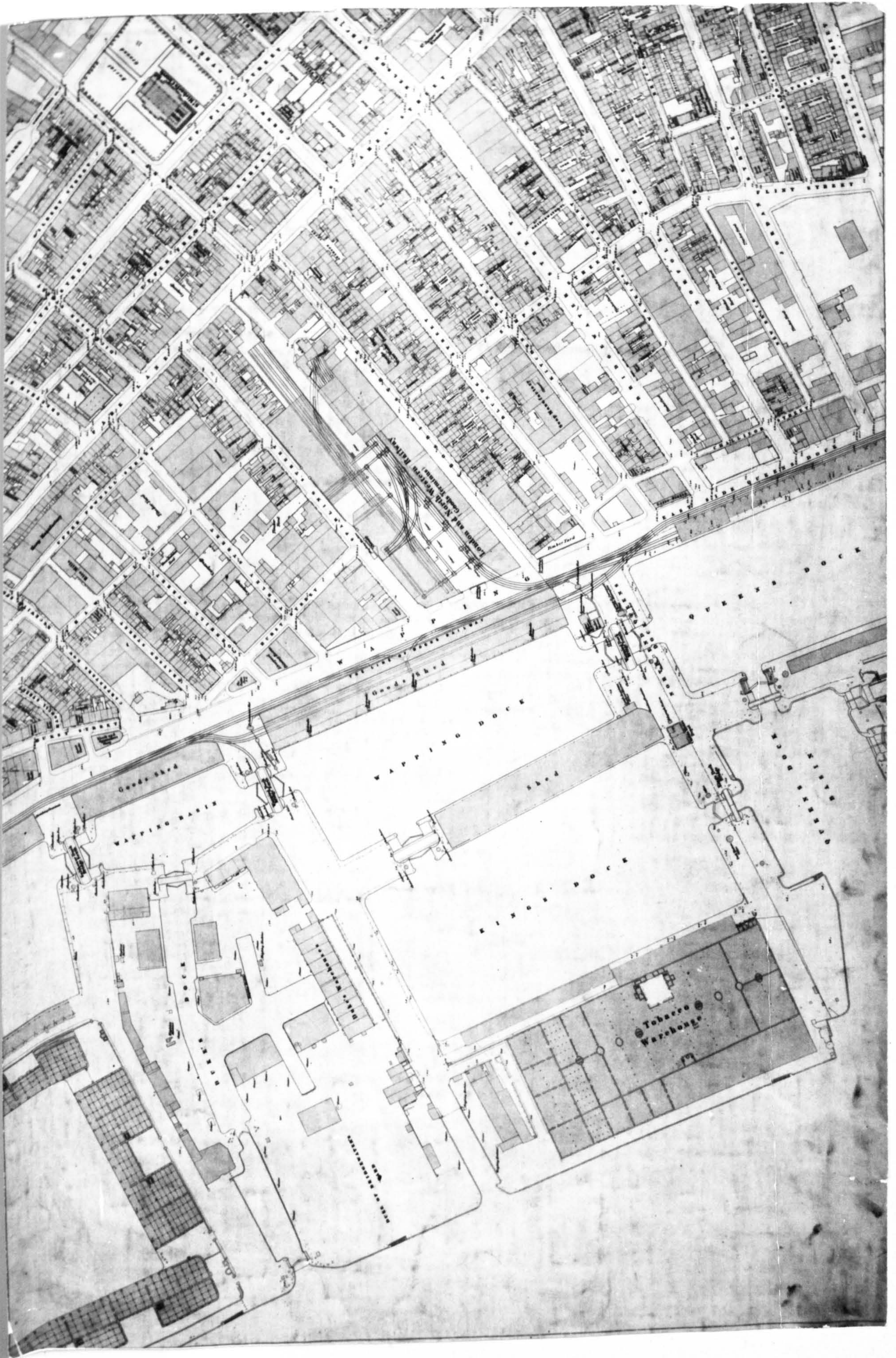


PLATE 30

Street 19, Ordnance Survey, Five Feet Series of Liverpool,
Surveyed in 1848.

The map shows the eastern half of Vauxhall Ward and a portion of the northern section of Exchange Ward. The period of development ranges from the late 18th century in the extreme south-west to the 1830's in the north. Vauxhall was the chief heavy manufacturing district of the town and the yards (along the Canal) and works are inter-mixed with court housing. At mid-century, this area was largely Irish in character.

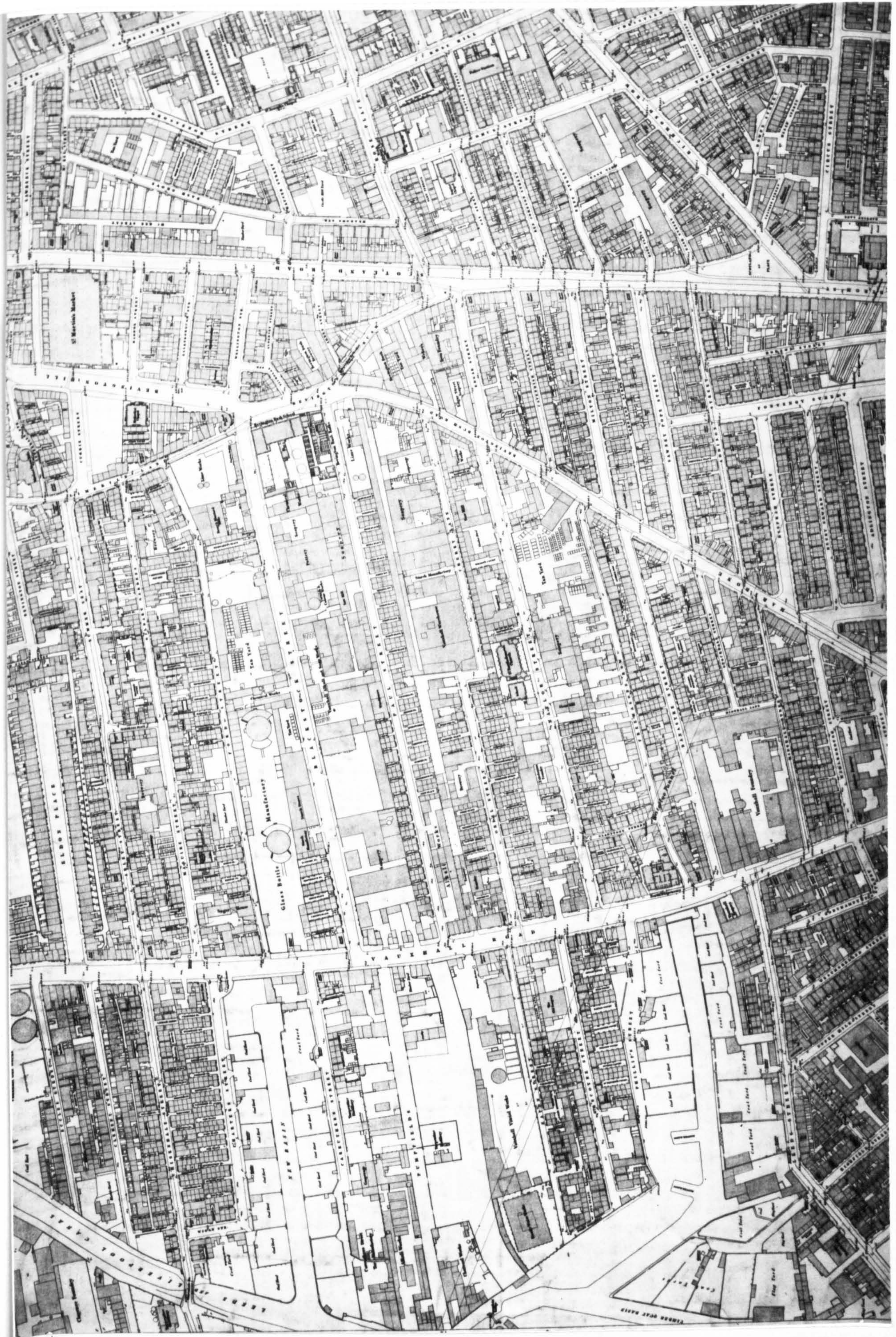


PLATE 31

Part of Street 14, Ordnance Survey Five Feet Series of
Liverpool, Surveyed in 1848

The map indicates the intimate mix of transport facilities, warehouses, works and housing in the dockside zone. The area was developed in the 1840's with the northern extension of dock facilities. The 'New Cut' indicated is the river entrance of the Leeds-Liverpool Canal. The Saltney Street court district is portrayed in more detail in Plates 21 to 24.

