

'The Urban 'Ghetto'

Formation and spatial structure

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Abstract

Research into patterns of immigrant settlement has consistently indicated that certain areas of cities are prone to settlement by immigrant groups. This paper proposes that immigrant settlement of such areas may have a particular spatial pattern. Taking the case of the settlement of Leeds, England by Jewish immigrants in the latter six decades of the nineteenth century, we describe the formation of the immigrant Jewish settlement in the area called Leylands.

The paper shows first, that Leylands was spatially segregated in comparison with the city overall; and second, that the pattern of settlement was one of intensification of particular streets through time, whereby initially the main, relatively integrated streets were settled, with occupancy moving as time went on into more segregated streets.

Analysis of social class defined by occupation suggests that the whole population of Leylands was much poorer than that of Leeds overall. This paper suggests that since the poverty difference was present and possibly more pronounced for the majority, non-Jewish population, that the socio-economic form of the area of settlement in Leeds was more likely to have been related to its spatial segregation than to the social and economic segregation of the immigrant group. It is suggested that the particular characteristics special to certain immigrant groups allowed the Jews of Leylands to overcome their spatial segregation by employing strong social networks on the one hand and through economic mutual help on the other.

1. Introduction

This paper describes research into the spatialisation of Jewish settlement in Leeds in the 19th century [see Vaughan (1999). Taking this example of 'ghetto' settlement [Englander (1994) p. 63], this paper attempts to address two key questions: was the Jewish settlement district - the 'ghetto' area of Leeds - distinctive spatially? And was there a spatial logic to the formation of Jewish settlement in this particular area of Leeds? It should be noted that this paper is based on a much larger research project, which considered a parallel case of settlement in Manchester Vaughan (1999) and an earlier research project, which considered Jewish settlement in London Vaughan (1994). The results of these were used to corroborate the research described here.

Introducing the Spatial Context

Although there is historical evidence that there were Jews living in England from after the Norman Conquest in 1066 until their expulsion in 1290, there was no continuity between the mediaeval community and that of later times [Lipman (1990), p. 1]. Jewish resettlement in England is normally dated from 1656, the date from which Jews were able to practice their

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religion openly (although prior to that date Marranos - enforced converts from Spanish territories - arrived clandestinely). The new settlers were for the most part merchants of substance, probably allowed back into England because of their ability to contribute to England's rise to commercial primacy. Most settled in London and maintained themselves through trade (although were barred from most trade associations and Guilds) or occasionally in professions, such as physicians.

Jewish settlement outside of London is normally dated from the early 18th century, where it was still at a very small scale. In most cases, Jewish provincial settlement dates from the early 19th century, when Leeds (like many of the other main provincial communities) developed as an industrial and commercial centre. The development of the railways in continental Europe enabled mass migration for the first time, which contributed to the growth of provincial cities. This general population move came partly as a result of famine and disease in Lithuania and Poland but for the Jews, there was the added cause of persecution and forced movement.

Jewish settlement in Leeds was initially located in Briggate (plate 1), to the south west of the Leylands district and was comprised on the whole of individuals lodging with English-born landlords. Briggate was not only the main street in old Leeds but was also the main street north of the River Aire and the main railway line. The Briggate district was not an especially prosperous district in itself, but the area west of Briggate served the 'middle rank of society' and became the civic and commercial centre of the city, see Dickinson (1908). From 1851 onwards, when family-group migration became more common, the majority of immigrant Jews chose to settle in the Leylands area (marked in grey on plate 1), north of Briggate. Historical evidence shows that up to the 1860s Irish immigrants had settled the district of the Leylands but by the time this became a Jewish district, the main core of Irish immigrants had moved elsewhere [see Dillon (1973)].

In geographical terms, the area of Leeds remained relatively small and compact in the 19th century, and outlying townships only became part of the city in the early 20th century. But in economic terms, by the mid-nineteenth century, Leeds had become a centre for the manufacturing industry, with engineering and textiles dominating. It is evident that Leeds' natural resources, transport connections and regional location helped make this development possible [See Kershen (1995) p. 25].

The Leylands district is usually defined by North Street to the west, Lady Lane to the south, Regent Street to the east and Skinner Lane to the north [see Freedman (1992), p. 26]. The eastern boundary has a clear geographical definition formed by Carr Beck and Lady Beck, which were once the resources for power, water processing and sewage disposal for the district, according to Dickinson (1908)).

Axial analysis [using Axman software, Dalton (1996)] of the city of Leeds in the late 19th century reveals the spatial structure of the district of Leylands. Plate 1 illustrates the global integration results for the axial map of Leeds, where the lines with the darkest grey indicate the highest value and the lightest lines indicate the lowest) with the main buildings, waterways and railway lines indicated. This paper assumes prior knowledge of theories and methods of space syntax analysis, of which axial analysis is an important method of representation. For a full explanation of space syntax methods, see Hillier and Penn (1993) and Hillier (1996).

The main points that emerge from this illustration are that Leeds is bisected by a waterway to the north and south, but the district of the Leylands (coloured light grey), which was the principal area of Jewish settlement in the 19th century, is further cut off by Carr and Lady Beck, (to the east). The only important building close to the Leylands district is Kirkgate Market.

Analysis of local integration (see plate 2) indicates that the Leylands area was close to main local integrators, but only one street possessing a high measure of local integration penetrates the district.

Statistical analysis of the axial maps suggests that although streets settled by Jews in Leylands were significantly more integrated than the average for Leeds overall (see table 1, top rows), this is apparently due to the proximity of Leylands to the integration core of the city. If we compare the district of Leylands overall to the adjacent Central Leeds area, (see table 1, bottom rows), the results suggest that Leylands streets are significantly less integrated than the central district, especially in the case of global integration and step depth from the most globally integrated street in Leeds.

Introducing the Social Data

This paper relies on two main sources of data for analysing the settlement of the Jews in Leeds. These comprise Ordnance Survey maps, at 25" and 6" to the mile and census data for the relevant years studied. By mapping the full extent of the city, it was possible to embed the Leylands area in its spatial context. The map also provides a means of identifying the spatial location of streets in which Jews were known to live in addition to the distribution of railways, rivers, canals and other key geographical features.

Census data provide an across-the-board analysis of an area, in addition to which, full analysis of data (rather than selective sampling) narrows the margin of error to the minimum. The research described here used electronic formatted data on the 1881 census [see Genealogical Society of Utah - Federation of Family History Societies (1997)] and microfiche records of the 1841, 1851, 1861, 1871 and 1891 of the original Census Enumerators' Books. The limitations of census data have been raised by various sources [Higgs (1996), Kosmin (1975), Schórer and Arkell (1992), for instance]. They point out that census data only provide a 'snap shot' of events and do not reflect, for example, population fluctuations due to the season or to the special nature of migrants, who tend to be more in a state of flux than long-time residents of an area. Yet, by using data on the entire population, it is hoped that these limitations are not critical to this study.

In addition to the census data used to create a contextual background to the periods of Jewish settlement studied here, this paper relies on the computerised data tables of Jewish households of Leeds [such as Freedman (1994)] to identify Jewish households in the census. Until recent times, the census did not contain a question regarding the respondent's religion. Therefore the identification of Jews in census data relies on multiple sources, such as synagogue records, burial society records and so. The only drawback notable in this method is that individuals who were not affiliated to the community and did not have 'Jewish' names might have been eliminated from the lists [see Waterman and Kosmin (1987b)]. However, this is not a major drawback for this study, which deals principally with the Jewish community as a social group and is less interested in non-affiliated Jews.

This paper describes Jewish settlement in the Leylands area, although it should be noted that Jews settled in small but ever increasing numbers elsewhere in Leeds as time progressed. Table 2 shows the summary data on the population of Leeds. This table shows that the number of Jewish families increased by increments of 2.5 every census. It also shows that the proportion of Jewish families in Leylands increased in every census, except the last.

2. Analysis of Pattern of Settlement

Plate 3 shows the location of streets with Jewish inhabitants through time. Graphic analysis of the data suggests that settlement starts from two cores, but develops only in one, the Leylands. We also find that the number of streets within the Leylands area increases. The following describes analysis of the pattern of Jewish settlement to see if there are spatial causes to this difference.

The scattergram shown in figure 1 shows on the x-axis the Jewish and non-Jewish inhabitants from the population totals in each census. The y-axis shows the total population in Leylands in each census. The scattergram shows that the increase in Jewish numbers was in line with a general intensification of the population density in the area. However, it is evident that Jewish density increased more quickly, whilst the non-Jewish density increased less quickly than the general trend. This suggests that the settlement of Jewish inhabitants in Leylands was faster than across the population, especially in the years 1861 to 1881 (although this could be partially explained by a higher birth rate amongst the Jewish population as evidenced from data on family size gathered in Vaughan (1999)).

The term 'density' refers in this paper to the proportion of the total number of Jews from the total number of inhabitants, per street. Table 3 shows the density per street across the censuses. Analysis of Table 3 suggests that density increases in Leylands in line with the absolute number of streets. We also find that the proportion of Jewish streets from all Jewish streets increases with time. However the rate of increase goes down with time. This suggests that there is a pattern of intensification, whereby some streets increase in Jewish density, whilst others are not settled at the same rate.

These findings lead to the hypothesis that streets with Jewish inhabitants fill up faster than newly Jewish streets. This was analysed by taking each census in turn and distinguishing between streets that were already settled by Jews and streets that were newly Jewish for that census (the 1841 census could not be split by this measure as it was the first census and the first decade of Jewish settlement in Leeds).

Analysis of Density Difference between New and Existing Streets

Figure 2 is a univariate line chart that shows the distribution of density for each consecutive census from left to right, for existing and newly Jewish streets on average, (for the Leylands only). We see that in both cases density increases from census to census. But, the higher rates and steeper curves for the 'existing Jewish' rates suggest that streets which were already Jewish in the previous census, consistently became more densely Jewish in the following census. This analysis has shown the formation of the density pattern in the Leylands area and has suggested a pattern whereby streets with existing Jewish populations are filled up faster than non-Jewish streets. The following analysis investigates whether the pattern of intensification was related to the spatial form of the district of Leylands.

Analysis of the location of new and existing Jewish streets can be seen in plate 4, which shows the location of Jewish streets in each of the six censuses, colouring up streets new to Jewish settlement in pale, thick lines and existing in thin black lines. This plate illustrates the

formation of the settlement in Leylands on the one hand and the disappearance of the original settlement near the town centre, on the other. A few points emerge from this illustration:

- If we concentrate on the Leylands district we see that initially settlement takes place on streets one or two steps away from Hope Street. After this there seems to be a tendency to infilling in the northern part of the district, again in streets one or two steps off. Finally, especially in the 1891 census, we see that settlement starts to occur in short streets more distant from the most globally integrated street. In other words, newly Jewish streets tend to be more axially distant from the point of origin than existing Jewish streets.
- The tendency towards infilling occurs also outside of the Leylands district, as can be seen for example in the cluster of streets to the north east of the district. By 1891 the majority of the streets in this area have at least one Jewish household. On the other hand, although most Leylands' streets have at least one Jewish family in 1891, it is notable that there are some key streets that remain without any Jewish settlement.
- We see that newly Jewish streets tend to be more axially distant from the point of origin than existing Jewish streets

These results are tested statistically in the following section.

Spatial Analysis of Jewish Households in Leylands, Comparing New and Existing Streets

The results of analysis of spatial measures for new and existing Jewish streets (described below) indicate that initial settlement took place in the more integrated streets of the district, but as housing demands increased (due to ever greater influxes of immigrants), newly settled streets were progressively less locally and globally integrated. These results were obtained by distinguishing for each census between streets that were already settled by Jews and streets that were newly Jewish for that census.

The following univariate line charts show the distribution of the various spatial measures for each consecutive census from left to right, for existing and newly Jewish streets on average (for the Leylands only). We see in the case of global integration (figure 3), that the rates for existing Jewish streets are generally higher than for newly Jewish streets when comparing the two groups within each census. In other words, in each consecutive census, the newly settled streets are not as globally integrated as the streets already settled by Jews. The largest margins between the two are in 1871 and 1891, both of which were census years that followed a large influx of new immigration (62% and 61% of Jews were immigrants in those census years, in comparison to an average of 54% in other censuses).

In the case of local integration (figure 4), there is a marked difference between new and existing Jewish streets across the censuses. We see a trend of newly settled streets to have lower local integration values as time goes on, whilst existing Jewish streets tend to be more locally integrated.

The measure of depth from the most globally integrated street in Leeds (figure 5), indicates a pattern, whereby in each census, newly Jewish streets tend to be relatively distant from the global core, when compared with streets already settled by Jews (with the only exception being the settlement in 1881).

The distribution of relative density is also illustrated in plate 5. Density is represented in 6 groups. Streets with over 50% Jews are coloured in 3 shades of black, the darker the colour, the higher the proportion of Jews to non-Jews. The streets with under 50% Jews are coloured in 3 shades of grey, the darker the colour the lower the proportion of Jews to non-Jews.

This illustration suggests that majority settlement (where Jews are over 50% of inhabitants in a street) only occurs for the first time in 1871, with four streets within the Leylands district. The distribution of blues continues to be mainly confined to the district in 1881 and only in 1891, after the major influx of immigration, do majority streets start to appear outside of the area and even here, only in isolated cases and mainly in short streets where the small number of households means that only small numbers of Jews suffice to put them into the majority. In addition, it is evident that the bands of density between 25% and 75% tend to occur one step off the main streets, whilst the more densely Jewish streets (the two darker shades of blue) are more axially distant.

The analysis so far has indicated that there was an identifiable pattern to the manner in which the Jews of Leeds settled in Leylands and that this pattern had a spatial logic. The next section seeks to show whether there was an economic distinctiveness to Jewish settlement in the area.

3. Analysis of Social Class Defined by Occupation

The first indicator of social class used was classification according to occupation by the Armstrong (1972) system, which assigns people to five social classes from Unskilled to Professional and used Culling (1996) to identify unusual occupations. The classification of the five classes was translated into a number called 'social rank' where the higher the 'social rank', the higher the class. It should be noted that in the case of sole lodgers living with non-Jewish families, the occupation of the lodger - not of the head with whom they were residing - was taken into account when calculating Jewish social class. Following a suggestion by Anne Kershen [see epilogue to Vaughan (1999)], the social classification was reprocessed in order to make distinctions between manufacturer and merchant tailors, boot makers and cloth makers on the one hand - and semi-skilled people working within the those industries on the other. Thus in the tailoring industry, Manufacturers, Merchants, Makers, Dressmakers were still classified as Class 3, whilst 'Seamstress, Presser, Cutter, Machinist, Plain Sewer' were classified as 2.5. In the boot industry, Manufacturers, Merchants and Makers were classified as 3, whilst 'Boot... Repairer, Binder, Finisher, Fitter, Clicker, Riveter, Cutter' were classified as 2.5. In the cloth making industry, Manufacturers, Merchants and Makers were classified as 3, whilst 'Cloth... Fuller, Cutter, Finisher, Packer, Presser, Sorter, Tenterer, Weaver, Cleaner' were classified as 2.5.

Figure 6 is a univariate line chart that plots the mean social rank for Jewish households inside and outside Leylands and for non-Jewish households inside Leylands, ordered from 1841 to 1891 from left to right. We see that the social class rate for Jewish inhabitants is constantly higher outside of the Leylands area than inside the area, although the rates are very close together by 1891. We also see that within the Leylands district from 1871 onwards, the Jewish households are constantly around a mean rate of 3 (marked by the dotted line). On the other hand, it is notable that throughout the six decades the Jewish mean social class remains on the whole below class 3, indicating a high rate of poverty. We also see that the difference between Jewish families inside and outside of the Leylands district narrows with time.

The social rank for non-Jews within the Leylands suggests that the Jews of the Leylands were in a higher social class than the average for the district. These results were tested statistically by taking all of the streets within the Leylands area and making t- tests of the difference

between Jewish and non-Jewish households within the same street. The results suggested that there was a significant difference between the two, but only in the latter 4 censuses, with significance ranging from $p=.0393$ in 1861 to $p<.0001$ in the 1891 census.

These findings suggest that the Jews of Leylands differed economically from other people in the area. Indeed, comparison with All England figures for social classes for the latest available census, 1881, [Lawton (1978)p. 154] suggests that on the one hand, neither the Jewish or the non-Jewish inhabitants of Leylands were in line with the average numbers of people in the upper two classes - with only around 5% of either group in the upper two classes, whilst the average for England as a whole was almost 55%. On the other hand, when considering the lower two classes, although non-Jews in Leylands were more or less in line with the average for England overall (22% and 24%, respectively), the representation of Jews in the lower two classes in Leylands was much lower, at 10%. This may be partly explained by the narrower spread of occupation types amongst the Jews and a smaller proportion of them in domestic occupations, since analysis of Jewish occupations and comparison of them with non-Jewish occupations showed that 88.9% of Jewish heads or lodgers were occupied in only 10 occupations whilst only 24% of non-Jewish heads were in those same occupations.

Further analysis was undertaken to compare new and existing Jewish streets. The result can be seen in figure 7, which suggests that the mean social rank for Jewish households in newly Jewish streets tended to be lower than for existing Jewish streets in the same census.

4. Summary and Conclusions

This paper has shown that the area of the city of Leeds known as the 'ghetto' had specific spatial characteristics that distinguished it from its surroundings. The findings showed that the district of Leylands was relatively segregated whilst close to the city centre. However, the analysis of settlement through time shows a more detailed pattern.

The first analytical section of this paper found a pattern of settlement in which the number of Jewish families and the number of Jewish streets increased with time; moreover, the findings suggested that Jewish settlement increased more in streets that already had an established Jewish presence, whilst, in later years of the settlement, more spatially segregated streets were settled in lower densities. These findings suggest an important aspect to the development of the settlement in Leeds was the intensification of Jewish occupancy in relatively integrated streets. In other words, it could be maintained that the drop in spatial integration over time was due to the spreading out of Jewish settlement into less integrated streets. Finally, settlement started to occur outside of the 'ghetto' area.

Analysis of social rank showed another time factor in the establishment of the form of Jewish settlement, due to the strong indications that social rank increased with each of the first three censuses, but from 1861 onwards there was a slow decrease to a rank of around 3. Comparison of social rank between new and existing Jewish streets within the Leylands indicated that the fall in social rank in the last three censuses could be attributed to streets that had not been settled by Jews prior to that census. This finding is notable if we consider that the increase in population in the last three censuses was concentrated in existing Jewish streets. It could be postulated that the Jews that moved into newly Jewish streets tended to be worse off and the fact that the majority of Jews moving into those streets were immigrants, sustains this theory.

Two points emerge from this paper:

First, by studying the spatial representation of the data, this paper has identified a number of patterns in the process of the creation of Jewish settlement in the Leyland district. It has demonstrated that these patterns took shape and were identifiable in the third decade from when settlement there began. The findings on the intensification process of settlement and the distribution of density help to confirm the likelihood that there is a discernible manner in which Jewish settlement, and probably immigrant settlement in general, is distributed through time, through a process of intensification followed by dispersal.

Second, analysing the social and economic characteristics of the Leylands area indicated that when comparing Jews to non-Jews within the district that most of the non-Jewish population were poorer than average, even when compared to their Jewish immigrant neighbours and that there was a relationship between spatial characteristics of their residential address and poverty.

These findings lead to the proposition that the 'ghetto' is defined by the spatialisation of class characteristics of the non-immigrant (in this case non-Jewish) community who are just as distinguishable from the general population, due to their poverty, as are the Jewish immigrants due to their 'foreignness'. This supposition is strengthened by the findings on the relationship between poverty and spatial segregation for both Jews and non-Jews, whereby the mean social class of the majority population seemed to worsen over time. This suggests a pattern of behaviour in which those who had economic and social mobility moved out, leaving behind those who did not. This is akin to Hillier's (1996), findings on the spatial segregation of housing estates 'and its consequent effects on the pattern of co-presence and co-awareness' that leads the sink estate effect (ibid, pp 210-212). Historical sources that suggest that the district was perceived as a 'slum area' even before it was settled by Jews [see for example Buckman (1983), p. 161] corroborate this, as does the fact that the Jews were never a majority in the district.

The question remains as to how economic and social mobility was and is acquired by poor immigrants and it is apparent that a key factor is strong support networks and a kin related pattern of work. Related research has suggested [see Vaughan (1999), chapters 6 and 7] that the most important characteristics of the work patterns of the Jewish inhabitants of the Leeds and Manchester 'ghettos' were that they tended to share a common occupational structure that differed from their non-Jewish neighbours. This included a pattern of out-working and small-scale workshop type work, concentrated in a small number of niche industries such as tailoring. This was coupled with a much higher degree of co-dependence, measured, for instance, by the percentage of people in a shared household having a common occupation and/or country of origin. Other research [see e.g. Drake (1994), p. 54, 93] has suggested that many immigrant groups have a social structure which possesses strong networks, even trans-national networks, and groups of this type will be drawn towards trades that can benefit from information flows, such as the mercantile trades common to the Jews of England. Other studies of the immigrant economy and the preponderance of entrepreneurship amongst recent immigrants, confirm that overseas links help strengthen this part of the economy [see Pollins (1989), p. 261]. Although it is unlikely that the poorest Jews of the 'ghetto' areas directly benefited from international links, it is highly likely that they enjoyed the support of their co-religionists - as evidenced by the high rates of co-dependence described above and the numerous Jewish charitable organisations [see Vaughan (1999), p. 87].

As Russell and Lewis note 'it will often be found that the master, in selecting his hands, gives a preference to his 'landsmann' who hailed originally from the same town in Poland.' [Russell and Lewis (1900), p. 193].

In conclusion, although this and other research points to the phenomenon of the spatially segregated 'ghetto' as being correlative with economic and social segregation [Mayne (1993) - 'The Imagined Slum'], it is possible to conclude that Jewish settlement is not just characterised by the sink estate phenomenon, which may occur in the initial period of settlement, but by an opposite phenomenon, whereby through an historical process of economic and subsequently, spatial and social integration, an immigrant group can improve its situation over time [see Waterman and Kosmin (1987a) who find].

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Notes

- [1] T-tests were made in a computer file which takes the spatial data from AxMan and identifies which are Jewish addresses; and which are Jewish addresses within the dense area.
- [2] Depth was calculated from the most globally integrated line in the entire spatial model.
- [3] The Central area of Leeds - the central business district adjacent to Leylands - was defined by the following streets: South - York/New York Street, Boar Lane; West - Park Row, City Square; East - Accommodation Road; North - Lower/Upperhead Row, Lady Lane, Quarry Hill.

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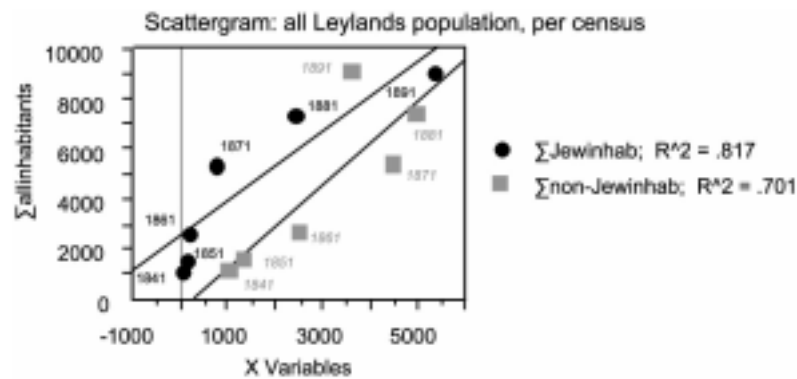


Figure 1:
scattergram of
Jewish/non-Jewish
inhabitants against
all inhabitants of
Leylands, per census

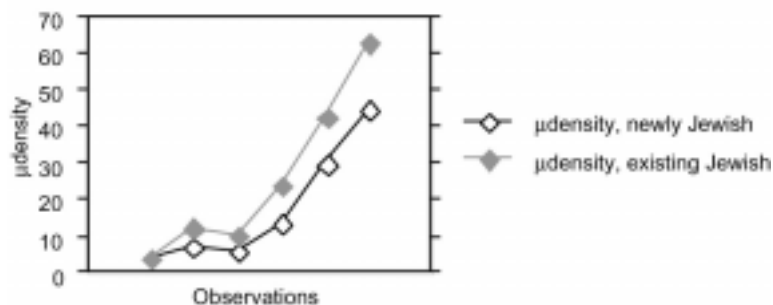


Figure 2: univariate
line chart showing
mean density for
newly Jewish
streets and existing
Jewish streets
within Leylands only.
The x-axis shows the
mean 1841 to 1891
results from left to
right; (no 1841
results for newly
Jewish)

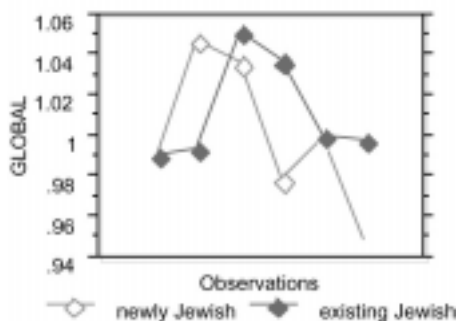


Figure 3: univariate
line chart showing
mean global
integration values
for Jewish house-
holds in Leylands.
The x-axis shows
mean 1841-1891
values from left to
right

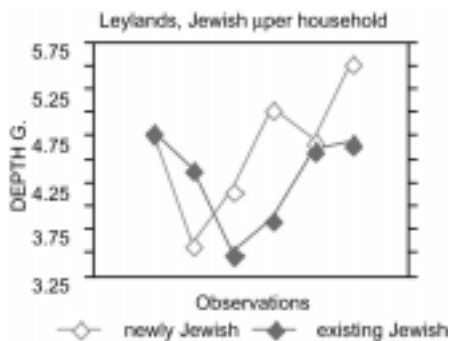


Figure 4: univariate
line chart showing
mean local integra-
tion values for
Jewish households in
Leylands. The x-axis
shows mean 1841-
1891 values from left
to right

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55.12

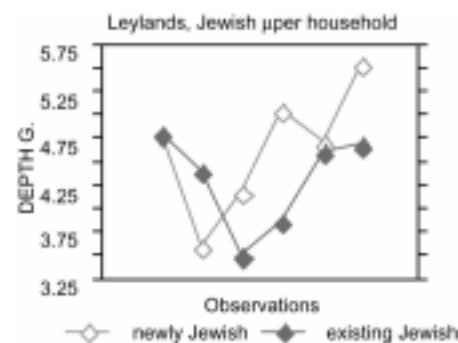
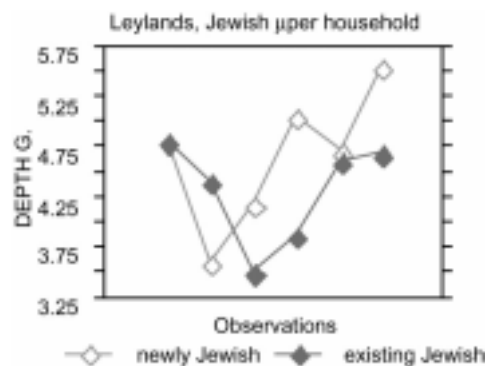


Figure 5: univariate line chart showing mean step depth from the most globally integrated street in Leeds for Jewish households in Leylands. The x-axis shows the mean 1841-1891 values from left to right

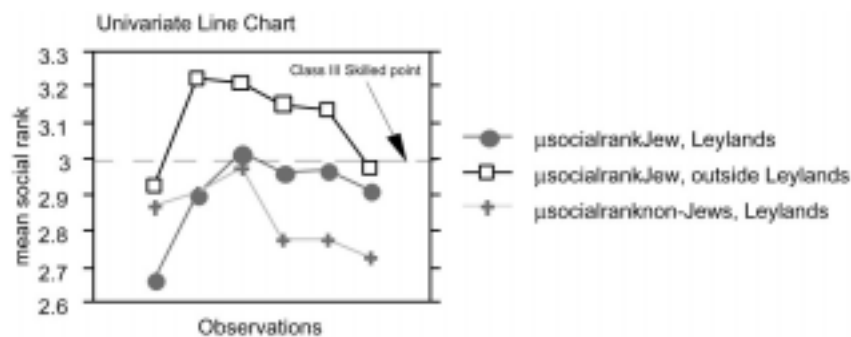


Figure 6: univariate line chart showing mean social rank in each census, for Jews in Leylands, Jews outside Leylands and for non-Jews in Leylands. The x-axis shows the mean 1841 to 1891 results from left to right

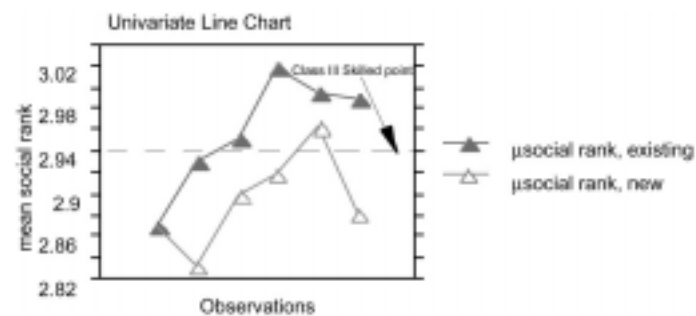


Figure 7: univariate line chart showing mean social rank per street, split between newly Jewish and existing Jewish streets within Leylands only. The x-axis shows mean values for 1841-1891

55.13



Plate 1: Global Integration

* Plate 1 Leeds c. 1881
- Global Integration



Plate 2: Local Integration

* Plate 2 Leeds c. 1881
- Local Integration

55.14

* Plate 3 Location of
Streets with Jewish
Inhabitants from
1841 to 1891

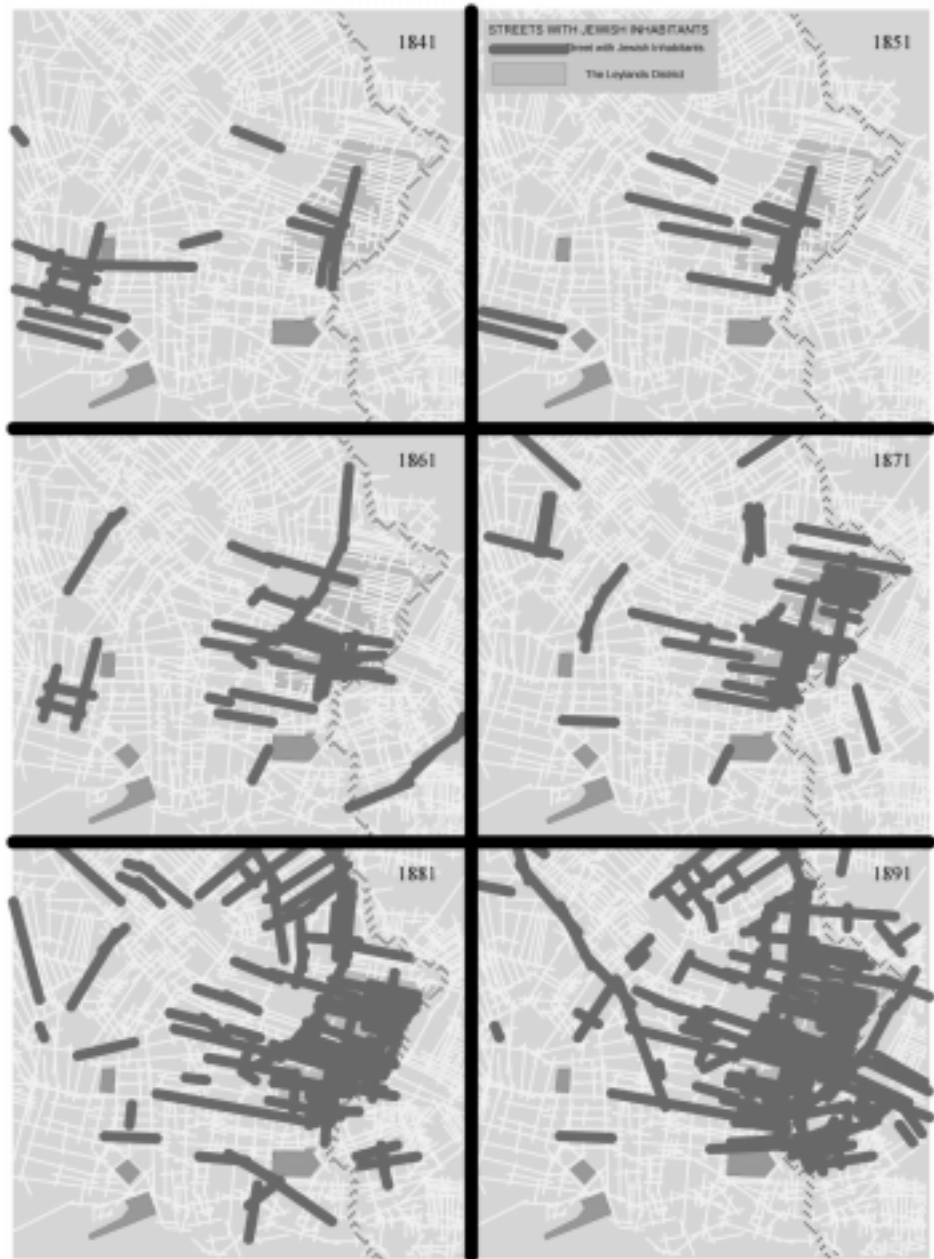


Plate 3: Location of Streets with Jewish Inhabitants Through Six Decades

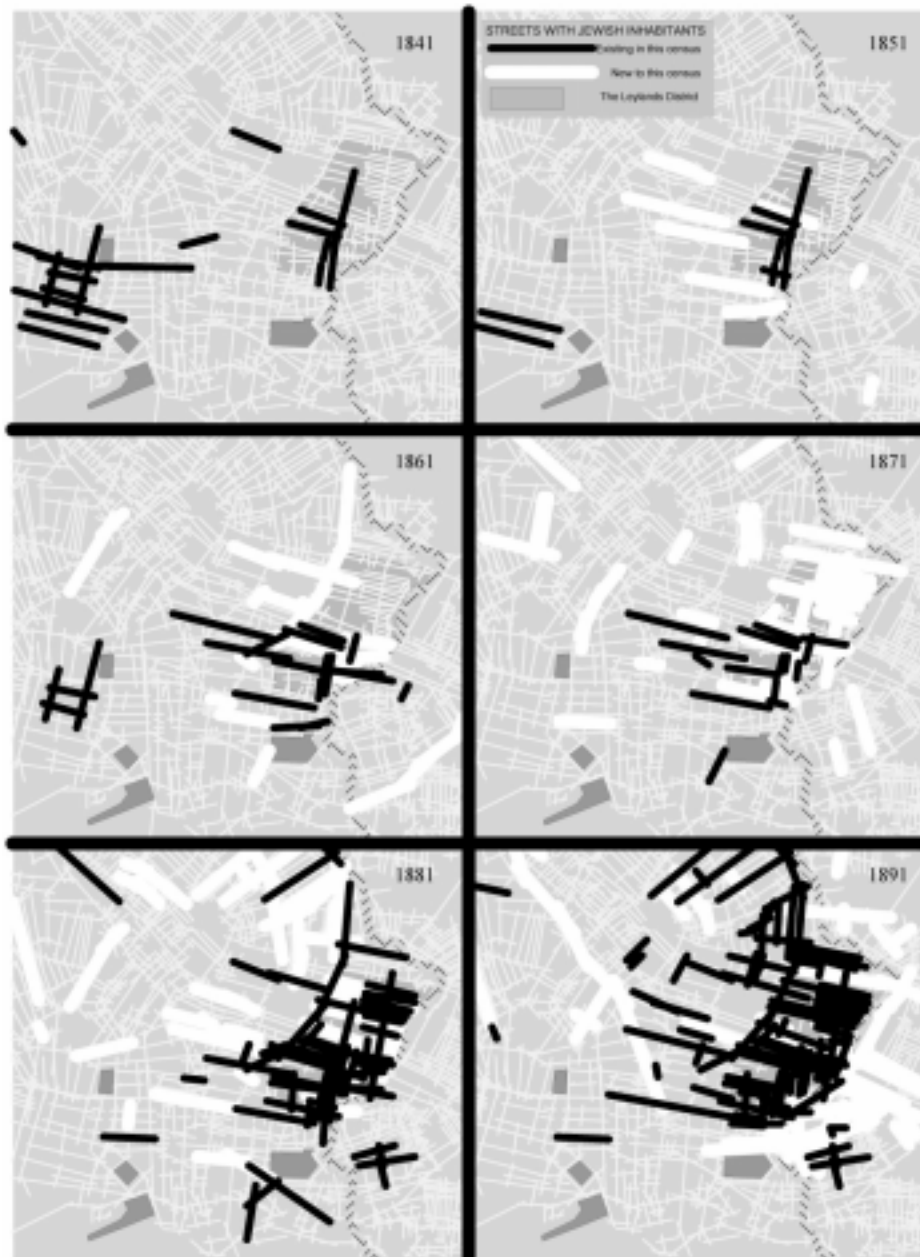


Plate 4: Location of New/Existing Streets with Jewish Inhabitants Through Six Decades

* Plate 4 Location of
New/Existing
Streets with Jewish
Inhabitants from
1841 to 1891

55.15

55.16

* Plate 5 Distribution
of Jewish to non-
Jewish Density from
1841 to 1891

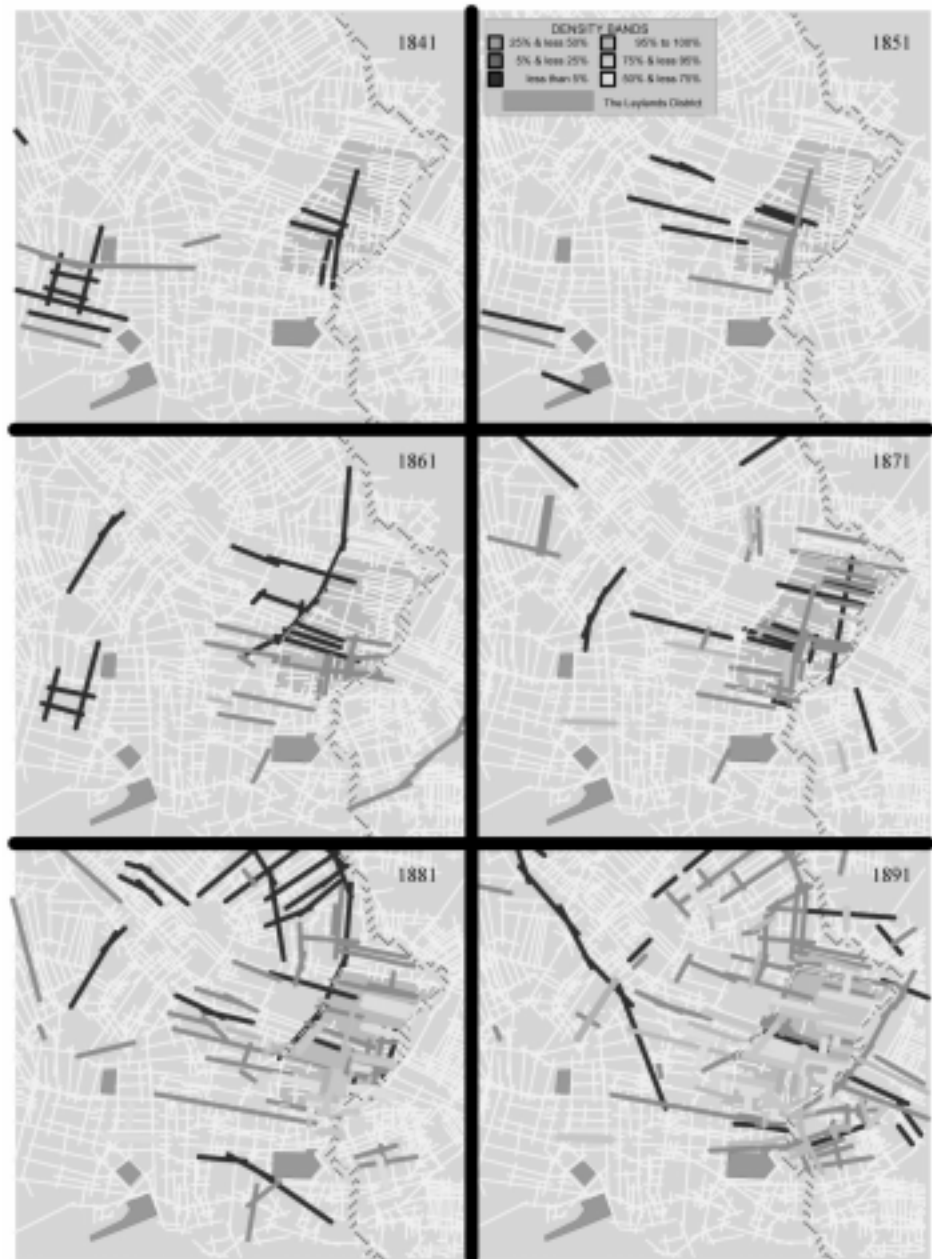


Plate 5: Distribution of Jewish to non-Jewish Density Through Six Decades