



*Poor Boy, from East End 1888 by William Fishman, 1988*

*A Study of the Spatial Characteristics of*

## *The Jews In London 1695 & 1895*

*Laura Vaughan • Thesis • September 1994*

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## **Abstract**

This paper suggests that the settlement pattern of Jews in London is in a distinct cluster, but contradicts the accepted belief about the nature of the 'ghetto'; finding that the traditional conception of the 'ghetto', as an enclosed, inward-looking immigrant quarter is incorrect in this case. It is shown that despite the fact that the Jews sometimes constituted up to 100% of the population of a street, that in general, the greater the concentration of Jews in a street, the better connected (more 'integrated') the street was into the main spatial structure of the city. It is also suggested here that the Jewish East End worked both as an internally strong structure of space, with local institutions relating to and reinforcing the local pattern of space; and also externally, with strong links tying the Jewish East End with its host society. It is proposed that this duality of internal/external links not only strengthens Jewish society but possibly contradicts accepted beliefs on the structure of immigrant societies.

## Introduction

It has been frequently noted in studies of the history of the Jews in England that they tend to settle in cohesive, well-defined geographical areas. V.D. Lipman writes that the concept of a Jewish immigrant quarter was a familiar point of public discussion in Europe and America in the late 19th century.

“A concentration of immigrants in a distinctive quarter was seen to be marked by a limitation of occupation, the retention of the customs, language and external habits of the country of origin, and by a distinctive economic, social and cultural life.”:

This paper attempts to verify whether the Jewish settlement in London constitutes a ‘ghetto’ - a cohesive well-defined spatial area. It also tries to achieve a reliable spatial description of Jewish settlement in London. The main subject of analysis is the Jewish quarter in the East End of London c. 1895. The Jewish settlement in the City of London c. 1695 is also analysed, but due to the limitation of available data on this period, this analysis is only used for comparative purposes. Although the choice of these periods was somewhat prescribed by the available data, this choice is backed by the fact that each of the dates in question represents the end of a definable era, both for the Jews and for England; 1695 being the time at which the Jews were considered to be established in English society, had achieved economic stability and had erected their first purpose-built synagogue. Whilst 1895 is the time around which the great influx of refugee immigration of Jews from eastern Europe, had established a settlement in and beyond the original ‘Jewish East End’, outside the eastern walls of the City.

Although the history of the Jews in England has been widely researched; the bibliography of this paper is a veritable tip of the iceberg of the literature and documentation available on this subject, this analysis attempts to tackle various concepts, which may contribute to a better understanding of the spatial character of the Jews in London specifically and space and society in general.

Despite the tendency of immigrant groups to integrate into society, there are cases where groups will choose, or are forced to, remain distinctive (Waterman, 1988). ‘Their concentration may result from spatial congregation or social prejudices which militate against their full integration or assimilation.’<sup>1</sup> This may be through cultural disparities or through the wish of either the host or the immigrant society that the latter remain separate.

Recent discussions on this subject seem to show a concern that a strong separation, such as through the spatial clustering of ethnic groups, will prolong the lack of integration of these groups into society and in the long run, marginalize them. Yet despite the existence of large ethnic-minority populations in 1980’s London, ‘census data reveal that over the whole of London, only a small number of areas (at the scale of the administrative wards) contain majorities of any single minority group’ (Waterman,

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<sup>1</sup> Jackson, 1981; Kantrowitz, 1981 in Waterman, 1988, 3. Note: a full bibliographical list can be found at the end of this paper

1989, 53). These findings seem to reflect the disparity between perception and reality, when relating to ethnic concentrations, suggesting that these are very localised.

By achieving an understanding of what has been the largest single immigrant group to arrive in the East End, that remained a distinct group for the longest time, yet has achieved integration into all levels of society, it is possible that a clearer model will be created of how a minority may integrate into society without losing its cultural identity. And if not an understanding of all minorities in Britain, at least those that are climbing the socio-economic ladder, such as Greek-Cypriots and East Africans<sup>2</sup>.

It is possible that contemporary attitudes towards minority groups might reject a conception that a group can be considered to be on the edge of society. For this reason, it was seen to be better to study a period from the distance of historical perspective. Another reason for ending this study with the 19th century, is the manner in which the 20th century city differs from previous periods, due to the development of modern transport which changed the face of cities and indeed the patterns of Jewish dispersal in them. The 20th century pattern of dispersal is much more difficult to measure or define as a 'cluster'<sup>3</sup> - and as stated by Carter: 'any measure of segregation is intimately related to scale and any statement about it only has validity at a defined scale' (Carter, 1983, 189).

The case of the Jews becomes, therefore, more interesting, as on the one hand they have always remained separate (yet equal, in modern times) from society; yet on the other hand, throughout history, have repeatedly established themselves as one of the most successful groups of the societies which they join. This success is reflected in social, economic and political spheres.

The decision to examine the Jewish case is of especial interest, due to the fact that despite their being in some ways in the same position as other immigrant groups, they differ in various ways. Unlike other groups which have come to Britain in the past, such as the Irish, they had no common language or religion with their host society, and unlike other groups from the British Empire, they had no common cultural tradition to fall back on or automatic right of settlement in the country. In addition to this, the Jews differ in other ways. For instance, historical research reveals that many first generation immigrant groups choose to cluster for reasons of self-support, however, history also shows, and is confirmed by economic analysis, that unlike most other immigrant groups, Jewish clustering continues beyond the first generation of immigration. This finding is of interest in the light of the Jews' distinctive cultural and social character.

The distinctiveness of Jewish society can be related to the dependence of the Jewish community on strong ties, both on the familial and on the community level. This level of ties, or interaction, is defined

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<sup>2</sup> This idea has been proposed by Waterman, *op. cit.*, 53, with reference to his own research on 20th c. Jewry.

<sup>3</sup> An interesting point regarding Jewish settlement in the 20th century is that despite the change of patterns of settlement in modern cities, and despite their ceasing to be an immigrant population, they continue to cluster. This form of clustering is not directly comparable with earlier periods (being in principle in the form of larger -ranging dispersal in city suburbs.) 20th century dispersal has been studied at some

here as spatial, due to the fact that many of these ties are distance related, requiring for instance that a Jew live within walking distance from a synagogue, *mikva* (ritual bath) etc. or the need for the spatial proximity of the extended family for the purpose of gatherings on the Sabbath and festivals (on which travel is prohibited). This subject is discussed by Russell and Lewis, who write that the children of immigrants who have passed through the educational system...

'seem often to remain in the district, out of regard to the feelings of their parents, who are perhaps dependent on them for support (ibid, 1900, 19).

They also write of the social ties that persuade Jews to remain in the area:

'...there are naturally strong inducements to remain in a district which is full of Jewish institutions. Charitable relief may there be obtained from a great variety of sources... and there is every facility for the training of their children, from the great Free School...which provides free clothing and free meals, along with an admirable elementary education...amongst other attractions must be reckoned the daily market in Wentworth Street, where commodities and prices are adapted to their demands' (ibid).

The second level of ties works on the external level, both between Jews across space, i.e. between communities around the world and between Jews and their host community. The relationship between the Jews and the external community is on many levels, but first and foremost it is the trade connection which has been the initial point of contact between the Jews and their host community. The reason that so many Jews have chosen trade as a source of income can be linked to external pressures which have restricted Jews from joining Guilds, or such occupations which require ownership of land. These restrictions have been turned by the Jews into a strength; whereby they make use of their local and trans-national ties to enlarge their markets, and whereby the Jews settle in the most urbanised areas of the country, locating themselves in such a way that they may capture passing trade.

But it is not only the trade connection which has linked the Jews in England with their host society. The Jews have realised that if they wish to become integrated into society they must attain the educational and professional recognition that brings about this acceptance.<sup>4</sup>

This paper proposes that there is a paradox in the spatial clustering of western Jewry, which projects an image of an inward-looking community - whilst historic evidence shows that the Jews have sought to, and have succeeded in, becoming integrated with their host society. It will be the main aim of this paper to discover whether there is a spatial dimension to this aspect of Jewish society and what is the form that it takes.

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length by the Department of Geography, Queen Mary College, London, by variously, Waterman, 1989, Waterman and Kosmin, 1986a, b and c, Kosmin and Waterman, 1987 b &c.

<sup>4</sup> To this end, for example, the Jews Free School, which was founded in London in the mid 19th century, served to 'Anglicise the children of the immigrants, even if it meant that their religious education was rudimentary' (Lipman, 1990, 29).

There are various theoretical ideas that need to be examined with reference to this aim. Firstly, there is the question of the spatial realisation of society - can a city structure be 'read' in order to further understanding of the society that it contains. Secondly, the question of social networks need to be addressed - in what way are the strong internal connections of Jewish life spatialised. On the other hand, the spatial dimension of the Jewish community's external networks will be examined. The concept of 'ghetto' will also be looked at.

The main theoretical background to this paper is the theory concerned with space and society developed at the Bartlett School of Architecture in the 1970s, which relates to space as a vital component of how societies work (see Hillier and Hanson, 1984). Hillier and Hanson's theory of space and society proposes that individuals belong to more than one societal group, therefore, they maintain, it is incorrect to say that space necessarily reflects society. Instead, they propose that space reflects the multiple solidarities of society, for each of which there is a different spatial realisation.

The given attitude towards society is that it is a system in which individuals belong to a variety of local networks, between which there is a correspondence, i.e. people socialise within a defined group, This is contradicted by Hillier and Hanson, who hold that there is plural membership in society, whereby an individual may belong to any number of spatial and *transpatial* communities

A transpatial community is any sort of social grouping that is not necessarily constantly spatialised, such as professional groups, political groups, etc. This type of community comes together in a spatial grouping only periodically, therefore, the spatial realisation of the community does not necessarily need to correspond with the local structure of space in which it is set.

Another aspect of current thinking on societies, is the attitude towards social groupings as being extremely localised. This leads to theories about the territoriality of society, whereby an individual is believed to seek to guard the 'territory' of his local community. Hillier and Hanson contend that this concept contradicts the notion of plural membership, and therefore believe that the city is a construct of any number of communities, whose spatial realisations may overlap and even cover wide areas.

Hillier and Hanson believe the spatial realisation of societies in cities reflects the richness of the social, economic and cultural milieu that it embodies (see Hillier, 1989). Moreover, they argue that the rules constructing society must inevitably be embedded in the very fabric of the city.

In order to test this idea, Hillier and Hanson developed a system, called 'Space Syntax', that creates an objective description of the pattern of space by quantifying, describing and analysing spatial patterns of cities and towns. By creating an objective measure of space, they are able to examine its primary properties, rather than examining space in relation to other concepts; by stripping down space to its purest qualities, they can develop to an understanding of a specific spatial pattern by correlating

its spatial variables with its measurable social quantities (such as movement rates, economic values, crime statistics and so on).

These ideas are presented in three parts. Parts A and B are based on and discuss various textual sources. Part A provides historical background and context to the question in hand, presenting material on the spatial, social and economic history of London, both from a general and from a Jewish perspective. This section is presented in chronological order so as to establish the factual background to the period 1695-1895. The two centuries in question are presented in a series of sections covering each historic sub-period, for each of which, general history, economic factors and Jewish history are presented in turn.

Part B of the paper is also based on textual sources and addresses the questions pertaining to society and space, described above. It is an interpretative review of sociological, anthropological and spatial theories relevant to the question in hand. This part is divided into three sections, each of which goes deeper into the question of society and space, culminating in a discussion of Jewish society and space.

A section presenting the system of analysis and describing the data-sets, opens Part C, which is an analytic review of the statistical data. Part C is based on various primary sources of data. In the first instance, contemporaneous maps of London have been used to analyse the pure spatial qualities of the city during each of the periods in question. By creating an objective picture of the local and global properties of space in the two periods, it was possible to create a statistical framework for assigning various economic, ethnic and social variables to the individual street unit, whereby correlations could be made from information on the street-by street level. In addition to this, by accretion of the individual street information into averages per economic or social category, a more general picture could be created.

The economic and ethnic data was provided by a second set of maps (in this case only for the 1895 period), which provided a picture of the economic classes and the distribution of ethnic bands of concentration - both for the Jewish and for the gentile population. These are Booth's Map of Poverty in London and Arkell's map of Jewish London, from Russell and Lewis, 1900. These maps were created from information collected at the time in question and drawn by people who were involved with the data collection. It should be pointed out, (as has been done in the past, see Topalov, 1993 and others) that there is a certain interpretive quality to the Booth maps, firstly in the actual definition of class division, secondly in the possible subjective assigning of families to class categories. In addition to which, and this should be noted for both maps, some of the data was extrapolated from the individual (school records) to the family level, although this information was cross-checked by Booth's team with other sources, such as landlords' rent books in the first case and synagogue records in the second. The 1695 spatial data (the map used was the Ogilby and Morgan map from 1676, updated with details from the Morgan map from 1881/2) was compared with economic data derived from the



tax assessment from 1695 and ethnic data from a study of Jewish names that appeared in the 1695 assessment records. These data sources are reasonably reliable; the data extracted from the tax assessment was counter-checked by this author in the original manuscript stored at the Guildhall in London. It should be pointed out, however, that the usefulness of these sources was limited, due to the fact that the information was on the parish, rather than the street or street segment level as with the former data-sets. The Jewish records could also be considered to be problematic, (as pointed out by their cataloguer, Arnold, 1962), due to the fact that they were based on the recognition of 'typical' Jewish names; although the Jewish names were cross-checked by Arnold in the synagogue records so this problem might be considered marginal.

The third set of data used in this section was information on the location of institutions (only for the 1895 period). This was taken from a number of sources and although generally comprehensive for major institutions, is somewhat limited with reference to minor institutions; firstly due to the lack of documentation of the smallest synagogues, and also due to the fact that information on clubs and cultural institutions was extracted from various sources, not all of which are entirely complete.

This paper ends with a summary of findings and general conclusions. Any terminology that might be unknown to the reader is explained in the footnotes of the paper, or in the text itself if considered vital to its comprehension. In addition to this, a glossary of Jewish terminology is provided in appendix D.

## **A. Historical and Economic Background to the Jews in London<sup>5</sup>**

This chapter presents a review of the historic circumstances that acted as a back-cloth to the Jews' history in London. It covers two main periods. The first period, is that leading up to 1695 (the date of the first data source) - for which a description of the causes leading to the reestablishment of the Jews in England is given. It demonstrates that the main reason the Jews were permitted entry was their position and contacts as merchants. It also describes the initial Jewish settlement in London, at the eastern edge of the City and demonstrates that the year 1695 was a time at which the community had achieved an established settlement. The second period leads up to the date 1895, the peak of immigrant settlement in the East End of London and the date around which the main set of data was collected. It describes the series of population distributions which lead to the creation of the settlement outside the City wall. The general economic background is also given - describing the occupations and other economic factors which contributed to the character of the Jewish East End.

### **I. 1492-1656**

A small community of Jews lived in Britain between 1066 and 1290, until they were expelled by Edward I. The modern-day settlement of Jews in Britain dates from 1492, time of the expulsion of the Jews from Spain. The Spanish Jews had comprised the largest and most prosperous community in Europe. Many crossed the border to Portugal, but were forced to convert to Christianity, or leave for risk of their lives. Two groups of Jews developed from the Portuguese and Spanish communities. One comprised the Sephardim, who fled from Spain and Portugal to North Africa, Italy and the Ottoman empire( including Syria and the Holy Land). This group retained the Jewish modes of prayer and religious customs. The other group was the Marranos (an originally derogatory term for converts) who continued to practise Judaism in secret. This group spread throughout the Portuguese and Spanish empires - to Europe, Central and South America and to Portuguese holdings in India. The Marranos acquired wealth and success in their host countries, but were a target for suspicion as secret Jews.

The first resettlement of Jews in Britain consisted of Marrano groups which arrived between 1492 and 1656. Many of the Marranos were merchants with connections with an international market, they settled mainly in London and Bristol. Those that settled in London comprised both merchants and physicians. They lived in the parish of St. Olave, Hart Street in the City and buried their dead in Stepney.

### **II. Background to the Pre-Industrial City**

The first period of resettlement considered in this paper covers the period preceding 1700, when London could be defined a pre-industrial city. In defining this term Carter (1983) stresses the presence of a defensive wall as a critical structuring element in the pre-industrial city. He refers to Sjoberg's *The Pre-industrial City*, 1960, which uses patterns of land-use as the factor distinguishing between the pre-industrial and the later industrial cities. The first of these distinguishing factors is "the pre-eminence of the central area [of the city] over the periphery, especially as portrayed in the distribution of social classes (Carter, 1983, 171).

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<sup>5</sup> The main source for general Jewish history in this section is Lipman, 1990, especially chapters 1-3, 1-66.

Carter (1983) defines this pattern as a distribution of the elite into the central area, often facing inwards from the street in order to maximise privacy and minimise ostentation towards the underprivileged, whilst the latter are located in the periphery and suburbs. Carter explains this distribution as being related to the need of the elite to control the power base, by having ready access to the city's 'strategic facilities' (ibid, 171).

This pattern is exemplified by a wide range of evidence presented by Carter, the most significant of which is a study by Glass and Langton which looks at the map of London prepared from 1695 data by Glass :

'Thus, three of the five largest English cities of the late seventeenth century, and Dublin, which was second to London in size in the British Isles as a whole, all displayed patterns of wealth distribution similar to those postulated by Sjoberg'<sup>6</sup>

Carter also relates to Sjoberg's second pattern of the pre-industrial city: 'The existence of certain finer spatial differences according to ethnic, occupational and family ties (Carter, 1983, 171).' The occupational distinction between classes is described by Carter (1983) by quoting a study by Viggo Hansen of the pre-industrial city in Denmark. From data on the household level of parish members plotted against the spatial aspect of the parish, Hansen concludes:.'

'it is clear that Class 1 plays a dominant role in the main street... where it occupies more than 25% of all addresses. Class 2 is more dominant in the back lane to the north of the main street, where more than 50% of the occupants belong to the artisans' class... Class 3 dominates the street running to the port, where many seamen lived, while Class 4 covers most households in the back lane...'<sup>7</sup>

Carter concludes from this that the town-suburb divide between classes is even more sharply defined than considered earlier, whereby, classes are separated at the household scale of the city, the 'finer front street-back street scale' (ibid, 174). In other words, the city centre in the pre-industrial city was not the sole preserve of the rich classes, rather their domain was separated from the other classes by the visual segregation of servants from their masters. As Carter says: 'it is a matter of scale and "visibility" ' (ibid) .

The existence of certain finer spatial differences according to ethnic, occupational and family ties seems to be found in 17th century London: the ethnic separation of the Jews according to Carter is quoted elsewhere in this paper (see Part B - background to the 'ghetto'); whilst the occupational divide is defined by Carter as the 'introduction of an aristocratic elite as against a mercantile interest' (ibid, 175). He writes that the social hierarchy clearly discerned between the merchant and aristocratic

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<sup>6</sup> Glass, D. V.: Notes on the demography of London at the end of the seventeenth century. *Daedalus* 97, 581-92., 1968, quoted by Carter, 1983, 173. D. V. Glass is also the author of *London Inhabitants Within the Walls 1695*, which is one of the main sources of data used for this paper, on the 1695 period (see part C).

<sup>7</sup> Hansen, 1976: "The pre-industrial city of Denmark. A study of two mediaeval founded market-towns", *Geografisk Tidsskrift* 75, 51-7, quoted by Carter, 1983, 173..

members of the same economic class, and that this distinction was made spatially. He quotes Reynolds, :

'At the end of the mediaeval period London had a prosperous elite, who were distinguished from their fellow citizens by wealth, municipal influence and less measurable elements of social prestige, rather than by their practice of any particular trade.'<sup>8</sup>

A study of a later period by Langton makes a more subtle distinction, where he concludes from a study of the 1665 Hearth Tax returns that...

'occupational groups were concentrated and segregated and that finer distinctions existed within broad mercantile, victualling, shipping and manufacturing quarters...It seems, then, that the core areas of the wealthier trades contained the wealthier members of those trades and, in addition, "creamed off" the wealthiest practitioners of crafts whose members were generally poorer.'<sup>9</sup>

Other studies examined by Carter cause him to conclude that the pre-industrial city was characterised by the falling-off in the significance of the city centre. 'as culture becomes private and of the home, rather than public and of the city streets, so the incentive for central residence falls away (ibid, 178).'

Due to limited mobility, the elite chooses to remain in the city rather than moving out to the country, but the centre of the city is transferred from being the ritual centre to being the preserve of a 'series of commercial sectors dominated by mercantile interests' (ibid, 178-9). Thus one finds the creation of separate sectors for trade and craft, each of which having their own market locations and trade associations. It seems likely that this description fits that of 17th century London.

The aspect of family divisions is possibly less relevant to this study, but in general, Carter states that 'there is a clear confirmation that household size and family structure were closely related to social status.' (ibid, 181).

### III. 1656-1700

The next period of Jewish resettlement is that dating from 1656, the date from which Jews were able to practise their religion openly. 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<sup>10</sup>

Immediately prior to this period, Portuguese settlement and exploitation of Brazil for trade purposes had grown rapidly. According to Samuel (in Lipman, 1961), many of these colonists were Marranos. In time they had all but conquered the market of trade between Portugal and Brazil. The subsequent

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<sup>8</sup> Reynolds, S.: An Introduction to the History of English Mediaeval Towns. Oxford., 1977, in Carter, 1983, 177.

<sup>9</sup> Langton, J.: "Residential Patterns in Pre-industrial Cities: some case studies from seventeenth century Britain". Transactions of the Institute of British Geographers 65, 1-28, in Carter, 1983, 177.

<sup>10</sup> See Samuel, in Lipman, 1961. According to Samuel, Cromwell's government approached the Portuguese Jews in Holland in 1651 in order to utilise their trading connections between Holland and Brazil and in parallel to the passing of the first Navigation Act, which served to restrict the use of foreign ships by English tradesman, and thus reduce the competitiveness of Dutch trade.

trade wars between Holland and Brazil over the Brazilian colony led to a Dutch connection to be made for the Portuguese Marrano merchants and many of these set up in Hamburg and Amsterdam where they were given freedom to practice Judaism openly. This situation created a division of loyalties in the Marrano world, with the Jews in Holland siding with the Dutch in the trade war whilst those resident in Portugal sided with the Portuguese. The Marranos that came to England at the beginning of this period were from both of these groups.

Shortly after this time a treaty was ratified between England and Portugal which gave England the right of free trade with the Portuguese colonies. The trading concessions made it worthwhile for Portuguese Marranos to settle in London and to take advantage of their connections with the Portuguese colonies.

Having settled in England, the Jews began to seek a permanent establishment in the country. The first stage towards recognition of the Jews in England was in 1655, when a Messianic rabbi, Menasseh ben Israel, who believed that the presence of Jews throughout the world was a precondition of the coming of the Messiah, petitioned Cromwell to allow the resettlement of Jews in Britain. Aside from a favourable religious climate for this notion, the readmission of the Jews was seen as favourable from an economic point of view. Although this question was brought to a vote at a conference organised by Cromwell, it was not asserted either way, due to vigorous opposition by clergy and merchants present at the conference, but still constituted a de-facto recognition of the Jews in England.

The second cause of recognition, was the situation created by a London Marrano, whose ships and cargoes had been seized as Spanish enemy merchandise. He petitioned the Lord protector on the grounds that he was not Spanish but Portuguese, and of 'the Hebrew nation'. He and his group subsequently won the right to meet privately for prayer. According to Lipman (1990, 4):

'the lack of formality in the permission was to the Jews lasting benefit. When Charles II was restored in 1660 there was no Act of the Protectorate to rescind. Even more important, whereas on the continent, Jews, if tolerated, had to conform to prescribed conditions, there was nothing of the kind in Britain and no special status'.

The first synagogue to be established in England for public worship since the expulsion in 1260 was that opened in Creechurch Lane in the City<sup>11</sup>, very close to the Bevis Marks synagogue which was to be established there some 50 years later. In parallel to this, the first Jewish cemetery was purchased in Mile End.

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<sup>11</sup> This was established, according to Hyamson, 1951, in two private houses which were redesigned for the purpose. It was called "Sha'ar Hashamayim" ['Heaven's Gate']. The houses were first in private hands, but the lease was soon transferred to the authorities of the parish of St. Katherine Creechurch; a situation 'which did not interfere with the renewal of the lease when the occasion arose.' This situation is an example of the relationship between London Jews at that time and the (local) church authorities. It also serves to strengthen the case for relating to the Jewish residence in the City on a parish basis. Another example of this relationship is again given by Hyamson who writes:

By 1664 the position of the Jewish community had been well established and the change of reign did nothing to endanger the security of its members. The community established its own organisation, the Mahamad, which was an elected committee of peers. It served as a court of arbitration and laid out the rules for safeguarding the community as a whole from 'a notoriously alien community in English environment' (Hyamson, 1951, 29). Thus, the printing of prayer books in Hebrew, Ladino or any other language was subject to permission of the Mahamad, and 'arguments on religious subjects with non-Jews and attempts at proselytization were forbidden... Lampooning, libelling or slander was denounced and subject to excommunication from the community. The Mahamad was a civil authority for the community' (ibid), but had influence on decisions made by the religious authorities.

The great plague in 1665 brought the Jews in London to their lowest ebb financially, yet from this date onwards their income grew first into the hundreds and then into the thousands of pounds.<sup>12</sup> The community at this time formed its first Hebrew school and created a charitable institution for sick-care and burials.

The ascent of James II to the throne in 1685 brought about an attempt to restrict the freedom of Jewish merchants; this was overruled by the King who awarded them with his protection. The status of Jews in the eyes of their fellow Englishmen had risen to a high level by this time, as can be seen in a pamphlet published in that year

'The Jews are a very Rich sort of People, their trade is very great, they imploy many ships &c. and should that be cut off, abundance of People, both here and in the Plantations, would feel the want of them. Moreover, the King would be much lessened in the Customs by the breaking off of their trade.'<sup>13</sup> :

This quotation suggests that it was to the King's advantage to allow the Jews to stay, due to their value, both from trade connections and from tax revenue.

The Glorious Revolution in 1688 brought about further waves of settlement of Sephardic Jews; this group came from Holland. By the end of the seventeenth century the Ashkenazi<sup>14</sup> community had grown to such an extent that it moved from the original modest synagogue to a larger, grander structure, The Great Synagogue. The Ashkenazi community also purchased (in 1696) land in Alderney Road, close to the Sephardi cemetery, for a cemetery of its own. In 1700 the Sephardi community moved into its new synagogue in Bevis Marks.

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'The friendly relations between the local church authorities and their Jewish parishioners cannot be better illustrated than by the mention that on the occasion of ... Jewish funerals the church bells were tolled.'

<sup>12</sup> According to Hyamson, the wealth of the community grew to such a degree that there were occurrences of non-Jewish foundlings being deposited at the synagogue doors, with the belief that their wealth, or possibly their reputation for charity would allow the foundlings to be taken in. (See page 36, op. cit.)

<sup>13</sup> Quoted in Lipman, 1961, 37 and from a publication by Samuel Hayne, under the title: 'AN ABSTRACT OF ALL THE STATUTES MADE CONCERNING ALIENS TRADING IN ENGLAND'.

<sup>14</sup> Ashkenazi is the name used to describe Jews who originate in Eastern and Central Europe. They differ from the Sephardim in pronunciation of Hebrew and in their form of prayer.

The Anglo-Jewish community was fully established by this date; the fifty years since re-admission had seen the movement of much of the commerce of Portugal into the hands of English merchants. As Samuel writes: 'The centres of the diamond trade moved from Goa and Amsterdam to Madras and London. The British West Indian colonies enormously expanded their trade' [- the Jews had helped to gain for England an] 'ultimate primacy in world commerce.'<sup>15</sup>

#### **IV. 1700-1858**

By 1700 the Jewish community had grown from 150 to 600. The community mainly consisted of merchants but also included army contractors and dealers in bullion and diamonds in addition to a small number of physicians.

By the end of the 18th century, the Sephardis in London numbered only 2000, despite high rates of immigration, probably due to assimilation into the general population. On the other hand, the Ashkenazi community increased much more rapidly in this period, to 20,000. The Ashkenazi Jews were, on average, much poorer than their Sephardic counterparts. This was due to the source of Ashkenazi immigration, which was poor communities in Central and Eastern Europe. In this period London expanded both eastwards and westwards - the move westwards was mostly dominated by the wealthy; on the other hand, London's spread eastwards was quite different; according to Cathcart-Borer, this was partly 'because of the manner of land tenure which enabled copyhold tenants to let on short leases, Stepney, Spitalfields...St. George in the East, Mile End and Bethnal Green filled out in a straggling, muddled way.' (Cathcart-Borer, 1977, 219) It is also in this period that the East End of London began to be occupied by the poorer classes of Jews. A contemporary account of this settlement describes it as follows:

'The east end, especially along the shores of the Thames, consists of old houses, the streets there are narrow, dark and ill-paved; inhabited by sailors and other workmen who are employed in the construction of ships and by a great part of the Jews...'<sup>16</sup>

Despite their relative freedom, in comparison with other communities, British Jews were restricted by not being permitted the freedom of the City of London, which prevented them from entering the trades there. They were also banned from landownership, from the universities and schools, from participation in civil and political affairs, and from the ordinary rights of citizenship and full naturalisation.

Between 1815 and 1858, the year in which the Jews attained full political rights, the community developed rapidly in all spheres. The growth in the community became more stable, with little or no immigration. The majority of Jews became middle-class, British born, taking to shop keeping, commerce, manufacture and in small numbers, the professions. The influence of the handful of Jews

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<sup>15</sup> Edgar R. Samuel, in Lipman, 1961, 39-40.

<sup>16</sup> Quoted by Cathcart-Borer, 1977, 219 from: J. W. Archenholtz, writing of London in 1780, in View of the British Constitution.

that had attained political and economic power, especially Rothschild and Montefiore, was used to persuade the government to bring the British emancipation of the Jews in line with that which was occurring in France and elsewhere. In 1832 the Jews were permitted to join the freemen of the City and in 1833 the first Jew was admitted to the Bar (there were many practising solicitors by then). City companies began to accept Jews as liverymen and despite the legal limitation of their political rights, Jews attained municipal office in a number of cities. By 1858 the only restriction on parliamentary office was the oath, which included the declaration 'on the true faith of a Christian'. This part was subsequently removed, which allowed Baron Lionel de Rothschild to become the first Jewish MP in 1858.

Between 1858 and 1881 the number of Jews in Britain grew from 36,000 to 60,000. The growth in numbers beyond natural increase (which was higher than that of the general population) seems to be due to immigration. The main source of immigrants to Britain in this period was increasingly from eastern Europe. The cause of this was persecution in the Russian Empire, coupled with ease of travel to the West because of the development of the railways. The direction of migration was westwards, with Britain serving either as a destination or as a point of transit to America. Many of those that arrived in Britain in passage to America, stayed. In many cases this was due to financial limitations. The immigrants settled, in the main, in Manchester, Leeds and Liverpool, due to these ports being their first point of arrival. The Jewish community in London had a much smaller rate of growth - in 1841 only 10% of London Jews were immigrants, although London continued to be a great source of attraction for immigrants seeking work.

According to Kalman (in Newman, 1981), it is possible to plot the dispersal of the Jews in London by following the opening of synagogues in the city: the first synagogue outside the City was established in 1774 in the Strand (which moved to Haymarket in 1822). Another synagogue opened in Golden Square Soho in 1815 (which moved to Maiden Lane Covent Garden), another in Hackney in 1871, whilst the Reform Movement (a branch of Judaism set up in Germany in the 19th century) established their synagogue in Upper Berkeley Street in 1840.

#### **Cemeteries in London<sup>17</sup> (numbers refer to map key)**

| <b>no.</b> | <b>Founded</b> | <b>Owner</b>  | <b>Address</b>                  |
|------------|----------------|---|---------------------------------|
| 52         | 1657           | Spanish and Portuguese Jews' Congregation           | Mile End Road, E1               |
| 43         | 1697           | The United Synagogue                                | Alderney Road, E1               |
| 51         | 1733           | Spanish and Portuguese Jews' Congregation           | Mile End Road, E1               |
| 44         | 1761           | The United Synagogue                                | Brady Street, E1                |
| 49         | 1788           | The United Synagogue                                | Lauriston Road, E9              |
| 46         | 1815           | The Western Synagogue                               | Fulham Road, SW3                |
| 48         | 1840           | West London Synagogue                               | Kingsbury Road, N1              |
| 55         | 1857           | The United Synagogue                                | Buckingham Road, E15            |
| 56         | 1873           | The United Synagogue                                | Glebe Road, NW10                |
| 50         | 1884           | Federation Burial Society and the Western Synagogue | Montagu Road, N18               |
| 47         | 1895           | West London Synagogue                               | Hoop Lane, NW11                 |
| 53         | 1896           | The United Synagogue                                | Plasht Park High St., East Ham, |

<sup>17</sup> The information about cemeteries was taken from Meller, Hugh: London Cemeteries: an illustrated guide and gazetteer; Gregg International, Surrey, England, 1985, in which Jewish cemeteries are identified as such.



|    |      |  |                   |
|----|------|--|-------------------|
| 54 | 1915 | West End Chesed V'Emeth Burial Society | Rowan Road, SW16  |
| 45 | 1919 | The United Synagogue                   | Sandford Road, E6 |

## V. Background to the Industrial City

According to Carter (1983) the most important element distinguishing the industrial city from the pre-industrial city is the growth of mobility; Although mobility needs to be considered as part of a set of secondary influences which included technological change and a general economic transformation, all of which worked together to transform the spatial form of the city.

The nature of the technological change was a transformation from small-scale craft industries with a limited, localised market, which were spread throughout a town, to large-scale factory industry. The requirements of factory industry, which include extensive and relatively cheap tracts of land, coupled with adjacency to energy resources and added to which the need for a location close to the rail or canal network, rendered some types of industry obsolete, whilst others translocated to different parts of the country.

The industrial relocation also influenced residential patterns of settlement. Due to the development of the multiple store a class of shop owners developed, which ceased to live "above the shop" thus leading to the demand for middle class housing. But the main influences were on the upper and lower classes: the first factor was that the introduction of large-scale industry tended to bring about a change of residential class in that area; whilst on the one hand a small number of managers and factory owners relocated to such areas, on the other hand, the indigenous wealthy population chose to move away from the insalubrious factory environments. The other factor noted by Carter is the clustering of working populations close to factories - he notes that the majority of the working class population continued to live close to work, in order to minimise the expense of travel.

This seems also to have been the case for the Jewish community, which is described by Russell and Lewis:

'Whitechapel is the great centre of the typically Jewish trades; and in these trades employment in the slack season is generally so uncertain, and hours of working in the busy season so long, that it is a great convenience and advantage for a man to live in the immediate neighbourhood of his work.' (Russell and Lewis, 1900, 20)

The development of transport technology had an influence on centres of production which grew from small towns into cities whilst the cities themselves suffered an explosive increase in population. Carter notes:

'Metallurgical centres, seaports, naval bases and resorts registered equivalent increases so that the description explosive is... [used] quite deliberately, for growth was of such a nature as to blow the pre-industrial city apart so that the fragments became reconstituted as the segregated city. In addition to this, the influx of populations from widely differing sources, changed the homogeneous nature of the city by introducing 'alien' elements. Ethnic areas, where immigrant populations

adapted to a new culture and way of life, became therefore distinctive sections of the industrial city.' (Carter, 1983, 188).

Another influence on the developments in transport technology was the growth in the distinction of mobility between poor and rich - the developments of the railway, trams and eventually motor-cars allowed the more affluent sections of society to escape the confines of the city and ultimately brought about the development of suburbia.

The industrial city also brought about a change in the housing market. According to Carter, the two main features of this were the severe shortage of municipal housing and the large proportion of the population who rented their accommodation. The outcome of the predominance of renting was the lack of control of the worker over his living environment; bringing about a situation which was exploited by landlords, who charged high rents. Higher rent charges forced people to take in lodgers rather than be evicted. This situation brought about in its extreme, the overcrowding and slum conditions which were a typical part of 19th century cities.

## **VI. 1858-1881**

In the mid-nineteenth century the spread of the Industrial Revolution had started to influence the established industries of London. This was especially the case with those industries that needed large space and a semi-skilled work force such as textile production, shipbuilding and engineering. However, according to Steadman Jones (1971), the finished goods industries were less affected, although they still suffered a high rate of damage. London remained a centre for finished goods, mostly due to its proximity to the market for such goods. These were clothes, shoes, jewellery, and specialised goods such as surgical tools. Home consumer items such as furniture, footwear and clothing also established an industrial base. The labour force that developed in London differed from that in the provinces in that rather than being factory-based, became based on a system of sub-division of labour. This system utilised the development of technology such as the sewing-machine, to enable manufacturers to dispense with a regular skilled labour force and to replace it with unskilled women and immigrants who could be paid subsistence wages or on a piece-work basis.

After 1870, the City began to gain importance as the financial centre of Britain's growing economic prosperity, and it began to develop specialised economic services in the fields of banking, insurance and marketing. In addition to this, London began to develop as a centre for wholesale trade, which was strengthened by the extension of the railway network which fanned out from London.

Jones writes that these developments had a significant physical impact on the city:

'The City was transformed from a residential-industrial area into a depopulated conglomeration of banks, offices, warehouses, and railway stations. Its poorer inhabitants were unceremoniously evicted to make way for this glittering imperial symbol of late Victorian capitalism.' (Jones, 1971, 152).

As mentioned earlier, London suffered in this period from its inability to compete with the growth of heavy industry, due to its distance from centres of coal and iron production, this was especially the case in the ship-building and heavy engineering industries. The growth of London as a financial centre actually contributed to this decline, by causing the costs of manufacturing overheads, such as rents, to rise.

The problem was, as Booth put it, 'that Trades leave, people stay'.<sup>18</sup> Jones (1971) states that there is considerable evidence that the poorest sections of the population were unable or unwilling to move out of London. Added to this, the influx of Jewish immigration created a large pool of casual labour that could be exploited by the sweated industries. Hall describes the Jewish sweated clothing industry in the 1880s:

'the Jewish industry in Whitechapel in those years was related to English industry in the same way as colonial industry was: it competed with the mechanical superiority of the late Victorian England in a trade where this superiority counted for relatively little, by using enormous amounts of labour at minimum cost.'<sup>19</sup>

According to Jones, the sweated industry was based on a desire to reduce overhead costs to a minimum, which had risen as a result of the growth of London as a financial centre (as mentioned above).<sup>20</sup> Complaints arose, claiming that the Jewish immigration had forced the native labour to enter this market.

According to Booth, the Jewish immigration was centred in the furniture, footwear and clothing industries. Booth's study of labour in the 1880s shows that approximately 10% of the workers in these industries were purely casual, and that a further 10% to 15% only received very irregular employment. Jones adds:

...'the development of the sweated industries offered no relief to the poverty and irregular employment upon which these trades anyway depend for their survival. The sub-division of skilled labour, the multiplication of small masters, the replacement of male by female labour, the fall in prices resulting from provincial and foreign competition, and lastly the incursions of Jewish immigrants in the 1880s both directly and indirectly enlarged the supply of labour to the casual labour market.' (Jones,, 1971, 100-1).

In addition to the sweated industries, which contained mostly immigrant Jews, there were the occupations of the established Jews of the East End who were concentrated in Spitalfields: the German Jews, for instance, both established and new immigrants, were engaged in the following variety of trades:

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<sup>18</sup> Booth, op. cit., 1st series, vol.4, 340.

<sup>19</sup> Quoted in Jones, *Outcast London*, 23 from: *Industries*, 54-5, 1971.

<sup>20</sup> A most evocative description of 'sweating' is in Booth's evidence, House of Lords Select Committee on Sweating, 1888, xx, 307; Jones, 1971, 23: 'The economy effected under the factory system by a more extensive use of machinery, and by more highly organised and regular employment, seems in London to be replaced by the detailed pressure of wholesale houses, or middle-men acting for them on masters tailors who transmit this pressure to those working under them, masters and men suffering alike from the long hours, unsanitary conditions and irregular earnings characteristic of the East End workshop.'

'bread bakers, sugar refiners, shoemakers, tailors (more of these than anything else) and dealers in clothes, furniture makers and dealers in furniture, street sellers and general dealers, small employers, shopkeepers, importers and wholesale dealers... an ambitious and industrious set [who] on the whole prosper.'<sup>21</sup>

Another aspect of economic occupations is Petticoat Lane Market, considered to be one of the most important Jewish market places in modern times. Situated in Middlesex street, on the edge of the most densely Jewish part of the East End: 'Petticoat Lane and the street markets in the adjoining streets, have always been available for traders on the basis of 'first come, first served.'<sup>22</sup> Attempts were made between 1820 and the late 1830's, to establish markets farther afield, but hostility to this move by their competitors forced the Jews back to Petticoat Lane, the only large marketing venue close to their residential area. According to Shepherd (in Newman, 1981), Petticoat Lane developed as an independent market, based on the ever developing rag-trade of the surrounding area, which freed the local inhabitants from having to fight for more expensive market places elsewhere, and made the community more self-dependent. Originally developed to support the Jewish itinerant peddlers, it became self-supporting - a focus for sightseers and for wholesale exporters. Shepherd relates that restrictions on the trading of hawkers and street salesmen forced them to move to fixed sites and to develop more attractive modes of sale, in order to attract a larger market. By the 1880's the rag-trade had moved elsewhere and Petticoat Lane market had developed as a fruit and nut wholesale market, also benefiting from the proximity of the Jewish Boards of Guardians for attracting a Jewish clientele.

In 1858 some two thirds of the Jewish population of England lived in London, the remainder lived at that time in a handful of small towns. In all cases, (according to Lipman, 1990) the Jews chose to settle in geographically defined areas. Up to 1825 London Jews had been concentrated in the City and to the area east of it with small numbers in Pall Mall, Covent Garden and Hampstead and Highgate. From 1825 onwards, the migration westwards continued, with additional groups settling in Bloomsbury, Bayswater and subsequently Hyde Park and Kensington. These groups came from the richest classes. The middle classes moved to Islington and Canonbury whilst the poorer groups moved to Dalston and Hackney. By the 1870's further settlements started to spring up in north-west London: St John's Wood and Maida Vale. Despite this, by 1881 two-thirds of the over 40,000 Jews in London still lived in and around the City, the remainder being spread out in the west, north and north-west of London. The original settlement of the Jews on the eastern side of the City of London drew later arrivals to the area, with the original community growing eastwards from this nucleus. Whilst the core was retained, there was also the above-described migration which was mainly due to added affluence, aided by the development of transportation and coupled with the desire to move away from congested and unhealthy surroundings. According to Lipman, the migration occurred in a distinctive pattern, with settlements occurring in clusters<sup>23</sup>

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<sup>21</sup> Booth: Life and Labour of the People of London, vol. 1., quoted in Fishman, 1988, 132.

<sup>22</sup> Shepherd, M.A.: "How Petticoat Lane Became a Jewish Market" 1800-1860, in Newman, 1981, 125. According to Shepherd, this point was upheld in law as recently as 1972.

<sup>23</sup> See Lipman, 1990, 15. The reasons for clustering are discussed in Part B.

In this period, the majority of Jews were concentrated in a small number of economic fields:

**Upper and middle class occupations - 1880; percentages given as proportion from total Jewish Population<sup>24</sup>**

|  |       |
|--|-------|
| Finance (merchant banking and brokers) | 10.0% |
| Professionals                          | 0.4%  |
| Manufacturing                          | 22.0% |
| Merchants                              | 21.0% |

The middle and working classes were not sharply separated in this period - 'the smaller shopkeepers and craftsmen who sold their own products were on the margin of the two classes' (Lipman, 1990, 19). This can be linked to the relatively small proportion of middle-class Jews choosing to move out to the suburbs. Lipman notes a similar situation in the early part of the 19th century, stating that the 1850 East End Jewish seemed to be socially and economically representative of the Anglo-Jewish community as a whole, forming some 50% of that community, with a mixture of well-off and poor living side by side.<sup>25</sup>

**Jewish classes breakdown 1858 and 1881; percentages given as proportion from total Jewish Population, London<sup>26</sup>**

|                             | 1858    | 1881  |
|-----------------------------|---------|-------|
| working class               | 50%     | 43.2% |
| middle class                | 50%     | 42.3% |
| upper or upper middle class | nominal | 14.6% |

In comparison with the general population, the Jews had a considerably larger proportional representation in the middle class. The apparent increase of working class population, seen in the above table, can be attributed to the large influx of immigration to England in 1881, and is counterbalanced by the growth of the numbers of Jews among the upper middle and upper classes. These measures of class are according to income - it is evident that despite a small number of Jews being counted among the British establishment, none could be said to be among the landed aristocracy and only a few financiers, merchants, manufacturers and professionals could be considered landed gentry.

According to Lipman (1990, 52-54), the trade occupations of the Jews changed in the period 1858-1881. Whilst in 1853 the majority of this class were hawkers, peddlers or street sellers, by 1880 they had developed (in parallel to the general population) to an industrial proletariat.

By the 1880's, economic depression started to exacerbate the casual-labour problem in the East End and by this time the Industrial Revolution had made its full impact on the established industries in London. Aside from printing and certain forms of precision manufacture, most of the aforementioned trades were severely hit by either industrial collapse, or what Jones refers to as 'industrial transformation', whereby small-scale production was developed from the type of goods that can utilise

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<sup>24</sup> After Lipman, 1990, 18-20.

<sup>25</sup> See Lipman, in Newman 1981, 28.

skilled labour, which was not in competition with country people, who lacked those skills. The sweated industry developed as a result of competition with country industries, which had greater space and lower overheads than their urban counterparts - and only the most desperate poor, such as the Jewish immigrants, chose to enter such industries.

## VII. 1881-1900

The final period of resettlement to be described here, came as a result of a series of pogroms in Russia, which began in the Ukraine in April 1881 and spread throughout southern Russia. In addition to this, governmental pressures began to be brought to bear on the Jews and new laws in May 1892 restricted the economic mobility of the Jews; forbidding them to settle outside the towns or urban areas or to engage in business on Sundays and Christian holidays. Further restrictions were imposed in the form of the "Pale of Settlement", an area on the western edge of the Russian Empire, established in 1771 which served to prevent the Jews of White Russia from spreading throughout the country. In addition to the same movement restrictions as elsewhere in the Empire, the Jews of the "Pale" were forbidden to move from one town to another within the region. Other restrictions were imposed on admission to the professions, high schools and universities, civil or military office, whilst a disproportionate number of Jews were conscripted to the army for unlimited periods of time.

The Russian influx was part of a general movement of mid and East-European population westwards, seeking relief from economic deprivation, for whom England constituted a station en route to America, (as was mentioned in the section on 1858-1881). The development of transport allowed for this mass movement and intensified the movement patterns that had started in the preceding decade.

According to Lipman, The immigration of this period dramatically changed the picture of the Jewish East End - whereas before, the East End held a majority of British born Jewry, after 1881, with the influx of immigration, it became 'par excellence the "area of first settlement"<sup>27</sup>. This immigrant quarter was, according to Lipman, analogous to immigrant quarters elsewhere in Britain and in America.

Despite their relative freedom, in comparison with other communities, evidence seems to show that the Jews started to create niche trades to offset their market limitations. For instance, Russell and Lewis write about specialisation among tailors:

[the Jewish tailor] 'has introduced new methods and a new type of workmanship; and it would be largely though not entirely true to say that he does not actually compete with the native industry. His work is confined to certain branches, which he may be said to monopolise. Jew and gentile... "work in water-tight compartments"' (Russell and Lewis, 1900, 67).

As mentioned earlier, by 1881 the East End population had developed into an industrial proletariat. The change in occupation since the big influx is best explained by the following table:

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<sup>26</sup> After Lipman, 18-20.

**The Jewish board of Guardians: major occupations for 1882 and 1892<sup>28</sup>**

| Trade                 | 1882         | % from total employed | 1892         | % from total employed | % change |
|-----------------------|--------------|-----------------------|--------------|-----------------------|----------|
| Tailoring             | 438          | 34%                   | 926          | 41%                   | +7       |
| Boot and Shoe         | 187          | 14%                   | 466          | 21%                   | +7       |
| Hawkers               | 257          | 20%                   | 316          | 14%                   | -6       |
| General Dealers       | 108          | 8%                    | 151          | 7%                    | -1       |
| Tobacco               | 146          | 11%                   | 146          | 7%                    | -4       |
| Glazers               | 118          | 9%                    | 75           | 3%                    | -6       |
| Woodworking           | 54           | 4%                    | 160          | 7%                    | +3       |
| <b>Total</b>          | <b>1,308</b> |                       | <b>2,240</b> |                       |          |
| <b>Total Occupied</b> | <b>1,588</b> |                       | <b>2,834</b> |                       |          |

The reasons cited by Lipman for the move into trades prior to 1881, was: ‘communal efforts to apprentice children to trades, competition from Irish immigrants and entrepreneurial initiative of individuals, who were helped by small loans from Jewish charities to set up their own businesses.’ (Lipman, 1990, 20) Having established a strong majority in various branches of trades, the immigrants of 1881 onwards were able to find employment amongst their co-religionists. This is shown by Lipman:

‘These three trades of tailoring, footwear and furniture-making were also those in which Jews already in Britain, not least those who had arrived a few years earlier, were engaged. The 1881-1914 Eastern European immigrant could therefore find employment with people of his own origin, religion and customs, or at least with whom he could speak Yiddish. Since the tailoring and footwear trades involved a number of repetitive operations - at least in the form in which they were practised in the workshops - they were relatively easy to learn for those without skills’(Lipman, 1990, 57).

If we note in the table above that the occupations with the highest increase from 1882 to 1892 are the typically ‘sweating’ trades; tailoring and boot and shoemaking, and take into account Lipman’s comments on immigrant employment, it seems possible that that the table reflects the move of immigrants from eastern Europe into these three occupations. Russell and Lewis seem to concur with this assumption when writing:

‘...the circumstances of the immigrant ‘greener’ are calculated to shut him out of the higher classes of industry. Even if he has been a skilled artisan at home, he has been accustomed to work on Russian methods; and apart from that, his ignorance of the language is sufficient to keep him out of English workshops. He therefore drifts into one of the typically foreign industries which require no special training...’ (Russell and Lewis, 1900, 61-62).

There is one other aspect to Jewish occupations, which is the tendency for Jews to become self-employed or to work for other Jews. The above quote from Lipman explains these causes, namely, a wish for independence (Booth) and (others), the limitations of the Jewish calendar (both Sabbath and Festivals), that make it preferable for a Jew to be employed by other Jews. Lipman adds to these assertions:

‘These three trades [those noted above] could be operated on a small scale in

<sup>27</sup> Lipman, in Newman, 1981, 31.

<sup>28</sup> After Booth in Fishman, 1888, 132 (footnote).

improvised premises (houses, cellars, sheds or disused buildings) by a small number of operatives. Hours could be adjusted to the exigencies of demand or of the Jewish religious calendar. They could be operated with a minimum of capital...' (Lipman, 1990, 58)

Another reason given (Russell and Lewis, 1900) is the relative ease for a Jew to find employment among other Jews because of cultural and geographical ties (the 'landsmann' theory). Booth confirms that the size of Jewish workshops tends to be small, stating that only 15 out of 900 (17%) coat-makers employ 25 or more workers, whilst 80% employ under 10 workers.<sup>29</sup>

Various sources attest to the fact that certain trades could be found in specific areas. The spatial distribution of Jewish occupations in the East London are described by Booth:

- '1. Whitechapel and Commercial Road (St. George's in the East): working class artisans, peddlers, hawkers and small shopkeepers;
2. Stepney and Bethnal Green: small shopkeepers and the better class of cabinetmakers;
3. East central London: small traders in and around Houndsditch; a large number of Jewish teachers in Goodman's Fields<sup>30</sup>

With reference to the zoning of trades, Booth raises the question of the widely disparate distribution of rent costs in London:

'The Jewish coat-making industry is practically concentrated within an area of less than one square mile... In this quarter thirty of forty thousand Jews of all nationalities and from all countries congregate, and form... a compact Jewish community. Overcrowding in all its forms, whether in the close packing of human beings within four walls, or in the filling up of every available building space with dwellings and workshops, is the distinguishing mark of the district. The percentage of persons per acre rises to 227; the highest at the East End. This would seem to entitle the Jewish community to the first place in Mr. Booth's "Tables of Poverty," if it were not that by another test of poverty - rateable value of property per person - this district compares favourably with other East End parishes. These two facts point out two leading features of East End Jewish life - the habit of excessive crowding of dwellings and workshops, and the willingness and ability to pay high rents.'<sup>31</sup>

This subject of this account is also dealt with by Jones (1971), who quotes statistics on the increase in rent costs in the East End of that time, stating that the increase in population in the East End, was almost solely the result of Jewish settlement in Whitechapel and the adjacent districts. Jones maintains that it was this factor that accounted for the enormous divergence in rent increases between the East End and the rest of the central area<sup>32</sup> The following table shows that most areas in London experienced a marked rise in rent in the 1890s, but the rise in the East End was, on average, 2.5 times that in the rest of the city:

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<sup>29</sup> See Booth, 1969, Vol. IV, 59.

<sup>30</sup> Quoted by Lipman, 1990, 52, from: British Library of Political and Economic Science, Booth papers, B.197, 8. The remaining geographical groups of London are: '4. Highbury, Canonbury and Dalston: middle-class employers, large shopkeepers, some professional men; 5. West Central (Bloomsbury): middle class: merchants, manufacturers, professional men; 6 West (Hyde Park, Kensington Gardens, Maida Vale): rich merchants, bankers, stock exchange and professional men - the less wealthy in Maida Vale; 7 South West (Belgravia): a very few, very rich merchants etc. ...: no synagogue; 8. north West (St. John's Wood): middle-class - merchants and a few professional men; 9. North West (Hampstead): as 8, except that the younger people are moving to this area. 10. West (Hammersmith) artisans, tradesmen (active and retired) and fairly well-to-do merchants; 11. South East (The Borough): artisans, small employers, and shopkeepers.'

<sup>31</sup> Booth, 1969, vol. 4, 46, Trades of East London Connected with Poverty.

<sup>32</sup> See Jones, 1971, 325.



**Rent Increases 1880-1900 (shown as percentages)<sup>33</sup>**

|                          | <b>1880</b> | <b>1885</b> | <b>1890</b> | <b>1895</b> | <b>1900</b> | <b>% increase</b> |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| <b>Northern Boroughs</b> | 89.5        | 92.1        | 91.9        | 96.5        | 100         | 11.7              |
| <b>Eastern Boroughs</b>  | 79.8        | 86.0        | 88.9        | 91.6        | 100         | 25.3              |
| <b>Southern Boroughs</b> | 90.6        | 93.5        | 93.7        | 95.4        | 100         | 10.4              |
| <b>Western Boroughs</b>  | 89.8        | 88.8        | 89.2        | 96.2        | 100         | 11.4              |

The cause of the rapid rise in rent charges is explained by Russell and Lewis (1900), who write:

'...a good deal of house property has lately changed hands, and been bought up - purely as an investment...when there is a very limited supply of house-room and a rapidly growing demand, it is hardly to be expected that rents will remain moderate' (ibid, 17).

It is also explained by Russell and Lewis how the densest parts of the Jewish East End are created in some cases by ...

'the two-storied tenement ...having been often displaced by the model dwellings, which shelter hundreds of families upon a comparatively narrow site... [the Jew] overcrowds his home, and therefore can afford to pay a higher price than that previously obtained and therefore gradually displaces the gentile population.' (ibid, 196).

The historical review established that the Jews of 1695 had attained a stable position in England: internally, having created structural stability for the community, (both figuratively and literally), by building their first purpose-built synagogue and externally: having also achieved de-facto recognition of their position in their host society, both as a recognised economic force and, to a certain degree, on a social level.

This section also highlighted the characteristics of the post-1881 community. It showed the economic background to this period which influenced the situation of the mostly poor immigrants who arrived in England at this time. It showed that economic and cultural forces led the Jews to continue to cluster in and beyond the original 'Jewish East End', east of the City of London; showing that this community was concentrated in a relatively small number of trades, most of which required their practitioners to live in the area. It also showed that the middle-class Jews remained in the area, in a proportion greater than that of their non-Jewish counterparts

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<sup>33</sup> As quoted in Jones, 1971, 325, : from Board of Trade: British and Foreign trade and Industrial Conditions, P1905, lxxxiv, 39. Jones also notes: "even the average rent increase in the Eastern Districts conceals a great difference between areas within it. In Bethnal Green, the increase was 26.9%, in Hackney 16.8% and in Stepney 33,3%."

## B - Space, Society and the Jews in London

This chapter is divided into three sections. The first deals with general concepts of space and society, presenting the various schools of thought. It also explains the main principles of the theory of space and society developed at the Unit for Architectural Studies, at the Bartlett School of Architecture, which form the background to the third, analytic, chapter of this paper. The second section deals with the question of the Ghetto as a historical concept and describes its development in modern times. The third section deals with the social solidarities of Jewish life, describing their contribution to the formation of spatial clusters.

### I. The Spatial Nature of Societies

Until recent times, there was little discussion of the relationship between space and society; the forerunners of the idea to relate spatial structure to societies were Durkheim and Mauss, who 'called to attention for the first time to the variable properties of space which should be considered in order to understand properly the structure of several primitive societies.'<sup>34</sup> However, their studies did not take them beyond primitive societies. Other theorists have taken up this idea and Giddens, for one, has pointed out the importance of spatial patterns in the study of society, asserting that one of the key identifying elements of society is 'the clustering of societal institutions' in space (Giddens, 1993, 164).

Hillier and Hanson agree with the conception of society as a spatial entity, but instead of viewing society as a cohesive whole, as does Giddens, view it as a composition of spatio-temporal individuals. In *The Social Logic of Space* (1990) they state that human societies are spatial phenomena. They write that societies are spatialised through mutual encounters and exchange of information. Hillier and Hanson also state that society arranges space through the physical means that mark the boundaries of the society, thus creating a definite pattern. They write:

'spatial order is one of the most striking means by which we recognise the existence of the cultural differences between one social formation and another, that is, differences in the ways in which members of those societies live out and reproduce their social existence.' (Hillier and Hanson, 1990, 27).

However, along with Hillier and Hanson, various other theorists have also pointed out that it is not always necessary that spatial configurations mirror the organisation of the society which they contain. Lévi-Strauss, for example writes that ...

'among numerous peoples it would be extremely difficult to discover any such relation [between space and society] among others the existence of a relation is evident, though unclear, and in a third group spatial configuration seems to be almost a projective representation of the social structure.' (Lévi-Strauss, 1972, 292).

Further on in the above quoted passage from Giddens, he points out that some societies are likely not to be mirrored in space: 'The locales occupied by societies are not necessarily fixed areas . Nomadic societies roam across time-space paths of varying types'.

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<sup>34</sup> Lévi-Strauss (1953) 1967, 282-85, in: Hillier and Penn: "Visible Colleges: Structure and Randomness in the Place of Discovery", *Science in Context* 4, 1 (1991), pp 23-49.

Lévi-Strauss, having continued the Durkheimian concept further has conceived of a major distinction between types of societies, dividing them into two types, the mechanical and the statistical:

‘A “mechanical model” is a model the elements of which are on the same scale as the phenomena; when the elements of the model are on a different scale, we shall be dealing with a “statistical model.” (Lévi-Strauss, 1972, 83)

He illustrates this with the example of primitive societies, in which marriage is bound by a set of rules pertaining to the kin or clan groupings, whilst in modern societies the rules binding marriage are related to social fluidity. Because modern society determines the rules by thresholds of average values, it is considered a statistical model, i.e. one which infers rules from phenomena, rather than the primitive model, in which the rules of the model are at the same scale as the phenomena themselves.

This attitude towards society as a ‘projection’ of mental processes has been criticised by Hillier and Penn (ibid, 1991, 24), who state that this analysis by Lévi-Strauss incorrectly assumes a direct relationship between structure and space; finding that most modern urban societies lacks a strict correspondence of this sort. Hillier and Hanson’s (1990) study of this subject, compares the varying degree of spatial form of societies, contrasting between geographically proximate Ghanaian villages . By analysing the degree of rules structuring each of the societies, they first conclude that neither geographical proximity or building technology are deterministic in creating the spatial forms of society. Their second conclusion is that the degree of ‘investment’ in the physical patterning of space varies widely from one society to another; moreover, the form of the patterning can range from the informal and ‘organic’ to the global and ‘geometric’. From this they conclude that this wide range of spatial variables must be, rather than a result of a causal relationship, between society and space, a “system of transformation”, of the rules of society into space through rules that restrict the random processes of spatial design (ibid, 4-5).

As described in the introduction, these concepts lead Hillier and Hanson to conceive of a computer system that can capture the most basic describable elements of space in order to discover the underlying rules which create the apparent ‘randomness’ of urban space.<sup>35</sup> The system has been applied for describing and analysing patterns of space, creating an objective system of describing social environments by simulating the urban environment on the computer, from which comparisons with social phenomena can be made. This is done, as explained in the introduction, by representing the pattern of space as a set of the fewest and longest set of ‘axial lines’. The principle lying behind the axial line representation is that movement is mainly related to the one and two dimensional extensions of space. Indeed, axially is considered ‘the most fundamental of all the necessary properties of architectural space, since it is the one that does most to create the most important aspect of our awareness of architecture’<sup>36</sup> Axial line break-up allows for the local space unit (usually

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<sup>35</sup> This system, called ‘Space Syntax’ is explained in full in the opening section of Part C of this paper.

<sup>36</sup> Hillier, Bill: “The Axis as Symbol and as Instrument”, 1.

called a 'convex' space, i.e., one from which all other points are visible) to be fully represented, by ensuring that all the axial lines drawn, pass through all the convex spaces in the system. More importantly, the global extension of space is ensured representation, by drawing the longest lines of sight possible - 'It is because axiality creates the basic patterns of traversal of a system of space that it is the primary means by which we become aware of the diffused complexity of architectural space.'<sup>37</sup>

The axial lines are analysed by computer, whereby the lines which are most accessible for all other lines are considered 'integrated' and those that are least accessible are considered 'segregated'. Research using Hillier and Hanson's system 'Space Syntax' has led to the theory that local and global *integration* are one of the fundamental properties of space. According to their theory, 'Towns give priority to certain spaces: the main square or common High Street will tend to be shallower and thus more generally accessible (i.e. highly integrated) than more secluded, deeper, quiet areas (segregated). Major commercial and public facilities will be within easy reach of other parts of town.'<sup>38</sup> Space Syntax studies have suggested that global integration relates to the spatial properties of the spatial system as a whole. Local integration relates to the spatial properties of space up to three steps away. An integral part of this theory is the proposal that movement patterns in cities are related to the integration values; with, in general, pedestrian movement being correlated with local values, and vehicular movement with global values.

Certain studies have also noted a phenomenon known as 'sub-areas', whereby certain sections of the urban area tend to have a different pattern of correlation between integration and movement.<sup>39</sup> It has been found that this phenomenon occurs especially frequently in geographically 'named' areas, such as the City of London or Covent Garden. These occurrences have been attributed to the 'differential distribution of built forms' such as the presence of tall buildings or the 'distinctively regional character' of an area.

Another development of their study of society and space has lead Hillier and Hanson to study the concept of 'community'. Past urban theorists have related to urban space as a series of small communities which have been built up from the original villages from which the city sprung. This has led to the concept of 'localism', a view whereby urban space is seen as a series of small blocks - which has led to the avocation of a return to the traditional street culture (Leon and Rob Krier, 1978, 1984; Frampton, 1980), leading to a fragmented, 'local quarter' theme in urban design.

In contrast with this, Hillier and Hanson propose that the 'sense of place' which is celebrated by the admirers of old cities, is due to the sense of openness created by a street system which is constructed by an 'intelligible' system. By 'intelligible', they mean that the spaces of the local system, the most supposedly private sections of the neighbourhood, are consistently related by lines of sight and access to the larger scale space structure.<sup>40</sup> The concept of 'intelligibility' is paramount to the Hillier

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<sup>37</sup> Hillier, Bill, *ibid.* 1.38 Hillier, et al: "Space Syntax", 1983, 54.

<sup>39</sup> See for instance: Hillier, Bill, et al: "Natural Movement", 1992, 28.

<sup>40</sup> See Hillier et al: "Against Enclosure", 1988, 63-88.

and Hanson theory of urban spatial organisation. An intelligible street system means that users can distinguish between the larger pattern of space and the local system.

The local quarter theme has been developed by Oscar Newman, into the idea of 'enclosure'. In his theory of 'defensible space' (1972), which has also been adopted by others (Alexander, 1977, Lynch, 1981), he proposes that people divide themselves between inhabitants and strangers, naturally policing their local surroundings by recognising who is a stranger. This theory is based on the idea that man is territorial by nature, and naturally seeks to guard his own territory. By segmenting urban domestic space into enclosures (in other words, courtyards surrounded by buildings), Newman believes that the territorial aspect will strengthen through the individual's greater identification with a specific locale. This will lead, he suggests, to the creation of 'local communities', whose internal identity will be strengthened and whose sense of security will improve. These conceptions have in common the idea that space is directly linked to society and that an individual defines himself according to membership in a local community, believing that there is a correspondence between the various networks of work, play and family to which an individual belongs.

According to Hillier and Hanson, it is the fact that traditional cities had a mix of inhabitant and stranger populations on the 'deformed grid' streets, that created the village atmosphere. In "Space Syntax", they propose that the presence of strangers is crucial in creating an awareness of others and naturally policing space. The empirical research conducted by the Unit for Architectural Studies has led them to conclude that 'strangers police space and inhabitants police strangers, thus generating "automatic" control in an area without the use of... electronic supervision or... locking strangers out.' In a deformed grid, as compared to an orthogonal grid where the sightlines are of equal length, the length of sightlines from particular spaces is sometimes restricted and sometimes extended. (Hillier et al, 1983, 52). They contend that this mix of populations is best created by the 'intelligible' street system, which takes 'strangers through into the heart of the town, while ensuring that the natural movement of inhabitants to, from and between the more segregated zones within the towns continually intersects the spaces used by strangers' (Hillier et al, 1988, 70).

It might be argued that this conception of inhabitants and strangers contradicts theorists, such as Bourdieu, who have proposed that there is added strength given to a community if it is found to be spatially cohesive. Bourdieu has postulated that strong ties between family and neighbours, maintained by close proximity, create integration of a social group - proximity is likely to generate encounters, i.e., make them more probable whilst distance is likely to do the reverse:

'...unity of residence contributes to the integration of the group... the constants for a network of relationships... comprises not only the total of the genealogical relationships kept in working order... but also the sum total of the non-genealogical relationships which can be mobilised for the ordinary needs of existence.' (Bourdieu, 1979, 38).

Hillier and Hanson agree that space is probabilistic in generating contact, but maintain that a unified local neighbourhood (such as modern housing estates) creates over-proximity; whereby the lack of

the presence of strangers also leads to the lack of anonymity. They contend that the 'traditional' local neighbourhood was made up of inhabitants and strangers, who mixed on the streets, whilst the modern housing estate contains only inhabitants. They find that the spatial characteristics of a unified local neighbourhood, i.e. one that excludes strangers, are a structure in which the local street system does not correspond with the global. This means that the streets of the local system are far less likely to contain strangers. Moreover, the pedestrianisation of many housing estates leads to the deepening of the distance and changes of direction from the private house into the surrounding street structure, creating yet more alienation. In contrast with this, Hillier and Hanson define the main characteristic of 'traditional' cities (specifically with reference to the city of London) as being *marginal separation - linear integration* (or sometimes the 'two-step logic'). They maintain that the principle that governs the design of London is that the local structure is only a few steps away from the main linear integrators, thus the inhabitant/stranger relationship is maintained, creating two sets of encounters, one at the large scale of the city and another at the level of the more local areas. Moreover, this system of space organisation, is the 'general means of providing larger scale intelligibility and spatial orientation in an otherwise rather freely growing system... it is the means of linking the local to the global and achieving that compression of scales - the sense of being in a locally identifiable place and part of a much larger global system, at one and the same time...' (Hillier et al, 1992, 35).

The relationship between encounters and low movement rates is explained in the following passage:

'Whatever the fate of this explanatory hypothesis, one thing seems already to be sure: that architecture determines to a substantial extent the degree to which we become automatically aware of others, both those who live near and strangers, as a result of living out everyday life in space. The differences between one system and another are substantial, and appear to correlate with ordinary verbal accounts of isolation and alienation, which are often vaguely said to be the products of architecture....' (Hillier and Hanson, 1990, 25-26).

The above-mentioned theory of territoriality, makes a direct link between space and society; according to this theory, people recognise the limits of their territory and seek to guard it from incursions. Other theorists contradict this view, stating that social organisation exists independently of space. For instance, Webber proposes that certain types of individuals are members of non-spatialised communities, he writes that scientific researchers might...

'work in the same town or indeed in the same neighbourhood within the same town. But the spaces over which their important interactions take place extend from the world to the neighbourhood, depending upon the specialisation level of the information being communicated...

In his role as a member of a world-wide community of virus researchers, *the scientist is not a member of his place community at all...* he may be in contact with colleagues in his laboratory who are also active participants in the world-wide community and who comprise a subgroup within that larger community... thus the scientists and they, in turn are simultaneously members of other interest-communities.' (Webber, 1964, 113).

Hillier and Hanson contradict both the concept of territoriality, and Webber's concept of non-spatial correspondence; proposing that members of a society can belong to both spatial, (or local) and transpatial groups (i.e. groups which are independent of space). They propose that the above

hypothesised scientist would belong, not only to a transpatial society of scientists, who come together only at conventions and meetings, but would also be a member of his 'place community' - through family ties, which would constitute local community membership, in addition to other probable spatialised relationships, such as membership in the local church.

Another way in which Hillier and Hanson differ from Webber is the fact that the latter envisions the transpatial society as a non-spatial entity, whilst Hillier and Hanson contend that the transpatial society must always have a spatial realisation, otherwise it can never be reinforced by direct communication. 'Thus clans have ceremonies, trades have congresses and academic disciplines have conferences.' (Hillier, 1989, 17).

Hillier and Hanson view the essential difference between spatial and transpatial societies in the fact that in the latter, integration is unarranged, whilst in the former, local integration is of an arranged (or spatialised) nature. In this way, groups which are bound in a transpatial society, will have elements in common with their transpatial group, as well as with their local, spatial group.

It is argued by Hillier and Hanson in "The Architecture of Community" that it is the combination of an urban individual's plural memberships, for each of which a different set of spatial principles is used, and each of which is concurrently realised in space, which creates the form of the city. This paper raises the question of what is the relation between a society and the structure of its environment when the society is both of a spatial and a transpatial nature. This question is addressed by Hillier and Hanson, who propose that transpatial groups are bound by a categorical set of rules, in contrast to spatial groups, which are bound by rules pertaining to proximate space. Although, 'all transpatial groupings have, at some time or other, a spatial realisation whether it is a ceremony, congress or conference,' (Hillier, 1989, 17) according to Hillier and Hanson the transpatial society is:

'an entity identified ... that is conspicuously not characterised by existing in a single, more or less unified region of space. On the contrary, what is summarised is a collection of entities without regard for their location... The introduction of categories into the discrete system and its spatial realisation is not therefore simply the introduction of non-spatial elements, but the introduction of specifically transpatial elements. It means in effect the introduction of elements and relations into the system whose reference points are not simply within the system in question, but outside it in other comparable systems across space.' (Hillier and Hanson, 1990, 40).

In other words, a society that is basically transpatial, will retain some of the structure of its specifically transpatial elements even when it takes the form of a spatial society.

Hillier and Hanson maintain that society is a discrete system, a system which is made up of elements which are fully separated, mobile individuals. these individuals are themselves organisms, but do not in any parallel sense compose a conjoint organism' Giddens concurs with this notion, as mentioned above, when he defines a society as a 'clustering of institutions across time and space'; in other words neither society, or its representative institutions, are necessarily space dependent. He goes on to state that there is no necessity that there be...:

‘an association between the social system and a specific locale or territory. The locales occupied by societies are not necessarily fixed areas.... [one finds a] prevalence, among the members of the society, of feelings that they have some sort of common identity, however that might be expressed or revealed.’ (Giddens, 1984, 164).

In “The Architecture of the Urban Object” (1989), Bill Hillier describes the institutions of the City of London, dividing them into two groups: those that belong to transpatial groups, such as Guilds and those that belong to spatial groups, such as parish churches. He finds that churches are built into the urban fabric, rather than taking prominent positions in space. Despite this, they are located on major axes of movement, in such a way that their presence is always felt, despite their being partially concealed. On the other hand, Guild halls are located in much more discreet locations, they tend to be separated from public space by narrow passages; they are almost in the private realm. This difference exemplifies the element distinguishing between transpatial and spatial societies - the parish churches relate to their immediate surroundings, which contain the spatial society to which they belong; the Guild buildings belong to a transpatial group which is not directly related to space, therefore they do not need to relate to the city space which surrounds them.

The above-mentioned concepts of local and global *integration* are one of the fundamental properties used by Hillier and Hanson in measuring space.<sup>41</sup> According to their theory, ‘Towns give priority to certain spaces: the main square or common High Street will tend to be shallower and thus more generally accessible (i.e. highly integrated) than more secluded, deeper, quiet areas (segregated). Major commercial and public facilities will be within easy reach of other parts of town.’ (op. cit., 1983). Global integration relates to the spatial properties of space as they relate to the spatial system as a whole. Local integration relates to the spatial properties of space up to three steps away.

## II. Background to the ‘Ghetto’

### 1. The Concept of ‘Ghetto’

Since the original Jewish ghettos were enclosures, which had some element of compulsion, ‘the most important feature that distinguishes the [Jewish] communities of the West from those of the East is their voluntary character’ (Wirth, 1969, 128).

The Jews in England and elsewhere in the West have had few cases in which they are enclosed from without and their seclusion from within has been more of a symbolic than a physical nature. Despite this, the term *ghetto* is still commonly applied to the various forms of settlement by Jews in the West<sup>42</sup>

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<sup>41</sup> The technical aspects of these measures are explained in the first section of Part C of this paper.

<sup>42</sup> See also the definition of ghetto in the Concise Oxford Dictionary, 1975: “Jews’ quarter in city” and *Webster’s Pocket Dictionary*, 1975, U.S.A.: ‘Jewish quarter in a city’. If we also look at *Roget’s Thesaurus*, Watson and Viney, Great Britain, 1977 we find the only synonym given for ‘ghetto’ in the index (518) is ‘seclusion’. Underneath ‘seclusion’ (883-884), we find that ‘ghetto’ is considered synonymous with: ‘exclusion; reserve, reservation, native quarter.’



, although these have nothing in common, aside from them being Jewish clusters of settlement, with the original ghettos set up in Europe.

It is evident that the term 'ghetto' is frequently used to describe Jewish settlement in England - although it is unclear whether the term still holds the original meaning of enclosure, or whether in some cases it has come to mean the more benign: 'Jews quarter in a city'. The term features in many of the key texts used for this paper; and seems to have a different meaning in each case. For instance in Lipman (1990) the author specifically avoids using the term 'ghetto': 'because historically this term, taken from the precedent of Venice, implies an area in which Jews were compelled to live. In the Jewish quarter of modern great cities they lived without governmental compulsion' (ibid, 63, note 32). Yet an earlier text by Lipman (from 1984) contradicts this statement, contending that the post 1881 settlement was 'a classic example of an area of first settlement or "immigrant ghetto"<sup>43</sup>

Wirth in *The Ghetto* (originally published in 1927), uses the term in the text as well as in the title, yet makes a clear distinction between the European ghetto and its western variety; from this it is possible to conclude that he believes that the term 'ghetto' has lost some of its original meaning. Zangwill (in 1892), like Lipman above, also applied the term 'ghetto' to London's Jewish quarter in the late nineteenth century. The following quote demonstrates the prevalent attitude at the time, that the people of the East End were still fighting to survive in a 'ghetto', struggling to be released from the worst aspects of 'ghetto' life,:

'this London Ghetto of ours is a region where, amid uncleanness and squalor, the rose of romance blows yet a little longer in the raw air of English reality... Their faults are bred of its hovering miasma of persecution, their virtues have won their way beyond its boundaries must still play their part in tragedies and comedies - tragedies of spiritual struggle. (Israel Zangwill, *The Children of the Ghetto*, (London, 1892) 'Proem' 1., in Fishman, 1888, 176.)

Russell (1900) also notes the struggle inherent in ghetto life, a struggle which has been imported, according to him, by the immigrants to their new surroundings, but points to the possibility that the English ghetto will differ from its predecessors, and 'improve', due to the outside influences of modern society and western thought. Whether this will be a change in the degree of religious observance or simply a process of acculturation, due to the efforts of education being made in the area, is stated as being unclear. This predicted development is set in contrast to the old style ghetto: 'Judaism owes its strength and persistence, as well as its narrowness and impenetrability, to the stress of persecution.' (ibid, 94-95). It seems evident that Russell also believes that if this move is not made and the immigrants stay within the physical confines of the ghetto, 'independent and unabsorbed', they will be as 'a state within a state' (ibid, 9). It seems possible that Russell views the Jewish East End as confined as its European counterparts.

## 2. The Causes of Clustering

As mentioned in the previous section, some sources maintain that the original European ghetto was an enforced enclosure; the first Jewish quarter to be named “ghetto”, was that set up in Venice in the 16th century. In that period, writes Wirth:

‘the Jews became subject to harsh, legalised conditions which institutionalised the ghetto. The origin of the word seems... [to date]... from the relations between the Jews and the Venetian state at the beginning of the sixteenth century. Venice was prepared to tolerate the Jews in return for the financial advantages they brought through taxation, but constant friction and periodical attacks followed and the solution seemed to be in a designated and protected area, [the Ghetto Nuovo]...’

‘The degree of segregation varied considerably and in many cities the Jewish presence was too limited to provide distinctive areas. In British cities the concentration is sometimes preserved in the word ‘Jewry’, as in the Old Jewry in the City of London.<sup>44</sup> In Europe, however, the areas were larger and more clearly marked...’ (Carter, 1983, 180).

Other sources maintain that the segregation of Jews has never been simply a case of exclusion, but more a combination of causes, among which is the voluntary clustering of Jews in a certain area. It seems that the establishment of such clusters, whose causes will be detailed further on, was exploited by the powers in charge, to further their own wishes; be they protection of the Jews from without, segregation of the Jews from the rest of the population (in order to limit cross-marriage), or simply for the ease of taxation. For instance Wirth writes:

‘The segregation of the Jews into separate local areas in the mediaeval cities did not originate with any formal edict of church or state. The ghetto was not, as sometimes mistakenly is believed, the arbitrary creation of the authorities, designed to deal with an alien people. The ghetto was not the product of design, but rather the unwitting crystallisation of needs and practices rooted in the customs and heritages, religious and secular, of the Jews themselves. Long before it was made compulsory the Jews lived in separate parts of to cities in the Western lands, of their own accord.’ (Wirth, 1969, 18)

In England, where political restrictions weren’t applied, the Jews still clustered - but this has never been, since modern times, the result of an outside imposition, but more the outcome of internal constraints. Neither has the clustering been caused solely by the natural inclination of immigrant communities to concentrate in an area for mutual economic and social support; in addition to these lie the social and cultural reasons which are specific to the Jews.<sup>45</sup>

According to Kalman, the most significant cause of clustering of the Jews in England has been religious restrictions:

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<sup>43</sup> Lipman in Newman, 1981, 40.

<sup>44</sup> This enclave dates from mediaeval times, and has no geographical connection with the settlement in London after 1654.

<sup>45</sup> It is interesting to note that despite the fact that the Jews of England never suffered enforced enclosure within a ghetto, even the exit from a voluntary ghetto can be traumatic : ‘... I was just at that stage which comes in the intellectual development of every Jew, I suppose, when he emerges from the ghetto, both social and intellectual, in which he was brought he finds the world outside pursuing a course quite

'Quite apart from the natural desire of any minority group to seek the protection against a possibly hostile host majority by that minority living closely together, there are the additional requirements of Jewish religious practice and regulation which makes it necessary for us to live near to each other in ways which do not apply to any other minority groups. Wherever we settle we soon arrange to comply with the requirement for a group of ten men to pray together. This inevitably, and usually very quickly, leads to the formal establishment of a recognised place of prayer, whether a room in a house or an ornate building. This inevitably, and often simultaneously, leads to a centre for religious study and tuition, and a place for the ritually correct slaughter of acceptable animals for food. The additional Orthodox prohibition against riding to synagogue on the Sabbath and Holydays means that communities of Jews will spring up within easy walking distance of these places of worship. This pattern is unchanging over the centuries and enables us to define with accuracy where Jews, or where the majority of Jews, have decided to settle.'<sup>46</sup>

Carter seems to agree with Kalman's belief regarding the contribution of religious restrictions to the formation of Jewish enclaves:

'The segregation of the Jews [in the preindustrial city] can in part be considered not a result of external pressure but due to needs arising from their own religious customs, particularly their own ways of preparing food, the demands of attendance at a synagogue and the need to take part in the various aspects of communal life...' (Carter, 1983, 180.)

Other causes of clustering cited by Russell and Lewis (1900) are exclusion caused by prejudice, which kept late 19th century Wapping, for instance, free of Jews. They also cite other types of exclusion, in this case, caused by blocks owned by large companies, being retained for the use of their own employees. Or the preference of some gentile landlords to not rent to Jews<sup>47</sup> Other reasons have been given for clustering; for instance, Wirth cites the commonest reason for the location of the Jewish, and other immigrant quarters on the edge of the central business district, as being that in the late nineteenth century unskilled employment was still generally concentrated in that area. Immigrants, especially when hired casually, need to live as near sources of employment as possible. It should be noted that several sources mentioned in the historical chapter concur with this theory. For instance, Fishman writes:

'Why the concentration here [in the western part of the East End]? The existence of wholesalers in the eastern borders of the City and the availability of plentiful cheap labour were the positive determinants. In the East End was found the reversal of current industrial trends where cheap manual labour could substitute for capital equipment. Workers in dying industries, such as the silk weavers of Bethnal Green, could feed quickly into local tailoring... In addition a captive market of cheap female labour, notably women engaged in outwork, lessened overhead costs for the employer. (Fishman, 1988, 61).

Contemporary accounts also give a similar picture:

'A further cause of the permanent congestion of the Jewish population is to be found in industrial conditions. Whitechapel is the great centre of the typically Jewish trades; and in these trades employment in the slack season is generally so uncertain, and the hours to work so long, that it is a

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oblivious of the claims of his race and his religion. This oblivion is in itself a tacit condemnation of the claims which justified his former isolation.' (Quoted by Wirth, 1969 119, from a book by an English Jew, Joseph Jacobs: *Jewish Ideals and Other Essays*).

<sup>46</sup> Kalman, in Newman, 1981, 8.

<sup>47</sup> The latter exclusion was possibly a result of the Jewish population of this time not usually being in the employ of large companies, preferring smaller, family owned businesses, which were invariably also Jewish, owned, although Russell and Lewis devote an extended section on the Jewish landlord.

great convenience and advantage for a man to live in the immediate neighbourhood of his work. and in the tailoring trade, at any rate, it is almost necessary for workshops to be within easy reach of the City, as work is constantly being sent to and fro; so that as far as their industry is concerned there seems to be little hope of any very wide dispersion.' (Russell and Lewis, 1900, 20.).

According to Carter (1983, 189-201), massively increased mobility in the nineteenth century saw much greater mixing of population, and the development of the concept of 'segregation', which he mentions with reference to the migrations of the Irish to British cities. Carter maintains that it is difficult to establish when a clustering becomes a concentration; as for instance, the Irish in London have been shown never to cluster to such a degree that they constitute a concentration that can be called a 'ghetto'<sup>48</sup> yet their clustering has been repeatedly remarked upon (as has the Jewish clustering.) A study by Stanley Waterman of late 20th century Jews, shows a common factor with the above described Irish group. In this study, Waterman writes that the Jew's move to the suburbs of northwest London, which was in parallel to a similar trend in the general population, still maintained the clustering form of settlement. This clustering is defined by Waterman as 'concentration without segregation':

'...whereby the Jews in northwest London are highly clustered, yet fail to form majorities at the scale of the administrative wards - and are only the majority in four polling districts'. He goes on to write: 'there is an anomaly by which the Jews in England, like a few other immigrant groups, although culturally absorbed in the general population<sup>49</sup> have remained distinct and distinctive as a group on a voluntary basis.. Certain groups not only maintain high levels of distinctiveness long after they have ceased to be immigrants but also retain high levels of spatial concentration.' (Waterman, 1989, 3).

In other words, despite the fact that the majority of this group was British born, and were not in the need of the proximity that the interdependency of immigrants demand, they continued to settle in observable clusters. We also find Lipman concurring with these assertions, writing that 19th century clustering was not reserved for the immigrant populations of that period; he suggests that even when moving to the suburbs in 1881, London Jews followed a distinctive pattern of clustering in particular neighbourhoods and such was also the case for the more established residents of the East End of this period, who moved into Stepney and Bow. (Lipman, 1900, 15).

### **III. The Results of Clustering - Spatial Reinforcement**

The previous section demonstrated that religious practice was a specific element causing the Jews to cluster. It also established that certain economic factors specific to the Jews might also influence the choice to cluster. Both of these were causes that brought about clustering beyond the first generation of immigration. The section on space and society presented various sources that establish a

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<sup>48</sup> Lees, L. H.: *Patterns of lower-class life: Irish slum communities in nineteenth-century London*. In Thernstrom, S. and Sennett, R. (eds.), 359-85, 1969.

<sup>49</sup> It should be noted that V.D. Lipman makes a distinction between different types of cultural absorption; assimilation, a merging of an ethnic minority with the wider community, through intermarriage and acculturation, an adoption of an ethnic minority of the social habits of the general population. The former process having taken place from the start of Jewish settlement in Britain, whilst the latter is a trend only obvious in the post Second World War years.

connection between society and space. The following section tries to determine whether the special nature of Jewish society might be related to, or reinforced by, its specific form of spatial clustering.

According to Wirth, the most basic form of solidarity in the Jewish community is the family group (which has been suggested by Hillier and Hanson, above, as being one of the most typical of local spatialised societies):

'The real inner solidarity of the ghetto community always lay in the strong family ties. In this inner circle deep bonds of sympathy had been woven between the members through a colourful ritual. Here each individual, who was just a mere Jew to the world outside, had a place of dignity, and was bound to the rest by profound sentiments.' (Wirth, 1969, 37).

Another example of Jewish unity, is in the Jews' use of a lunar calendar, in contrast with the solar Gregorian calendar found in most western societies, this means that the dates of the Jewish calendar do not work in tandem with those of their host societies but are instead tied into the seasons of the land of Palestine. Bourdieu confirms the significance of this type of cultural exclusion, stating: 'The reason why submission to the collective rhythms is so rigorously demanded is that the temporal forms or the spatial structures structure not only the group's representation of the world but the group itself, which orders itself in accordance with this representation' (Bourdieu, 1979, 163). This might be one of the causes of the aforementioned conception of Jewish society as an exclusive entity.

The religious solidarity may be said to be reinforced by the up to thrice-daily synagogue meetings, the weekly Sabbath celebrations and the adherence to the Jewish calendar, which imposes a separate and highly structured order on the local society. As mentioned earlier, the practice of religion, especially Orthodox Judaism, with its multiple rules, rigid structure and strong adherence to the rhythms of the calendar, all serve to unify and strengthen the Jewish society.

The suggestion that religion acts as a cohesive element for societies is also addressed by Giddens, who writes that the spatial aspect of society acts as an anchor, through the co-presence of its members; 'the routines of day-to-day life are fundamental to even the most elaborate forms of societal organisation.' (Giddens, 1984, 64). This is established in the Jewish example by Russell and Lewis who write: 'the essential feature of modern [Jewish Society] is to be found not in its blood but in its religion; ...its continuance as a nationality will depend on whether or no it clings to its religion.' (ibid, xvi). The laws and restrictions of Jewish life have also been the glue that has kept, according to tradition, the community together through adversity - from this it is possible to conclude that the strong internal ties, which take the form of religious life, have not just been a characteristic of Jewish society, but a necessary, inherent part of it which has directly led to its spatial clustering.

According to Israel Cohen, the most important form of Jewish solidarity is at the level of the organised community. He writes that the synagogue 'forms the pivot and centre of communal life throughout Jewry, and its establishment is followed by the growth of a cluster of other institutions, each

answering some definite social need or aspiration...<sup>50</sup> The synagogue is the place in which the (male) members of the community gathered for prayer three times a day, it is also the place in which after-prayers studying took place, and the primary location for basic education for Jewish children. In addition to the religious and educational importance of the synagogue, is its social importance; the commonest term for synagogue is *Beit Haknesset* - house of assembly, a reflection on the role of the synagogue as the gathering point of the community. The synagogue acted as the social and recreational centre of the ghetto, and most public announcements were made there. The synagogue also provided the communal leadership with a judicial structure, by taking over nominal governmental functions such as tax assessment and the imposition of local regulations. The latter function was later superseded by a separate secular governing body - (for instance the *Mahamad* of 17th century England, see Part A, section 1658-1700).

The previous passage proposed that the synagogue served as the centre of local solidarity, being the repository of most communal functions. Other sources also discuss the spatiality of the synagogue in Jewish society. For instance, Wirth asserts that the Jewish quarter tended to cluster around the synagogue: 'The Jewish quarter, even before the days of the compulsory ghetto, seems to have grown up round the synagogue, which was thus the centre of Jewish life, locally as well as religiously'.<sup>51</sup>

Other forms of the cohesiveness of local solidarity in Jewish society take the form of organised self-help, a type of charity which is....

'rooted in the Jewish religious concept of charity as a positive obligation. ...There was also a vaguely formulated assumption by the Jews themselves that it was an unwritten condition of their resettlement that they should look after their own poor, who should not become a charge on public funds. hence, by the mid-nineteenth century, there were charities for "orphans, widows, invalids, lying-in women, and burials, as well as ones distributing food and fuels in winter and at festivals, and others sponsoring education."' (Lipman, 1990, 31).

Local solidarity is very spatialised in the Jewish society, yet an outsider to the local society, who belongs to the transpatial society (i.e. a Jewish stranger) will be capable of firstly, recognising the symbolic structure of the society and knowing how it works, and secondly, will be able to use it as an entry point into the local society. The immigrant Jews of 1890 London knew this fact, and utilised it, by calling on family or village networks from the 'old land' to help them find work and accommodation in the 'new land':

'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. This will not always prevent the master from imposing hard or even unfair terms, but it remains true that, in the small workshop, there usually exist far more kindness and good feeling than in the large factory. Journeymen out of work often receive much assistance from their former employers, and many small acts of kindness, which do so much to sweeten human relations...' (Russell and Lewis, 1900, 193).

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<sup>50</sup> Israel Cohen: *Jewish Life in Modern Times*; London and New York, 1914, 23, as quoted by Wirth, 1969, 52.

<sup>51</sup> Abrahams, *Jewish Life in the Middle Ages*, (New York, 1897) , 1 in Wirth, 1969, 52.

All the above solidarities entail interaction between group members both on the family level and on the community level; these solidarities fit into the earlier defined, local or spatial societies. However, Jewish society could also be viewed as a transpatial solidarity, since until the creation of the State of Israel, Jewish society as a global entity only existed as a totally transpatial element, since it had no defined territory. On a more basic level, Jewish culture is linked transpatially by a common language of prayer, and in many cases also by a common vernacular (Yiddish among Ashkenazi Jews and Ladino among Sephardic). These transpatial solidarities are reinforced by connections based on a common land of origin, especially among immigrants of the first and second generation (both periods examined in this paper deal with 'new' immigrants).<sup>52</sup>

As mentioned earlier, another essential part of Jewish religion is its calendar of festivals and fasts, which was given as an example of local reinforcement of solidarities through religious celebration. However, it could also be argued that the Jewish calendar acts as a link to other Jews across the world, who all celebrate the seasons of ancient Palestine at the same times throughout the year, by for instance praying for rainfall after the Autumn harvest festival (Succot), at a time which is concurrent with the commencement of the rainy season in Palestine and similarly praying for a cessation of rain during the Spring (Passover) festival. It could therefore be suggested that the Jewish calendar acts as a transpatial reinforcement for the local Jewish society, which shares local, spatialised type encounters with global, transpatialised encounters. Global transpatial links in Jewish society can also be seen in Hyamson's discussion of the relationship between the Jewish community in seventeenth century London and the communities of western Europe:

'So far as Amsterdam was concerned, that community could, to a certain extent, claim to be the parent or foster-parent of Bevis Marks [the London community]'. There were relationships to other Sephardi communities in Europe ... as a rule it was London who was the benefactor and the Continental community which was the beneficiary.' 'In 1689 a fund was raised for the relief of the Jewish fugitives who were fleeing from the war that was raging around Belgrade, and twenty years later a similar fund was raised for the benefit of 'our brothers in Poland'. (Hyamson, 1951, 163).

Wirth concurs with this assertion, writing: 'The Jew was a person of many contacts, and often of many "homes." In the course of his migrations he established himself in the remotest parts of the globe.' (ibid 51). The following shows how the transpatial and spatial communities were linked, and the spatial form of this link - the synagogue:

'The Jews of the Middle Ages certainly had more contacts and more varied and extensive contacts than their Christian neighbours. They travelled from one town to another, and even when they themselves were unable to see much of the world, their ghetto was visited by Jews from all the corners of the earth. Particularly in the synagogue we find the centre of thought, the meeting place where strangers often dropped in to tell of what went on in distant lands. The Jewish communities thus came to share the life of their distant co-religionists...In fact, for a long time the Jews were the intellectual intermediaries between Orient and Occident.' (ibid, 36).

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<sup>52</sup> The most descriptive notion of transpatial solidarity is the reading of the Passover story, which is undertaken at the Passover Eve meal, in which all participants pray for 'Next year in Jerusalem' - thus reinforcing the connection with the land of origin.

The spatial/transpatial notion of Jewish society might also be translated into the terms of mechanical and statistical models (explained in the previous section). To relate these terms to Jewish society, if we consider mechanical societies as being rule-bound, limiting random interactions, then the strict religious and cultural rules that determine Jewish society, can be considered mechanical. If we continue to use the marriage example given in the earlier section (where it was suggested that marriage is bound by a set of rules pertaining to the kin or clan groupings, in mechanical societies whilst in modern societies the rules binding marriage are related to social fluidity), we find that Jewish society has a 'mechanical' nature: firstly in its restrictions on the choice of spouses from within the cultural group, and in some cases it has further restrictions, such as Sephardis only marrying Sephardis, or even restrictions pertaining to marriage within a class or country of origin.

On the other hand, one might argue that because of the mechanical aspects of Jewish society, which contain and strengthen its internal structure, it is freed to release the binds of its outward aspects, such that it may be absorbed into the host society in which it is set - and thus may be considered a statistical society. Considering that English Jews have become absorbed into most parts of society (see section on history, in which it is shown that the only restriction on social mobility for 19th century Jews was absorption into the landed aristocracy), whilst still retaining their identity, customs and culture as a separate entity, they might be said as fitting this description. It might also be noted that even in cases when a Jew has wished to throw off this identity, such as in the case of Disraeli, the host society still continues to consider him as 'equal but separate'.

Another example of the struggle between Jewish identity and alienation from it: described by Shmueli as the 'essence of the Jewish dilemma'<sup>53</sup> can be seen in the description of the artist Mark Gertler's association with the East End. Mark Gertler, who was born in Spitalfields in 1891 to poor immigrant Jews and became assimilated into English society through his success as an artist. As Steyn (1992) states: 'education was for Gertler (as for others from immigrant societies) the primary means through which...he began the process of assimilation'. (ibid, 9-10). Despite this successful assimilation, Gertler continued throughout his life to have an ambivalent attitude towards his Jewishness, which is reflected in his painting, in which he promote an image of strength and unity in Jewish society, using the iconography of the family to exemplify this notion. Yet he left the East End for Hampstead at quite an early age, because he felt it 'stifled' him. According to Steyn (1992) this ambivalence was a reflection of society's attitude towards him, which persisted in relating to Gertler as if he 'could never fully belong. He was never enabled or able to transcend a Jewish identity, that of "other"' (ibid, 20).

As mentioned above, there are internal strengths in Jewish society, which come about from its adherence to a separate culture and language; as well as the aforementioned religious cultural unifier,

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<sup>53</sup> Quoted by Steyn, 1992, 51, from: E. Shmueli, *Seven Jewish Cultures*, Cambridge University Press, Cambridge, 1900, 7.



it could be suggested that Jewish education also acts in the same way - this mechanical aspect stays more or less constant in whichever society the Jews are to be found.<sup>54</sup>

'the foreign Jew in his anxiety that his children should receive sufficient instruction in Hebrew [is such that] quite poor parents frequently pay a shilling a week for each of their sons...[to be instructed]...in the Hebrew School or cheder... The Jews have always been 'a nation of students.' The Talmud sets the scholar above the king; and a thorough training in Hebrew is still held a matter of the highest importance.'<sup>55</sup> [The text goes on to describe how the young Jew spends considerably longer hours than his gentile counterpart in acquiring education]<sup>56</sup>

However, like the religious aspect, the Jewish recognition of the importance of secular, (rather than religious) education can be transmuted into a statistical element, as is explained by Bourdieu, who comments that cultural competence, or literacy, enables a society to move beyond immediate human needs. According to Bourdieu, education allows for the accumulation of cultural capital as much as money does for economic capital:

'academic qualifications, like money, have a conventional, fixed value which, being guaranteed by law, is freed from local limitations... the objectification accomplished by academic degrees and diplomas and , in a more general way, by all forms of credentials, is inseparable from the objectification... which allows... permanent positions.. to be occupied by agents who are biologically different but interchangeable in terms of the qualification required.' (Bourdieu, 1979, 187).

In other words, qualifications allow for social mobility; they also allow the individual who is different from the surrounding community to objectify his social bearing; transcending social barriers by using a movable commodity. By attaining qualifications, Jewish society is able to overcome the social barriers which hold it back. If we look again at Mark Gertler, we see he used his education at the Slade School of Art for this purpose. It might also be possible to use Bourdieu's analogy between cultural and economic capital to point out that a study of the history of English Jewry shows that they utilise their accumulation of economic capital in the same fashion; such that added wealth allows for added mobility (of course this is the case for all members of society).

The idea of economic strength giving added social mobility is reinforced by Giddens, who writes that economic mobility can be translated into its most basic meaning, that is freedom of movement, whereby he states:

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<sup>54</sup> This comment helps to explain the success of Jewish society, which has always been a textually based culture. The manner in which education helps with the outward strength of a society; can be shown in the opening of free schools for the Jewish population, which were, according to Lipman, 'motivated by the desire to educate the Jewish poor, raise their "intellectual character", and help them to acquire "the means of self-dependence"'. (Lipman, 1990, 29).

<sup>55</sup> Russell and Lewis, 1900, 28. It is interesting to note Wirth's comment on this subject, who writes that the common word among Ashkenazi Jews for synagogue was (and still is) *shool*, derived from the German for school - 'study and worship went hand in hand; nay, study was worship, and ignorance was a deadly sin.' (Werner Sombart, *The Jews and Modern Capitalism* (New York, 1913), 334, as quoted by Wirth, 1969, 76.

<sup>56</sup> Another cultural difference between the Jews and the gentiles of 19th England; is noted in *The Englishman's Food*, Drummond and Wilbraham (1991), 408, state: 'a survey of school children in Leeds in 1902 showed that in the poorer districts no less than half had marked rickets while more than 60 per cent were suffering from carious teeth. An interesting point which this particular inquiry revealed was that the incidence of these defects was much smaller among the children of Jewish parents, the corresponding figures being 7% and 25% respectively. It is certain that this was due to better feeding, for it is a well known fact that the Jews as a people take far more pains to give their children good food than do the English. For one thing, Jewish infants are nearly always breast fed. Secondly, the Jews have a sense of good living and even when poor will make almost any sacrifice to try to get wholesome food for their families.'

'The access of those in more affluent sectors of housing markets to relatively easy transfer of property underlies the "flight to the suburbs", changing city centres from regions of frontal display to back regions of urban decay, which the "respectable classes" avoid. Ghetto areas may be rendered "invisible" by their regional enclosure in neighbourhoods having very low rates both of property transfer and of daily mobility in and out of those neighbourhoods.' (Giddens, 1993, 130).

A good example of transpatial economic solidarity can be found with the Jews of 1695, who utilised their trade contacts in other countries to create business connections in England. Indeed it is evident (see history section) that the Jews were readmitted to England, and later allowed to remain, so that their Dutch-Portuguese trade connections could be utilised. A social structure which possesses strong networks, even trans-national networks, will be drawn towards trades that can benefit from information flows - it is therefore not surprising to find that the Jews have been drawn to this form of income. This idea could be confirmed by the following quote from Wirth who gives an early example of a specific spatial location near a market-place as being typical of Jewish quarters:

'The typical ghetto of the sixteenth century, is a densely populated, walled-in area usually found near the arteries of commerce or *in the vicinity of a market*. [italics not in the original]. The location characteristic is epitomised in the ghettos of Venice and Frankfurt. Away from the main core of settlement, they were symbolically set apart but still retained an adjacency to the centres of commercial activity.' (Wirth, 1969, 78.)

It could be argued that this quote suggests that the Jewish transpatial connections, utilised for their economic strength, and having been transformed into trade, then take on a spatial aspect - the market-place. This quote also reinforces past studies,<sup>57</sup> which have suggested that the poor sectors of the city tend to occupy spatially segregated areas. For instance, Wirth observes that the typical geographical formation of the Jewish ghetto is a location in the interstitial area of the city, on the border between the old and the new city. It could be claimed that the settlement of the Jews in London fits into this description (ibid, 1969, 42). Lipman, 1990 also advances this theory: 'Topographically, [the Jew's immigrant quarter] was adjacent to the central business district.' (ibid, 51).

It could be suggested that the importance of the market-place in Jewish life is a result of the type of occupation traditionally chosen (or imposed upon) Jews, which is frequently: trade, banking, professions.<sup>58</sup> This is referred to by Barnett: The Jew... 'is essentially a town-liver, kept off the land for so many years and prevented by his Sabbath Laws from so many forms of labour, he has been driven to trade...'<sup>59</sup>

Wirth notes other causes for the Jewish tendency towards commercial business:

'his mobility, his adaptability, his flexibility.'... In the rigid structure of a society in which... 'everyone was tied to something - the soil, the feudal lord, the house in which he and his ancestors live, or the Guild of which he was a member... the Jews found a strategic place.' In addition to which, 'the

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<sup>57</sup> See Czapski, 1989, 3, who quotes Booth: 'In Battersea poverty is caught and held in successive railway loops this is one of the best object lessons in poverty traps in London'.

<sup>58</sup> In fact it might be argued that modern banking is the most transpatial of trades, due to its dealing in a commodity which is incorporeal whilst the nature of some of the professions most frequented by Jews, namely, medicine and architecture, is their transportability, even to a different culture and country.

<sup>59</sup> In Russell and Lewis, 1900, xxiv.

Jew, by the nature of his contacts - largely of a categorical and secondary type - was especially fitted to become the commercial individual and less fitted to become the artisan, who requires close and intimate personal contacts with his clientele... Moreover, the Jew was not prevented by his religion, as were others, from dealing in money. he therefore became the money lender and the banker. By the time that the mediaeval church relaxed its stand on the question of usury the Jews had already a fair start.' (Wirth, 1989, 24, 78).

It could be contended that this quote strengthens the above made claim that Jewish society has a statistical aspect - by being free from the rules of society, the Jews have transcended the mechanical aspect of their host society - and are free, as quoted above, to choose occupations not open to others. More frequently, their position on the edge of society has been exploited by others; , for instance, in mediaeval times, they were frequently chosen to be the physicians and emissaries of rulers and princes. As suggested by Wirth, the Jews were 'the typical stranger, and in that role they acquired the objectivity and built up the relationship of the confidant, which served them well as counsellors and diagnosticians.' (Wirth, 1989, 78).

Certain sources maintain that the market-place is the point of contact between otherwise disassociated groups; Bourdieu writes:

'In fact, whether a small tribal market or a big regional market, the suq represents a transactional mode intermediate between two extremes, neither of which is ever fully actualised: on the one hand there are the exchanges of the familiar world of acquaintance, based on the trust and good faith that are possible when the purchaser is well informed about the products exchanged and the seller's strategies...; and on the other hand there are the rational strategies of the self-regulating market, which are made possible by the standardisation of its products and the quasi-mechanical necessity of its processes.' (Bourdieu, 1979, 172.)

This concept of the market as a place of abstract transactions between extremes, or strangers, is also submitted by Wirth, who writes of the Jewish trade relationships, that this type of relationship takes place in a situation where no other contact can take place:

'Trade is an abstract relationship, a form of symbiosis, physical rather than social in its nature. it is rational, and the emotions drop into the background. One can trade with one's enemies because trade involves none of the elements of personal prejudice. The less personal, the less emotional, and the more impersonal and the more abstract the attitude of the trader, the more efficiently and successfully can he exercise his function.' (Wirth, 1989, 25).

The centrality of the trade in general, and Petticoat Lane market specifically, in London Jewish life, is best presented by the following description by Booth

'Whitechapel is a veritable... Eldorado of the East, a gathering together of poor fortune seekers; its streets are full of buying and selling, the poor living on the poor. Here, just outside the old City walls have always lived the Jews, and here they are now in thousands, both old established and new comers, seeking their livelihood... the neighbourhood of old Petticoat Lane on Sunday is one of the wonders of London, a medley of strange sights, strange sounds, and strange smells. Streets crowded so as to be thoroughfares no longer, and lined with a double or treble row of hand-barrows, set fast with empty cases, so as to assume the guise of market stalls...those who have something showy, noisily push their trade, while the modest merit of the utterly cheap makes its silent appeal from the lower stalls... Many, perhaps most, things of the "silent cheap" sort are bought in the way of business; old clothes to renovate, old hinges and door-handles to be refurbished up again... Other stalls supply daily wants - fish is sold in large quantities - vegetables and fruit - queer cakes and outlandish bread. Except as regards these daily wants the *Jew is the*

*seller and the gentile the buyer; Petticoat Lane is the exchange of the Jew, but the lounge of the Christian' (Booth, 1969, 66-67).*

The above italicised sentence is the best indicator of the position of the market-place in Jewish society as the threshold between the interior and exterior worlds. It is the nature of *transactions*, as pointed out earlier in the quote by Levi-Strauss, to equalise relationships and to *transcend* the barriers of society. It might also be maintained that the above quote demonstrates how Petticoat Lane is not only the encounter point between the society members, but also where the community makes contact with the outside world.<sup>60</sup>

This section established that considerable weight can be given to the argument that the structure of society can be read through its spatial form. It also presented evidence regarding the spatial nature of local, spatial societies and that of transpatial societies. This section demonstrated that despite the differences between the original European and its western form, that Jewish clusters continued to have factors in common with, and even continued sometimes to be called 'ghettos'.

This section also discussed the spatial nature and the causes of the Jewish form of clustering. It presented multiple sources of evidence, all of which pointed to the special nature of Jewish society as being the cause of Jewish clustering. The special nature was postulated as being linked, not only to the localised, internal nature of Jewish society, but also being due to its outward-looking nature - both a religious factor, a social factor, related to the Jew's history of migration and a factor caused by their position in society.

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<sup>60</sup> Petticoat Lane is still considered a Jewish market to this day and still constitutes a meeting and socialising point for the Jewish community of London, despite the dispersal of most of its members to a far distance away. A proof of this point is the continued existence of one of the oldest Jewish restaurants in London, *Blooms*, in Whitechapel, which benefits from City trade during the weekdays, and Petticoat Market trade on the weekend.

## C - Statistical Analysis

### I. Space Syntax Analysis<sup>61</sup>

Space Syntax analysis examines the spatial configuration of cities by defining all external spaces as a continuous network of space. The spatial configuration is represented by the set of the fewest and longest lines of visibility and permeability that link between all spaces in the network. Past research using this method has consistently found the importance of the axial map in representing a picture of the patterns of movement and activity that are common in cities.

The Unit for Architectural Studies at the Bartlett School of Architecture has developed methods for the analysis of spatial layout in buildings and urban areas, modelling the relationship between spatial layout and how people use and move through buildings and using these models to effectively predict relative levels of movement within a system. This method is based on the theories advanced by Hillier and Hanson (as described in the Part B, section 1), in which a primary property of the form of the urban grid is to privilege certain spaces over others for through movement. In this way it is suggested that the configuration of the urban grid itself is the main generator of patterns of movement. The spatial unit related to in this theory is the 'axial line', i.e. the longest line of sight and access that defines each of the street spaces in the system (or in the case of buildings, in the building). The layout of the urban or building system is represented as a system of axial lines, each of which is studied according to how accessible it is from all other spaces in the system.

The axial line break-up is analysed by computer as a pattern of accessibility, measuring the relative distance of each part from the system as a whole, and then describing the system according to the distribution of accessibility; ranging from the most accessible, 'integrated', to the least accessible, 'segregated'. The numeric properties of the spatial system are laid out in a table, allowing the mathematical analysis of the relationship between the spatial properties and other numerically measurable properties of space use. The numeric properties are also represented graphically, by colouring up the axial lines in a spectrum of colours from cold to warm, assigning the blues to the least integrated lines, the greens to the next and so on, through yellows and oranges to the most integrated lines, coloured red (or in a black and white map from light grey to dark grey and black).

The key measure of the axial map is the integration value. Global integration (or integration radius n) measures the degree to which each line in the map is present on the simplest (fewest changes of direction) routes to and from all other lines. A version of global integration, termed 'local integration' (or integration radius 3) restricts the measurement of routes from any line to only those lines that are

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<sup>61</sup> The main form of this section is taken from a report co-written by the author entitled: *Crime and Security in Hospitals* published by The Unit for Architectural Studies, for NHS Estates, February 1994.

up to three steps away from it. This measures the localised importance of a space for access within a particular part of a city area.

The Unit for Architectural Studies at University College London has applied these analysis techniques to a number of urban sites, ranging from housing estates to central city spaces<sup>62</sup>. In all of these sites they have found a statistically significant ( $p < .05$ ) correlation between movement rates and integration values, observing that movement consistently rises as streets become more integrated and that the relative range of movement does not change according to the time of day, i.e., those streets which are the busiest during the morning, are continuously so throughout the day. In other words, these studies have proposed that a large proportion of movement in cities can be explained by the basic configurational pattern itself. In general, pedestrian movement tends to correlate with local movement and vehicular, with global. The only exceptions to this relationship are modern housing estates which do not correlate at all, or in some extreme cases, (as the Alexandra Road estate at Swiss Cottage) the relationship has been found to be bifurcated (Hillier, 1988, 63-85).

The lack of correlation in modern housing estates between integration and movement has been explained by Hillier and Hanson (1990, 23-24), as being related to the essential difference between modern housing estates and 'traditional' city systems; whereas in traditional streets the range of movement rates from 'liveliest to quietest' is quite small, and related to the relative integration values of the streets, in modern housing estates, the movement rates are consistently lower than the quietest, nighttime rates of movement in 'traditional' systems. This discrepancy is explained by Hillier and Hanson as being due to the difference between the spatial structures of the two types of systems. Whilst in the 'traditional' city the number of changes of direction that need to be taken to reach the quietest domestic roads from the main street system is relatively small, the modern housing estate requires the inhabitant to make numerous changes of direction, during which he is less and less likely to encounter anyone else. The use of the word 'inhabitant' is not by chance, The Unit of Architectural Studies has observed that one of the outcomes of the divorce of modern housing estates' public spaces from the street system is that the likelihood of anyone passing through the housing estate's spaces by chance is minimal, which in itself exacerbates the physical cutting-off of the spaces, by making them empty of everyday traffic. The low rate of traffic is also attributed to the numerous choices of route through the typical housing estate, which causes the already low rates of traffic to be spread out thinly.

Movement rates in cities have also been studied at the Unit for Architectural Studies with reference to the accepted theory of 'attractors'. This theory, usually applied by traffic engineers, contends that traffic movement in cities can be attributed to flows of movement from and to 'attractor' land uses. The contention is, that by modelling movement to and from all 'attractors', it is possible to predict flows of

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<sup>62</sup> The following studies exemplify the results reported here: The Kings Cross Railway Lands site Study, for the Railway Lands Community Group and Fosters Associates, 1988 and the Mansion House Square public inquiry, 1984. Both of these are summarised in "Natural Movement", B Hillier, A Penn, J Hanson, et al, in *Environment and Planning B: Planning and Design*, 1992, volume 19.

traffic. In contrast with this, 'Space Syntax' studies have submitted that the location of 'attractors' is related to the pattern of 'natural movement' in the city. As explained earlier, the theory of 'natural movement' contends that the urban grid acts in itself as the main distributor of movement. The findings of studies relating to 'attractors'<sup>63</sup> have demonstrated that the stage at which retail land-uses start to 'kick in' to the movement pattern is at the stage at which they are located to take advantage of the opportunities offered by passing trade; these studies also submit that 'attractors' may be acting as multipliers of the basic pattern of 'natural movement' generated by the grid configuration.

## **II. 1895 data**

Section II is divided as follows:

Background to the 1895 Analysis, describes the methods used for collecting the data on the East End. In all sections, two spatial models are used, one limited to the immediate environs of the Jewish East End and an extended model, which deals with a larger contextual background to the area in question. 1: Visual analysis of the Source Maps, examines the spatial distribution of the relative percentages of Jews. 2: Spatial Analysis deals with the basic spatial characteristics of the Jewish East End and compares it with the characteristics of the non-Jewish streets. 3: Spatial and Ethnic analysis, compares the characteristics of the Jewish and the non-Jewish streets and between the various bands of Jewish concentration. 4: Dispersal of Institutions - Related to Spatial Variables, analyses the spatial information regarding Jewish institutions in the East End. Sub-sections 5 and 6 deal with the comparison between the economic factors and the spatial and ethnic variables considered here. Section II ends with a summary of findings.

### **Background to the 1895 Analysis**

Two boundaries were chosen for examining the Jewish East End within its urban context. (See overleaf an overlay on the Booth map of the north-east section of London, which shows the extent of the two boundaries and the parish boundaries). The first boundary was chosen in order to examine the Jewish East End in the context of what is considered by historians to be the true limits of the East End. This boundary was decided according to the definition of the East End that is found in an essay by Raymond Kalman (in Newman, 1981). They are as follows: to the north - Dalston Lane, to the south - the river Thames, to the west - Shoreditch High Street and its continuation along Kingsland Road. On the eastern side the boundary differs from the definition laid out by Kalman, whereby the railway line from Victoria Park going south and the Blackwall Extension Railway to the south-east serve as the edge examined for this analysis, these two lines lie more or less in the Lea valley, which forms a natural boundary in any case. The boundary laid down by Kalman lies slightly further to the

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<sup>63</sup> Such as Stonor, T: The Manchester Pedestrian and Vehicular and Movement Study, Unit for Architectural Studies, Jan. 1993.

east, at the edge of Bow, by the natural boundary formed by the River Lea and Bow Creek, but due to the fact that these exceed the area examined by Booth, it was decided to limit the area as described.

The model created according to the Kalman boundaries poses a potential problem for spatial analysis, since the Jewish East End is at the edge, rather than the preferred centre of the model. This might potentially cloud the results of a spatial analysis, which is less accurate at the edges of a map (for this reason the area of interest is always embedded into a larger, contextual map). In order to test this supposition, a second boundary was chosen for 'the Extended East End model'. This boundary is an extension westwards of the above-described model, in which the western boundary was decided by the extension of Blackfriars Bridge northwards along St. John's Street Road, Essex Road, King Henry's Walk, back to Sandringham Road in the north.

As mentioned in the previous section, Space Syntax Analysis allows a detailed description to be made of the East End area in its urban context. The technique was employed here to represent the street network of the city by representing all lines of sight and access in the area as a matrix of lines. In the case of this analysis the data on economic classes, the distribution of the Jewish settlement in the East End and the information on the location of Jewish institutions were applied to the numeric spatial data in order to create a statistical table.

As mentioned in the introduction to this paper, the patterns of movement and space use in the East End and the measures of ethnic density and economic variables were taken from mapped data. The map sources for the 1895 data are reproduced in appendix A.

The initial mapping of the area in context and the economic data were taken from: Booth, Charles, intro. by Reeder, David, A.: *Descriptive Map of London Poverty, 1889* [set of four coloured reproductions of the original maps by Booth]; London Topographical Society, 1984.

The data on distribution of Jewish settlement in the East End was taken from: Russell, C. and Lewis, H. S.: *The Jew in London*; T. Fisher Unwin, London, 1900. With a map specially made for this volume by Geo. E. Arkell.

The Booth map was checked in detail for minor streets and alleyways according to the following map: Bacon, George W: *1888 New Large Scale Ordnance Atlas of London and Suburbs with Supplementary Maps*, in the form of the *A to Z of Victorian London, with Introductory Notes by Ralph Hyde*; Harry Margary, Lympne Castle, Kent, in association with the Guildhall Library London, 1987.

The system used for collecting data on ethnic and economic characteristics was identical in both cases: the street or street segment was assigned a colour from the band of colours representing the categories of ethnic density or economic classes. In most cases a single colour existed the full length



of an axial line, in cases where more than one colour existed along a line, an average was taken, unless there was a clear predominance of one colour over the other.

The map of Jewish London was drawn by G. E. Arkell, who worked for Charles Booth on the Life and Labour maps. The map was based on information collected between March and October 1899. It shows the extent of Jewish settlement, 'which has grown up around the old Ghetto by the City walls, and also the proportions of Jew and gentile resident in the district.' (Russell and Lewis, 1900, xxxiii). The map covers the entire Jewish population of the East End, but excludes minor clusters outside the area, (such as in Dalston or Hackney). The information included in the map of Jewish London is based on information supplied to Arkell from the London School Board and from the Visitors of the Tower Hamlets and Hackney areas. As these are the same sources quoted by Booth in his writing about the East End, it is safe to assume that Arkell was drawing on the contacts and information he had acquired through his work for Booth. The information on the location of Jews was based on names (both forenames and surnames), names of schools attended, observance of holidays, etc. Again similar to the Booth enquiry, information on homes containing children was extrapolated to include homes without children, i.e., the proportion of Jews in the homes without children was deemed to be the same as that in homes containing children, in the same street. The basic unit was a street, or street segment, in the case of longer streets. The Arkell map (see appendix A) uses the following categories of Jewish density: 0-5%, 5-25%, 25-50%, 50-75%, 75-95%, 95-100%. The bands for the lower densities 0-50%, where Jews were a minority, were coloured in reds ranging from deep red, to light pink for the highest density. The bands for the upper densities 50-100%, where Jews were a majority, were coloured in blues from light blue, to deep blue for the highest density.

The data on institutions in the East End has been drawn from the following sources:

1. Levy, A. B.: *East End Story*; The Jewish Chronicle, London, 1948.
2. Pollins, H: "East End Working Men's Clubs; affiliated to the Working Men's Clubs and Institute Union, 1870-1914"; in Newman: *The Jewish East End, 1840-1939*; The Jewish Historical Society of England, London 1981 1, 173-192.
3. Glasman, Judy: *London Synagogues and the Jewish Community c. 1870-1900*; MSc. thesis, History of Architecture, Bartlett School of Architecture, University College London, 1981/82.
4. Newman, A: "The Synagogues of the East End"; in Newman: *The Jewish East End, 1840-1939*; The Jewish Historical Society of England, London 1981, 217-222.

The book by A. B. Levy includes four maps of the area which show the location of many of the most important Jewish institutions in the East End. It was possible to ascertain from the text of this book, which of these institutions was active during the period in question; for the purposes of this study, the year 1900 was used as a cutting off date. In general, the institutions were divided into four types: religious: synagogues and mikvot; educational: schools, Talmudei Torah; communal: Jewish hospitals, homes for the aged, soup kitchens; and cultural: clubs, theatres. There is a map plotting the

dispersal of Jewish Institutions in the East End, preceding the institution analysis (plate 3). An additional classification of institutions was made of synagogue types: between the United and Sephardi synagogues: 'Main and United' and the small, local synagogues, called here: 'minor'. Appendix C presents an account of how, during the period in question, a sharp divide had been created between the established synagogues in London, the United Synagogue movement and the old Sephardi synagogues on the one hand and the *stieblach* (small synagogues) on the other. It also gives a full list of synagogues used for the analysis.

### **1. Visual analysis of the Source Maps**

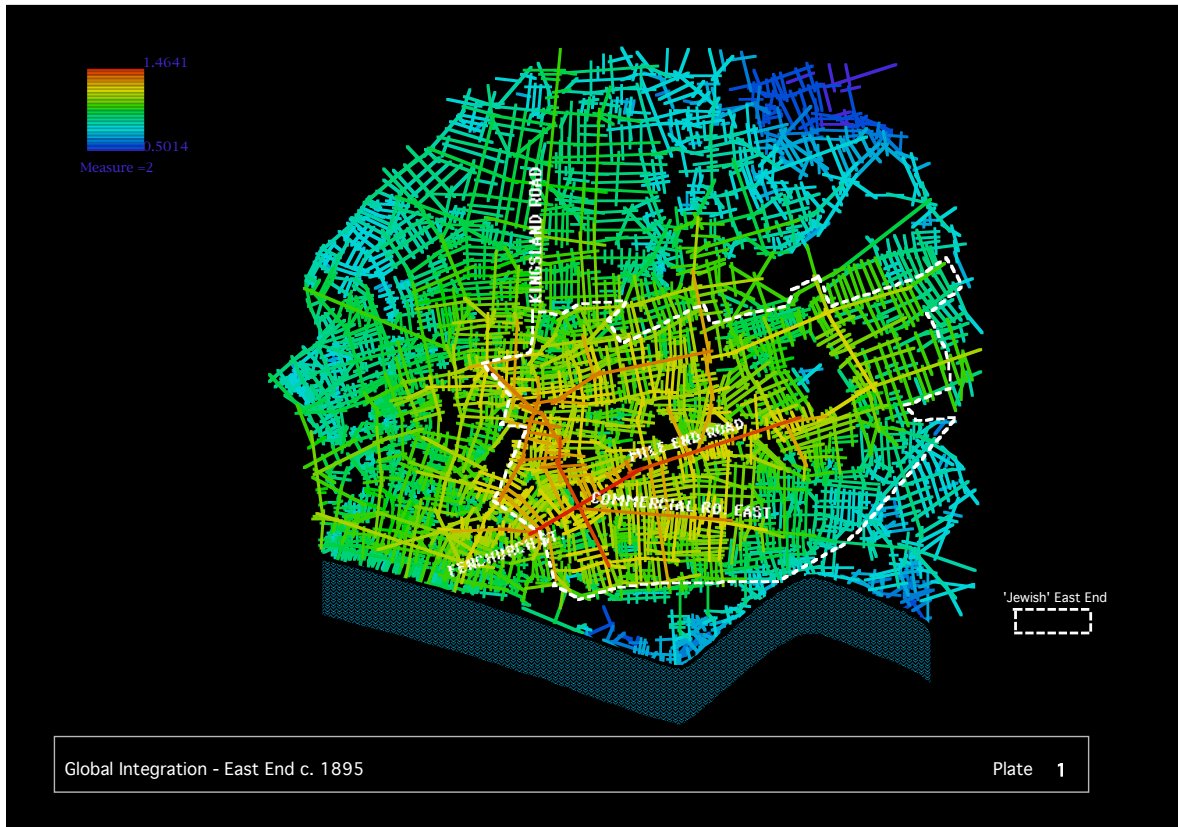
An examination of the Arkell map reveals a noticeable cluster of 50% and over streets in the western part of the area. A comparison of the core of settlement with the Booth maps of poverty, reveals that these are, according to the Booth classification, mainly 'higher class labour mixed with poverty' (£1.50 to £2 per week family income) or 'working class comfort' (£2-2.50), with small areas of 'very poor' or 'poor', below the £1.50 per week 'poverty line' as defined by Booth; on the other hand, there are some 'well-to-do' (middle-class with one or two servants) along the main thoroughfares, where the main shops are located, who were (according to Lipman, 1990) shopkeepers, or the teachers mentioned in Dr. Adler's group 3 (see section on 1881-1990 which discusses trades) and merchants, ministers of religion and other middle class still in the East End. Lipman (1990) also finds confirmatory evidence about this distribution of social classes from information on synagogue membership (*ibid*, 53).

Generally, these findings have also been observed by various sources, who note that the highest concentration of Jews is closest to the City, in the most western segment of the area - this is the area closest in proximity to the earlier settlement within the City walls, and it could be concluded from this that the dispersal of the Jews moved in a steady eastwards direction. It is also noted that they tend to occupy the main streets of the area:

'The gradual spread of the Jews... has followed... the path of least resistance. From Whitechapel the flow has moved along the great highways, especially Whitechapel Road and Commercial Road, and into the streets immediately off these thoroughfares. In streets not directly connected with the main roads, and not readily reached, the influx has been slow and is comparatively recent. In some long streets directly connected with a main road, a distinct difference may be noted between the near and remote ends of the street... The same tendency to spread along the main thoroughfares is seen in the outlying portions...' (Russell and Lewis, 1900, xl-xli (notes on map).

### **2. Spatial Analysis**

Plates 1 and 2 over-leaf give the global and local integration matrixes for the two models of the East End, showing the 'Jewish East End' (the limits of the Arkell map) outlined in a dotted white line. These plates show that the Jewish area has the highest integration values (represented by the red and orange lines).



Figures 1 and 2 show a correlation between local and global integration values for the entire East End system - figure 1 shows the small East End system, figure 2, the extended system. In both cases we

see a reasonable correlation, considering the size of the models, with a slightly tighter correlation in the smaller of the two models.

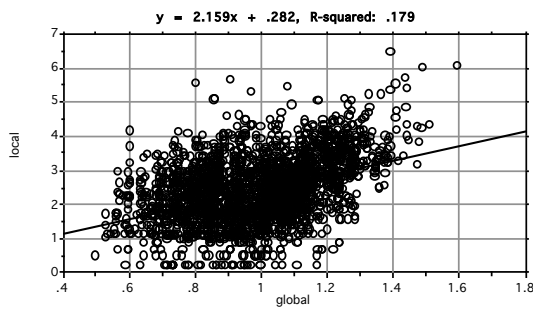


fig. 1 Intelligibility, small model

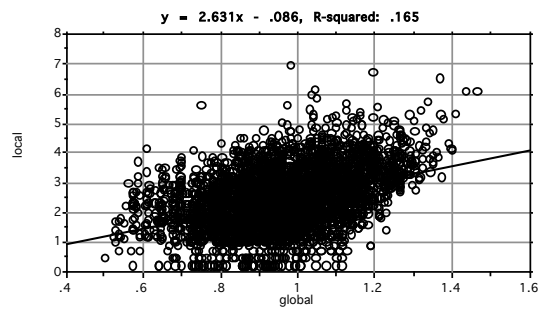


fig. 2 Intelligibility, extended model

In figures 3 and 4 which show the same variables, but with the range limited to the Jewish area, (the range was locked in order to retain the same scale as in figures 1 and 2), we find there is a much greater correspondence between the two elements than when considering the system as a whole. Small model -  $r: 0.568$ , adjusted  $r$ -squared:  $0.322$ ,  $p=0.0001$ . Extended model -  $r: 0.537$ , adjusted  $r$ -squared:  $0.288$ ,  $p=0.0001$ . It may be concluded from this that the Jewish East End is in an area which is reasonably intelligible (intelligibility having been defined as good correspondence between local and global structure).

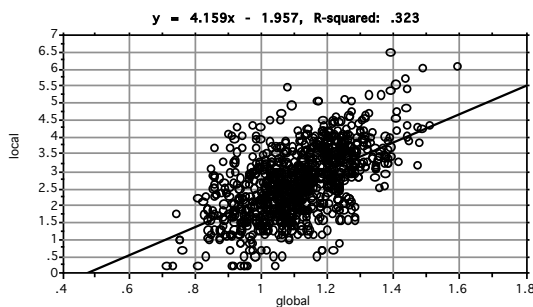


fig. 3 Intelligibility, small model - Jewish streets only

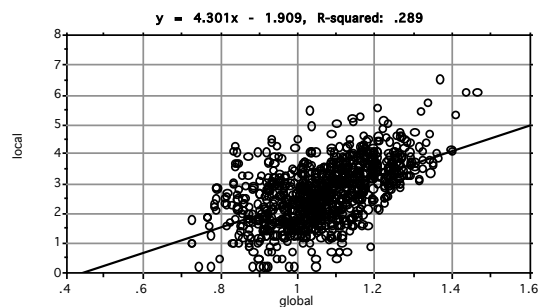


fig. 4 Intelligibility, extended model - Jewish streets only

This conclusion is strengthened by the findings of figures 5 and 6, which show the two systems again, with the 50% and over Jewish streets highlighted and circled. We see another interesting characteristic of the area, that the Jewish district seems to be occupying a defined sub-area of the system, which has a stronger global than local element - evident from the steeper regression line. The fact that this pattern stands in both cases, when the Jewish area is at the edge of the model (in the smaller model) and when it is at the centre, is a sign that this result is quite significant. As was explained in the first part of the analysis, a sub-area tends to occur in spatially distinguishable areas and also tends to be in 'named' parts of London, such as Covent Garden. It is also evident in figures 5 and 6 that the Jewish streets are among the most integrated lines in the area, a factor that may be influencing the sub-area characteristic of the models.

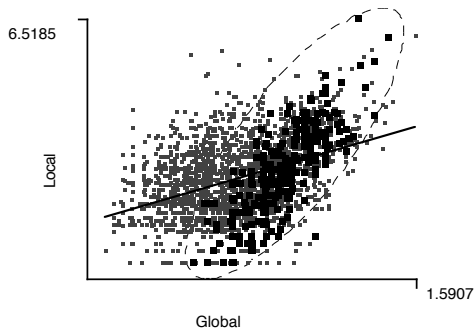


fig. 5 Intelligibility, small model - Jewish streets highlighted

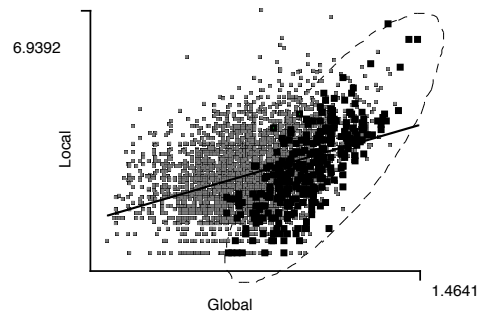


fig. 6 Intelligibility, extended model - Jewish streets highlighted

### 3. Spatial and Ethnic Analysis

Having established that the spatial variables of the East End, the following section compares these variables with the data on Jewish densities in order to ascertain whether there is a relationship between the two. The first set of correlations compares the percentage measure of Jewishness to the spatial variables within the entire Jewish area. (The spatial characteristics were taken in the context of the entire model for each of the small and extended models). Figures 7 and 8 show the smaller model and 9 and 10, the larger. These scattergrams show that neither of the systems correlate. Instead, we have a layering affect created by the fact that each ethnic band has a broad range of spatial factors.

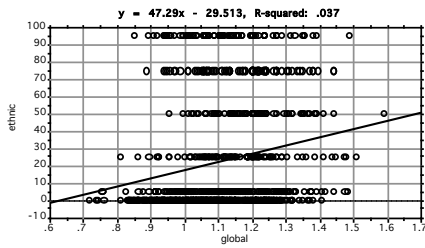


fig. 7 global/ethnic density, small model

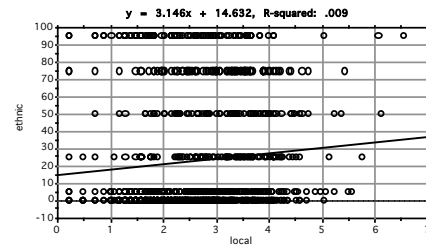


fig. 8 local/ethnic density, small model

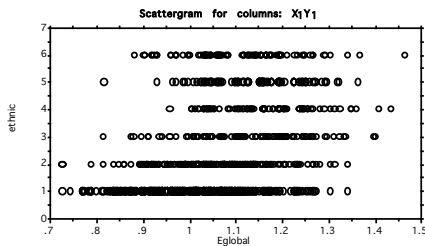


fig. 9 global/ethnic density, extended



fig. 10 local/ethnic density, extended

Whilst the previous scattergrams showed that integration values do not correspond with the Jewish measure when the streets were taken individually, the following t-tests determine whether the Jewish streets are different on average from the gentile streets by comparing the average spatial values for Jewish streets with those of the East End as a whole (A full explanation of t-test analysis may be found in Appendix B).

Figures 11 & 12, 13 & 14 show the results of the t-tests comparing spatial values for the Jewish area with the average spatial values of each of the two models of the East End. The first set of figures is for the smaller model, the second, for the extended model.

| One Sample t-Test X <sub>1</sub> : global |              |            |          |                 |
|---|--------------|------------|----------|-----------------|
| DF:                                       | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
| 1007                                      | 1.111        | .985       | 29.565   | .0001           |

fig. 11 t-test on global values, small model.

| One Sample t-Test X <sub>1</sub> : local |              |            |          |                 |
|--|--------------|------------|----------|-----------------|
| DF:                                      | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
| 1007                                     | 2.662        | 2.408      | 8.164    | .0001           |

fig. 12 t-test on local values, small model

| One Sample t-Test X <sub>1</sub> : Eglobal |              |            |          |                 |
|--|--------------|------------|----------|-----------------|
| DF:  | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
| 1007                                       | 1.064        | .958       | 27.263   | .0001           |

fig. 13 t-test on global values, extended model

| One Sample t-Test X <sub>2</sub> : E local |              |            |          |                 |
|--|--------------|------------|----------|-----------------|
| DF:  | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
| 1007                                       | 2.668        | 2.434      | 7.502    | .0001           |

fig. 14 t-test on local values, extended model

The t-tests show that in both models, the Jewish streets are, on average, significantly more integrated, both locally and globally, than the East End as a whole. We find that in the extended model, the averages are not quite as large as in the small model, but not significantly so. This means that although the levels of Jewish concentration do not correspond to integration patterns, we do find that the Jews are locating themselves in relatively more integrated streets.

The next stage of the analysis examines the Jewish area broken down into ethnic bands as defined by the Arkell map. Figures 15 and 16 give the results of t-tests comparing each band with the model as a whole. In addition to this, the average integration values for all non-Jewish lines is given at the top of table, while a repeat of the t-test shown above, for all Jewish streets, is given at the bottom for comparison purposes.

| band no. | %Jews       | DF   | Sample Mean | t Value | Prob. (2-tail) |
|----------|-------------|------|-------------|---------|----------------|
| 0        | 0           | 1479 | 0.899       | -20.306 | .0001          |
| 1        | 0≤5%        | 439  | 1.069       | 13.538  | .0001          |
| 2        | 5≤25%       | 209  | 1.120       | 15.231  | .0001          |
| 3        | 25≤50%      | 93   | 1.155       | 12.087  | .0001          |
| 4        | 50≤75%      | 77   | 1.195       | 15.690  | .0001          |
| 5        | 75≤95%      | 88   | 1.166       | 14.039  | .0001          |
| 6        | 95≤100%     | 96   | 1.116       | 10.319  | .0001          |
|          | all streets | 1007 | 1.111       | 29.565  | .0001          |

fig. 15 - Jewish band values for Global Integration; small model compared with all East End mean (The population mean given in the table is the mean global integration for all East End streets: 0.985)

| band no. | %Jews       | DF   | Sample Mean | t Value | Prob. (2-tail) |
|----------|-------------|------|-------------|---------|----------------|
| 0        | 0           | 2944 | 0.922       | -13.773 | .0001          |
| 1        | 0≤5%        | 439  | 1.013       | 10.144  | .0001          |
| 2        | 5≤25%       | 209  | 1.054       | 12.982  | .0001          |
| 3        | 25≤50%      | 93   | 1.125       | 13.211  | .0001          |
| 4        | 50≤75%      | 77   | 1.165       | 17.532  | .0001          |
| 5        | 75≤95%      | 88   | 1.140       | 17.075  | .0001          |
| 6        | 95≤100%     | 96   | 1.109       | 13.317  | .0001          |
|          | all streets | 1007 | 1.064       | 27.263  | .0001          |

fig. 16 - Jewish band values for Global Integration; extended model compared with all East End mean (The population mean is the mean global integration for all East End streets: .953)

Figures 15 & 16 show that within the Jewish area there is a definite pattern relating spatial factors to levels of Jewishness. The first aspect of the pattern is that the four lowest bands of Jewishness become increasingly more integrated with the rise in Jewish density. The second aspect is that after

reaching a peak of high integration, the two most Jewish bands decrease in their value of global integration.

Another point to be noted is that in both of the models, each of the individual bands is significantly more integrated than the average level for the Jewish area as a whole, whilst the group of all non-Jewish lines is significantly less integrated than the average for the entire East End.

These results were also examined in the form of a correlation analysis, in which each of the ethnic bands was assigned a number from 1 for band 0-5% to 6 for 95-100%. The average values for all gentile streets was assigned the number 0 and included in the analysis. These values were plotted against the average global integration figure for each of the Jewish bands. Figs. 17 & 18 are the scattergrams of these plots. They show a distinct pattern, as described above in the analysis of figures 15 & 16, of bifurcation between the lower five groups of ethnic density, which become more integrated, the denser they become, with the group of gentile streets having the lowest value; and the upper two bands, which become less integrated, the denser they become. Small model -  $r: 0.720$ , adjusted  $r$ -squared:  $0.421$ ,  $p=0.0683$ . Extended model -  $r: 0.837$ , adjusted  $r$ -squared:  $0.641$ ,  $p=0.0187$ . It is evident that by testing these variables in the context of both the smaller and the larger models, that the results are very robust.

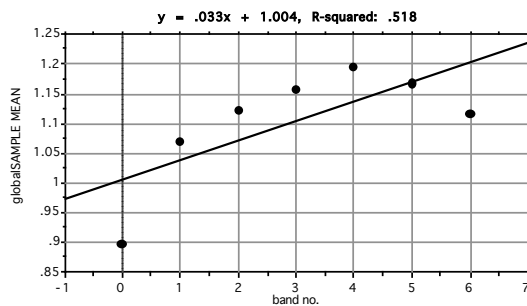


fig. 17 global/ethnic band no., small model

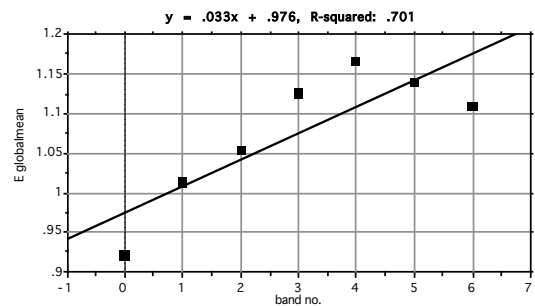


fig. 18 global/ethnic band no., extended model

If we repeat the exercise for local integration, we find the pair of tables in figures 19 & 20. It is notable that we again find a repetition of the growth in integration value correlating with the increase in Jewish density for the first four bands of Jewishness. We also see a repeat of the situation whereby the upper two bands of Jewishness decrease in integration values. We also observe that as with global integration, the decrease in values of the upper two bands, still leaves them with higher integration values than of the two lowest bands of Jewishness.

| band no. | % Jews      | DF   | Sample Mean | t Value | Prob. (2-tail) |
|----------|-------------|------|-------------|---------|----------------|
| 0        | 0           | 1478 | 2.236       | -7.640  | .0001          |
| 1        | 0≤5%        | 439  | 2.440       | 0.779   | *.4365         |
| 2        | 5≤25%       | 209  | 2.740       | 4.778   | .0001          |
| 3        | 25≤50%      | 93   | 3.036       | 5.995   | .0001          |
| 4        | 50≤75%      | 77   | 3.133       | 6.321   | .0001          |
| 5        | 75≤95%      | 88   | 2.981       | 5.679   | .0001          |
| 6        | 95≤100%     | 96   | 2.462       | 0.484   | *.6295         |
|          | all streets | 1007 | 2.662       | 8.164   | .0001          |

fig. 19- Jewish band values for Local Integration; small model compared with all East End mean. (The population mean is the mean local integration for all East End streets: 2.408) \* indicates insignificant difference.

| band no. | % Jews      | DF   | Sample Mean | t Value | Prob. (2-tail) |
|----------|-------------|------|-------------|---------|----------------|
| 0        | 0           | 2944 | 2.354       | -4.478  | .0001          |
| 1        | 0≤5%        | 439  | 2.445       | 0.273   | *.7850         |
| 2        | 5≤25%       | 209  | 2.740       | 4.398   | .0001          |
| 3        | 25≤50%      | 93   | 3.062       | 5.934   | .0001          |
| 4        | 50≤75%      | 77   | 3.143       | 6.190   | .0001          |
| 5        | 75≤95%      | 88   | 2.984       | 5.411   | .0001          |
| 6        | 95≤100%     | 96   | 2.466       | 0.288   | *.7737         |
|          | all streets | 1007 | 2.434       | 7.502   | .0001          |

fig. 20- Jewish band values for Local Integration; extended model compared with all East End mean. (The population mean given in the table is the average local integration for all East End streets: 2.434). \* indicates insignificant difference.

Unlike the table for global integration however, we find that the local values for the uppermost and the lowest bands of Jewishness are not significantly greater than those of the East End as a whole. In other words, the band with the least number of Jews and the band containing the most amount of Jews are actually quite close to the average local integration value for the East End - these bands are occupying streets with less than average integration.

The band values of 0-6 (band 0 is for all non-Jewish streets) were plotted against their average local integration values. The scattergrams in figures 21 and 22 show a distinct pattern (as described above with the comparison with global integration) of bifurcation between the lower five groups of density, which become more integrated, the denser they become, and the upper two bands, which become less integrated, the denser they become. It is apparent here that unlike with global integration, the local value for the uppermost band drops very sharply, almost to the level of the non-Jewish band - and as shown above, the streets with the most Jews, are occupying the below average integration parts of the model. This is especially significant when considering that the surrounding streets in the Jewish are so far above average.

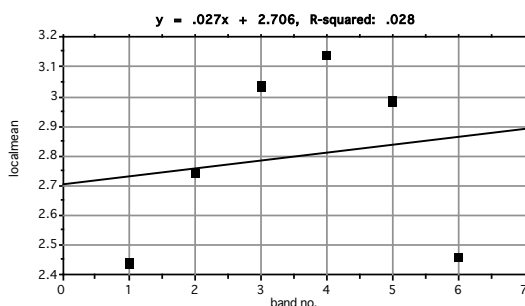


fig. 21 global/ethnic band no., small model

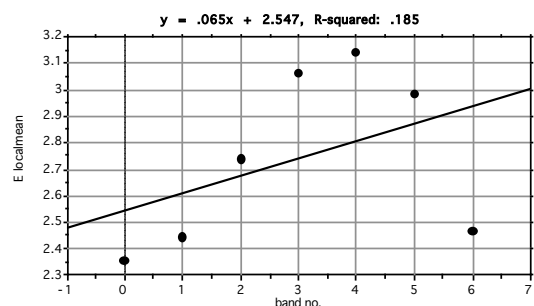


fig. 22 global/ethnic band no., extended model



Another set of tests relates to an internal comparison between the various bands of Jewish concentration. Figures 23 and 24 show the tables of the results of comparing average global integration within each of the Jewish bands with the average values for the Jewish area as a whole, whilst figures 25 and 26 show the results of the same comparison for local integration.

| band no. | % Jews  | DF  | Sample Mean | t Value | Prob. (2-tail) |
|----------|---------|-----|-------------|---------|----------------|
| 1        | 0-5%    | 439 | 1.069       | -6.635  | .0001          |
| 2        | 5-25%   | 209 | 1.120       | 1.177   | *.2405         |
| 3        | 25-50%  | 93  | 1.155       | 3.216   | .0018          |
| 4        | 50-75%  | 77  | 1.195       | 6.346   | .0001          |
| 5        | 75-95%  | 88  | 1.166       | 4.360   | .0001          |
| 6        | 95-100% | 96  | 1.116       | 0.470   | *.6396         |

fig. 23 - Jewish band values for Global Integration; small model compared with mean Jewish value (the population mean is the mean global integration value for all Jewish streets: 1.110.) \* indicates insignificant difference.

| band no. | % Jews  | DF  | Sample Mean | t Value | Prob. (2-tail) |
|----------|---------|-----|-------------|---------|----------------|
| 1        | 0-5%    | 439 | 1.013       | -9.523  | .0001          |
| 2        | 5-25%   | 209 | 1.054       | -1.289  | *.1987         |
| 3        | 25-50%  | 93  | 1.165       | 4.807   | .0001          |
| 4        | 50-75%  | 77  | 1.165       | 8.547   | .0001          |
| 5        | 75-95%  | 88  | 1.140       | 7.135   | .0001          |
| 6        | 95-100% | 96  | 1.109       | 3.982   | .0001          |

fig. 24 - Jewish band values for Global Integration; extended model compared with mean Jewish value (the population mean is the mean global integration value for all Jewish streets: 1.064.) \* indicates insignificant difference

| band no. | % Jews  | DF  | Sample Mean | t Value | Prob. (2-tail) |
|----------|---------|-----|-------------|---------|----------------|
| 1        | 0-5%    | 439 | 2.440       | -5.342  | .0001          |
| 2        | 5-25%   | 209 | 2.740       | 1.127   | *.2609         |
| 3        | 25-50%  | 93  | 3.036       | 3.571   | .0006          |
| 4        | 50-75%  | 77  | 3.133       | 4.107   | .0001          |
| 5        | 75-95%  | 88  | 2.981       | 3.161   | .0022          |
| 6        | 95-100% | 96  | 2.462       | -1.803  | *.0746         |

fig. 25 - Jewish band values for Local Integration; small model compared with mean Jewish value (the population mean is the mean local integration value for all Jewish streets: 2.662.) \* indicates insignificant difference

| band no. | % Jews  | DF  | Sample Mean | t Value | Prob. (2-tail) |
|----------|---------|-----|-------------|---------|----------------|
| 1        | 0-5%    | 439 | 2.445       | -5.360  | .0001          |
| 2        | 5-25%   | 209 | 2.740       | 1.034   | *.3024         |
| 3        | 25-50%  | 93  | 3.062       | 3.721   | .0003          |
| 4        | 50-75%  | 77  | 3.143       | 4.147   | .0001          |
| 5        | 75-95%  | 88  | 2.984       | 3.125   | .0024          |
| 6        | 95-100% | 96  | 2.466       | -1.818  | *.0722         |

fig. 26 - Jewish band values for Local Integration; extended model compared with mean Jewish value (the population mean given in this table is the mean local integration value for all Jewish streets: 2.668.) \* indicates insignificant difference

The earlier comparison between individual bands and the values for the entire system showed that the Jewish lines were overall more integrated, with the lowest band of Jewishness being the least globally and locally integrated. We find this point strengthened when comparing each of the bands with the average values for Jewish streets only, as besides the case of global integration in the

extended model, the lowest band of Jewishness is the only band sitting below the average global and integration values and it is also the only band with a significantly lower than average global and local integration value. We see that in figure **24** that band 2 is also below the average, but not significantly so (see the p-values which are .0001, significant, for band 1 and .1987, insignificant, for band 2).

The lowest band of Jewishness is also the largest band, covering 44% of all Jewish streets (439 out of 1007). It is possible therefore to find a strong factor distinguishing all of the least Jewish streets from all other streets - this is the group with the largest number of least integrating streets and these streets are significantly less integrated both globally and locally than the average for the entire model. As pointed out earlier, the fact that the band 1 streets are significantly below average, whilst all other bands are considerably above average, creates a sharp point of demarcation between band 1 and bands 2 to 6; the fact that band 1 is of close proximity to bands 2 to 6, throws it into sharp relief in comparison with its more densely Jewish neighbours.

Another notable point is the uppermost band of Jewishness. In the comparison made earlier with the average values for all the East End, it was found that it tends to occupy relatively less globally and locally integrated streets than bands 2 to 5. It was also found that band 6 was globally significantly more integrated than average, but locally, only slightly and insignificantly more integrated than average for all East End lines. In short, band 6, unlike band 1, is still part of the general pattern of bands 2 to 5 which all occupy significantly more integrated streets, despite the fact that the band 6 values are slightly lower than those of bands 2 to 5.

If we examine figures **23** to **26** we see that this situation is clarified. When band 6 was compared with the average global integration value for all East End lines, it was found that it was significantly more integrated than average (see figures **15** & **16**). However, when the average global integration value for band 6 is compared with the average for all Jewish streets only, we find a confirmation of the scattergrams in figures **17** & **18** which show how this band dips down towards the average for the Jewish lines and indeed, figures **23** & **24** show how band 6 is only slightly above average. It should be noted that we find here the first difference between the two models, whereby the extended model assigns relatively higher global integration values for band 6 in comparison with the average (see  $p=.0001$  in figure **24**) whilst the smaller model shows band 6 to be insignificantly more integrated than average (see  $p=.6396$  in figure **23**).

The marginally greater than average local values which were shown for band 6 in figures **19** & **20** are given greater clarity when band 6 is compared with the Jewish streets only; we see here in figures **25** & **26** that band 6 has below (Jewish) average local integration, but not significantly lower than average, as was found for band 1.

Figures 27 and 28 are scattergrams showing the average step depth values from the main global integration structure<sup>64</sup> lines of the Jewish streets. Each band was assigned a number from 1 to 6, with band 1 for 0<5%, to 6 for 95-100% Jews, shown on the y axis whilst the average step depth for each band was plotted on the x axis.

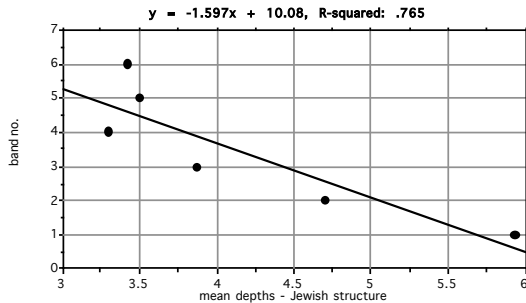


fig. 27: distance from global integration structure plotted against bands of Jewishness - small model. (r: .832, adj. r-squared: .631, p=.0202)

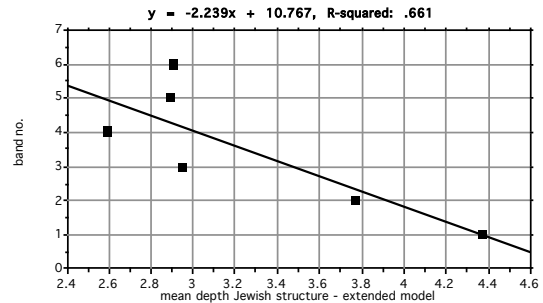


fig. 28: distance from global integration structure plotted against bands of Jewishness - extended model. (r=.813, adj. r-squared: .576, p=.0491)

These scattergrams show that the global integration structure is connected by only a few steps to most of the lines in the Jewish East End. In contrast to this, the average step-depth for the non-Jewish streets is exceedingly lower than even the lowest band of Jewish streets. For instance, the average step-depth for band 1 (0-5% Jews) in the extended model is 4.373, whilst that of all non-Jewish streets is 6.254.

We also see that the upper three bands of Jewishness cluster much closer to the global integration structure; all of these have a depth no greater than 3.5 steps in the small model and 3 steps in the extended model.

We also find a reversed correspondence between depth and Jewish density; the more Jews in a street, the closer it becomes, on average, to the main integration core of the Jewish street. Whilst the uppermost two bands reverse this trend, by becoming relatively segregated from the main integration structure

In contrast to this, the lowest band of Jewishness, of 0<5% Jews, is over-performing along the regression line, signifying that this band is significantly farther away from the integration core, as was indicated in the earlier tests described above. It is also evident that the extended model works slightly better to predict this finding, both with a stronger correlation value and with a more clearly defined dip from band 4 to 6.

#### 4. Dispersal of Institutions - Related to Spatial Variables

<sup>64</sup> The global integration structure was defined as the streets possessing top 1% of integration values. (The integration structure is normally defined as the top 10% or 5%, but since the Jewish streets are so close to the core, a larger selection would have obscured the picture.)

Plate 3 below shows the dispersal of Jewish Institutions in the East End. Plate 3 shows a couple of distinct features of the dispersal of Jewish institutions in the Jewish East End. First, as was quoted from Lipman in the introduction of this section, the institutions tend to cluster at the western side of the Jewish East End. Another notable feature is the large number of institutions that are to be found on the most integrated lines in the area. However, it is also evident that relatively few institutions are on the very highest integrators, Mile End Road and Commercial Road East. Instead, the biggest clusters occur one or two steps off from these streets. One other feature is that the largest group appearing is that of the religious institutions; although this may be a result of the more comprehensive information that was available on this type.

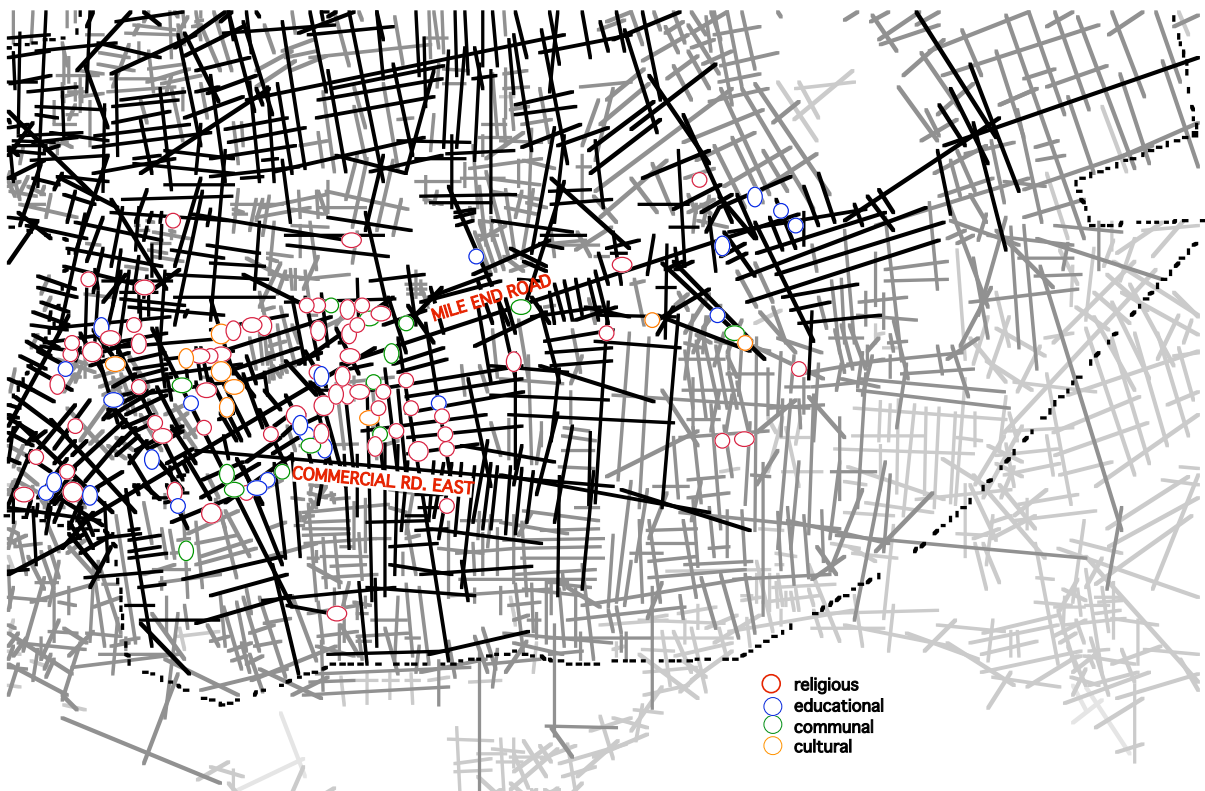


Plate 3 institutions overlaid on local integration

Figures 29 to 31 show the box plots which were created in order to describe the spatial characteristics of the streets which have institutions. Figure 29 shows the general distribution of spatial values for all Jewish streets, showing the similarity between the two sizes of models. The same plot (with a locked scale) was used in figure 30 to give the breakdown of Jewish streets among the various institution types. (E = extended model).

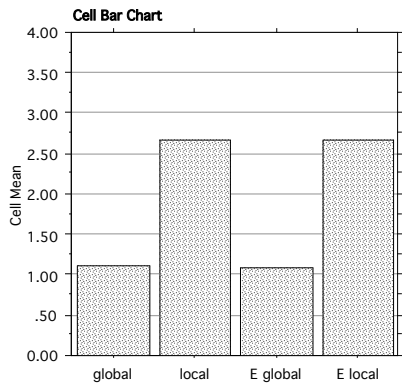


fig. 29: Spatial values for all Jewish streets

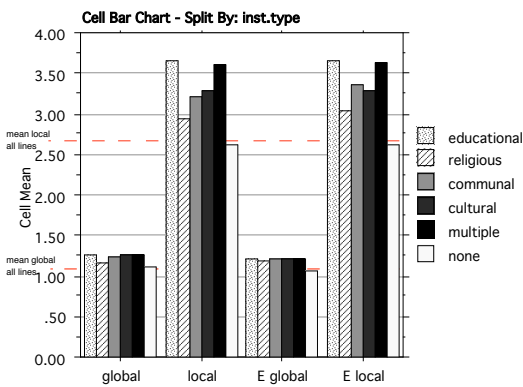


fig. 30: Spatial values for all Jewish streets split by institution type

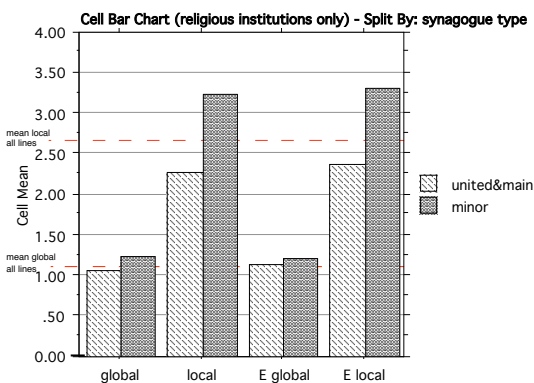


fig. 31: Spatial values for all religious institution streets split by synagogue type

Figure 30 shows that the values for global integration are quite undifferentiated. However, it is evident that the values for local integration are distinctly different among the various types of institutions; streets without institutions ('none') are significantly less locally integrated than the institution lines, and the only group of lines below the (dotted) line of average integration values. In other words, all the streets with institutions are above the average integration for Jewish lines.

Figure 30 shows that the most locally integrated group of streets is those with educational institutions. It also shows that among the institution lines, the consistently least integrated group is that of streets with religious institutions. However, the religious institutions can be divided into two groups; figure 31 shows the distribution among religious institutions, between the United Synagogue movement and

other 'established' synagogues and the minor synagogues - local synagogues and those belonging to the 'Federation' (see appendix C on synagogues in the East End). This shows that the major synagogues are pulling the average integration of the group of religious streets below the dotted line (of average integration for all Jewish streets); when broken down, it is evident that the local synagogues are in similar rank order as the communal and cultural streets, whilst the main synagogues are lesser in value even than the non integration lines. Indeed, they are only marginally greater in local and global integration value than the average for all East End lines.

Figure 32, which gives the results of t-tests comparing institution and non-institution streets, shows that streets with institutions are significantly more integrated than 'none' Jewish streets.

|                 | DF | Sample Mean | Pop. Mean | Prob. (2-tail) | Prob. (2-tail) |
|-----------------|----|-------------|-----------|----------------|----------------|
| global          | 71 | 1.207       | 1.103     | 6.596          | .0001          |
| local           | 71 | 3.205       | 2.617     | 4.594          | .0001          |
| extended global | 71 | 1.198       | 1.055     | 11.901         | .0001          |
| extended local  | 71 | 3.277       | 2.622     | 5.216          | .0001          |

fig. 32 - t-test results for comparison between Jewish streets with institutions and Jewish streets without (the population mean given is the mean spatial values for Jewish streets without institutions)

If we examine the t-test in figure 32a, which compares the average 'ethnic'<sup>65</sup> value for all 'none' Jewish streets with that of institution streets, it is clear that the streets with institutions are occupying much more densely Jewish streets.

**One Sample t-Test X1: ethnic**

| DF: | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
|-----|--------------|------------|----------|-----------------|
| 61  | 4.081        | 2.461      | 8.171    | .0001           |

Note: 10 cases deleted with missing values.

It is also possible to break down the group of communal institutions according to major institutions; headquarters of communal institutions and burial grounds, which would be expected to relate to the Jewish community as a whole, and minor institutions: local institutions such as charities and soup kitchens. Figure 33 shows this breakdown. Although the breakdown is not as dramatic as for religious, it is evident that the major institutions are more locally integrated than the minor, whilst the values for global are quite similar.

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<sup>65</sup> The 'ethnic' value is determined by assigning a value of 1 to a street which is in band 0<5, 2 for band 5<25 and so on. Therefore, the lower the 'ethnic' value of a street, the less Jews are to be found on it. The 10 missing values are those streets which are outside the Adler map of Jewish East London.

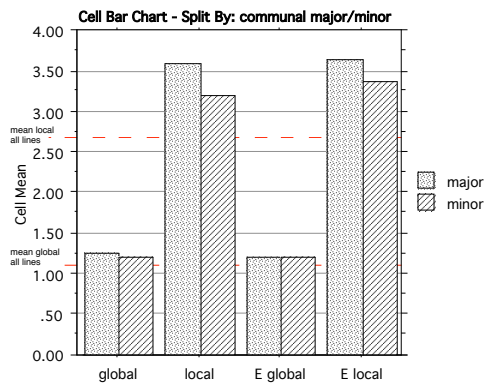


Fig. 33: Spatial values for all communal institution streets split by communal type

If we look at figures 34-37, we see an examination of another of the characteristics of the East End Jewish institutions, that is noticeable both from plate 3 (above) and from the list of institutions that follows it, namely that some of the institutions tend to cluster, with more than one type of institution located on a street, and in some cases, several types and numbers of institutions in one street. The average institutions per street for each institution type were plotted against the average global integration values for each institution type.<sup>66</sup>

Figures 34-37 show that the clustering phenomenon is linked to global integration values (this was found not to be the case for local). Figures 34 and 35 show the global integration values for each of the spatial models plotted against all institution types. The institution categories used for figures 29-31, used here were as follows: educational, cultural, religious broken down into United & main and minor, communal broken down into major and minor. They show a tendency towards a correlation between the number of institutions on a street ( of any sort) and the global integration value of a street - the more institutions on a street, the more likely it is to be integrated globally.

<sup>66</sup> These figures were created first, by summing up the total number of institutions appearing on each street in the system (in the main statistical table), and then creating from this, a table of averages for each institution type. As all types of institution were summed up in the main table, the averages per institution type reflect the co-presence of all types of institution; therefore, an average of 1.5 for minor synagogues reflects both the fact that these appear relatively infrequently, and that this type is relatively isolated, i.e. it is not clustered with others of its own type or with other institutions of any type. On the other hand, we see that the figure for cultural institutions is the highest in all cases; reflecting the fact that this institution type is both highly integrated and that it tends to be clustered with other institutions.

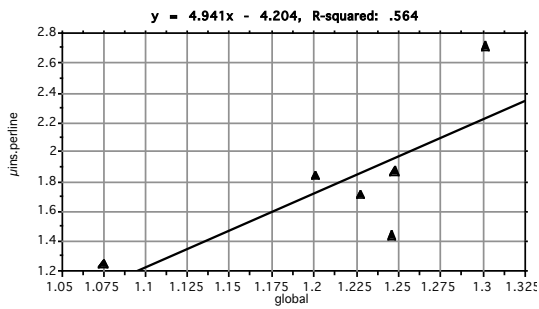


Fig. 34 average small model global integration values for each institution type plotted against the average number of institutions ( $r: .751$ , adj.  $r$ -squared:  $.455$ ,  $p= .0852$  - insignificant)

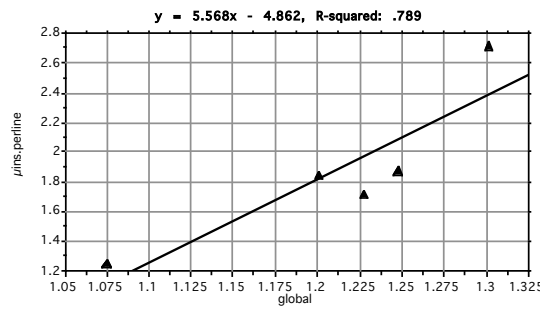


Fig. 35 average small model global integration values for each institution type plotted against the average number of institutions with school outlier removed ( $r: .888$ , adj.  $r$ -squared:  $.719$ ,  $p= .0440$  - significant)

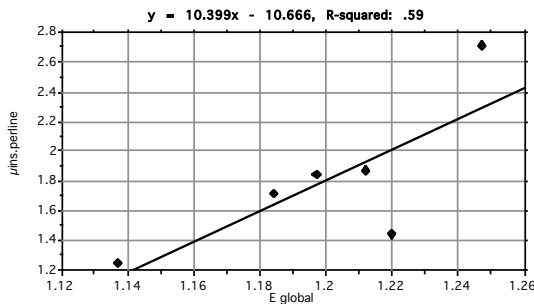


Fig. 36 average extended model global integration values for each institution type plotted against the average number of institutions ( $r: .768$ , adj.  $r$ -squared:  $.488$ ,  $p= .0743$  - insignificant)

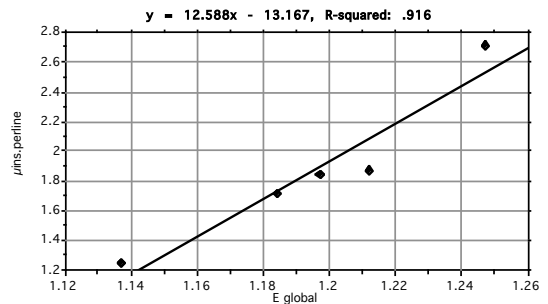


Fig. 37 average extended model global integration values for each institution type plotted against the average number of institutions with school outlier removed ( $r: .957$ , adj.  $r$ -squared:  $.888$ ,  $p= .0106$  - significant)

Educational institutions are not only distinguished as having the highest local integration value, but are also found to act as an outlier in figures 34 and 35 by having greater global integration, on average, then would be predicted from the number of institutions to be located on it. If we remove the educational institutions from the scattergram, as shown in figures 36 and 37, we see a very strong correlation between the number of institutions on a street and the integration value of that street. It may be concluded that clustering tends to occur in more globally integrated streets - or that more globally integrated streets attract more institutions. It should be pointed out that in both cases, the correlation was only statistically significant for the extended model.

Two factors were noted above, in relation to the various institutions. First, major synagogues are not linked to the spatial characteristics of the Jewish East End and second, major communal institutions, such as the Board of Shechita (ritual slaughter) are more globally integrated than local. These two types of institution have in common that they relate to the Jewish community of London as a whole, rather than to the local East End community. It could be conjectured that this type of institution chose globally integrated sites, due to their importance for the Jews of London as a whole, not only those that live in the East End. Therefore the following set of t-tests checks the hypothesis that the institutions which serve the community as a whole, defined as transpatial, would have different global and local integration values to local or 'spatial' institutions.



A set of paired t-tests<sup>67</sup> (see figure 38) was conducted on the global and local integration variables of these two groups, which compared the spatial and transpatial, institutions.<sup>68</sup> Although no differences were found within the entire group of institutions, it was found that within the clustered institutions, global integration was considerably higher, on average, among the transpatial than among the spatial group. This distinguishing factor is more significant in the extended model. (This finding did not stand for local integration values) This finding strengthens the findings given above, that the transpatial institutions are related more closely to the global structure, and do not choose to differentiate themselves locally. This may be further confirmed by the finding that the group of transpatial institutions occupies significantly less Jewish streets than the average for all other institution lines. This is shown in the t-test in figure 38a, comparing the average 'ethnic' value for the transpatial institutions with that of all other institutions lines.

|   | Mean x y | Paired t Value | Prob. (2-tail) |
|---|----------|----------------|----------------|
| transpatial global/ spatial global          | 0.119    | 3.228          | *.0841         |
| transpatial local/ spatial local            | 1.506    | 1.764          | ^.2197         |
| extended transpatial global/ spatial global | 0.200    | 7.793          | .0161          |
| extended transpatial local/ spatial local   | 1.613    | 2.091          | ^.1717         |

fig. 38 - Paired t-test results for comparison between Jewish streets with transpatial institutions and Jewish streets with spatial institutions. The t-tests for global values show reasonable significance. \* note: only marginally significant. ^ note: insignificant

| DF: | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
|-----|--------------|------------|----------|-----------------|
| 11  | 2.333        | 4.091      | -2.473   | .0309           |

fig. 38a

## 5. Background to the Analysis of Economic Values

The assignment of economic values in numeric terms was in the same method as described above for the Arkell map, i.e. the predominant colour on the street space was assigned to the corresponding axial line and its spatial values.

The economic values used here are those given by Booth for 'the East End and Hackney'<sup>69</sup>. Booth's class descriptions are given numerical values in this analysis, (i.e. A=1 and so on.)

<sup>67</sup> Similar to an ordinary t-test, the paired t-test compares the averages of two measurements from the same unit; between two categories within a group - in this case global integration for spatial institutions was compared with global integration for transpatial institutions, local for spatial with local for transpatial etc.

<sup>68</sup> The institutions defined as transpatial were: communal institution headquarters, the Boards of Guardians and of Shechita, burial grounds and the United and main synagogues.

<sup>69</sup> Booth, 1969, volume 1, 34-36. This table is copied from part 1 of the analysis.

|               | <b>class description</b>                     | <b>% pop.</b> | <b>colour</b> |
|---------------|--|---------------|---------------|
| 1. Class A:   | Lowest Class. Vicious - semi criminal        | 1.25%         | black         |
| 2. Class B:   | Very Poor, casual Chronic want.              | 11.22%        | navy          |
| 3. Class C:   | Poor. 18s to 21s a week for moderate family. | 8.33%         | light blue    |
| 4. Class D+E: | Mixed. Some Comfortable, others poor.        | 56.74%        | purple        |
| 5. Class F:   | Fairly comfortable. Good Ordinary earnings.  | 3.60%         | pink          |
| 6. Class G:   | Middle Class. Well to do                     | 3.86%         | red           |
| 7. Class H:   | Upper Middle Class and Upper classes.        | 5.02%         | gold          |
|               | Wealthy                                      |               |               |
| Total         |  | 100.00%       |               |

The table above is broken up by the divisions made by Booth, namely, Class A is considered a separate class (and is significantly smaller); Classes B and C are 'normal' poverty classes; Classes D to G are the various Middle Classes; whilst Class H covers all classes above Upper Middle. Class H is not represented in any of the streets examined for this study.

## 6. Analysis of Economic Values

The distribution of economic classes among the various economic bands can be seen in figures 39 and 40. Figure 39 lists the percentage distribution of each economic class in the Jewish East End as compared with the entire East End. Figure 40 shows a univariate plot of the average class distribution among all East End streets (according to the Booth figures) in comparison with the class distribution among all Jewish streets. Class H has been excluded due to it not appearing in any of the Jewish streets.

| <b>Class:</b> | <b>A</b> | <b>B</b> | <b>C</b> | <b>D&amp;E</b> | <b>F</b> | <b>G</b> | <b>H</b> |
|---------------|----------|----------|----------|----------------|----------|----------|----------|
| All East End  | 1.25     | 11.22    | 8.33     | 56.74          | 3.60     | 3.86     | 5.02     |
| All Jewish EE | 0.11     | 3.85     | 14.40    | 17.25          | 35.50    | 28.90    | 0.00     |

Fig. 39 Values for Economic Bands comparison of means

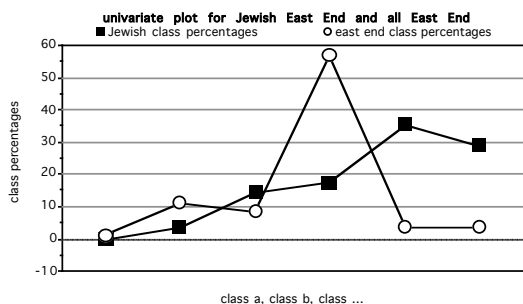


Fig. 40 Univariate plot of Jewish and East End class percentages.

Two factors are evident: firstly, the lower classes (classes A to C) are more or less comparable in the two cases. On the other hand, of the three middle classes, the lowest is much smaller in the Jewish East End than the average for the area, whilst the other two middle classes are over-represented in the Jewish East End in comparison with the area as a whole. (not disregarding the total absence of the upper class H):.

Both in the lower and the middle classes, the top band within that category is larger than average in the Jewish East End than in the East End as a whole.

Figure 41 is set of histograms showing the distribution by percentage, of economic classes within each of the bands of Jewish density.

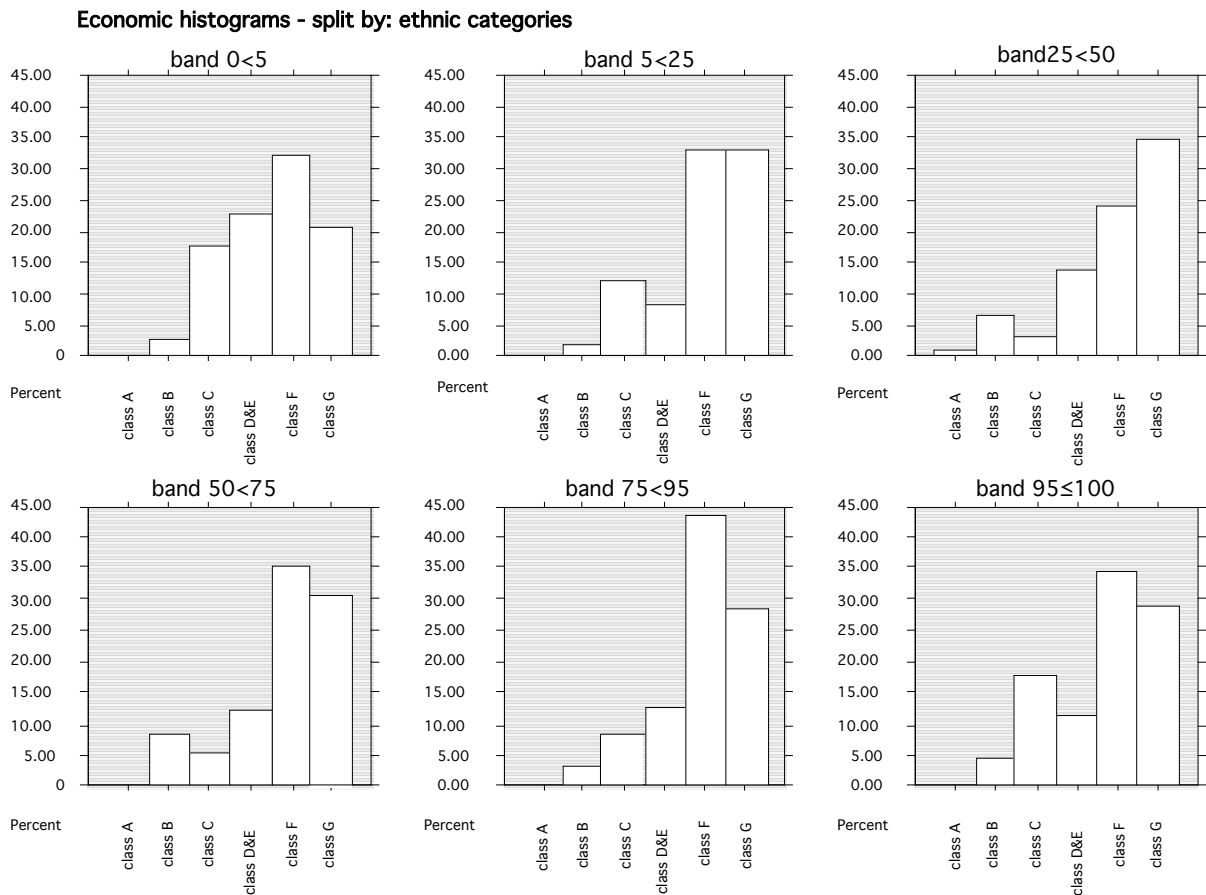


Fig. 41 Histograms of the six economic bands, split by ethnic classes.

We see that the lower classes (shown here as the left-hand set of bars in each of the histograms) are consistently low, below 13% among the middle four bands of Jewishness. On the other hand, in the most and least dense Jewish bands (0<5% and 95<100%), class C reaches beyond 17%.

The middle classes are distributed as follows: First, class D&E is significantly greater in the least Jewish band than in the rest of the Jewish bands - 22% in band 0<5 as compared to 7-12% in the rest of the bands. Class F is steady across all the bands, aside from the 75<95 band, in which it is significantly greater. Class G grows steadily towards the 50% point, from which it descends.

## 7. Analysis of the Jewish Core

The analysis up to now has advanced the theory that there is a factor distinguishing the 'core' of the Jewish East End (those streets coloured blue) from the rest of the Jewish streets, by showing that the

50-75% mark acts as a cut-off point for the economic and ethnic factors. This theory is examined in the following analysis, which studies the pattern of density distribution with a step-depth test.

If we make a comparison between relative densities and step-depth<sup>70</sup> from the perimeter of the entire Jewish East End, we find that in general, the denser the Jewishness, the farther it is from the perimeter (see figure 42). However, if we look at the Arkell map (see pages preceding the 1895 analysis), we can see that the upper 50% streets (those coloured blue) are surrounded on three sides by the lower 50% streets, so despite their being on the western edge of the Jewish quarter, the densest Jewish streets are closest, in most cases, to Jewish rather than non-Jewish streets.

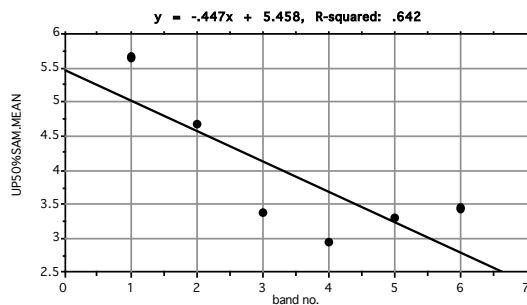


Fig. 42 average step depth from Jewish East End perimeter plotted against Jewish band numbers

This exercise has shown that the upper percentages of Jewish streets are concentrated in a core, with the most Jewish streets being contained in the interstices of that core, probably due to their being stepped back from the street structure

### III. - 1695 Data

#### Background to the 1695 Data

A comparative set of data to the 1895 analysis was provided by the map of London from 1695 along with data on the Jewish settlement in the City of London in that period. (See over-leaf an overlay on the Ogilby and Morgan map, which shows the extent of the spatial model and the 'Jewish' parish boundaries)

The axial map for London of this period was taken from the map created by Julienne Hanson for her doctoral thesis of 1989. This map, which was contained within the City walls, was expanded for this study to the extents of the City boundaries (thus including a number of parishes outside the city walls) and taken from the Ogilby and Morgan map of 1676 (see outline of extents of axial map on the

<sup>70</sup> Step depth analysis gives a picture of the number of steps, or changes of direction that a street system is away from a specified street or streets. The selected line is given a value of 0, all the lines connected to it are at depth 1 and all the lines connected to those, are at depth 2 and so on. Therefore the lower the depth value of any street in the system, the closer it is to the selected street.

overlay over-leaf. The Ogilby and Morgan map was taken from the following source (which includes an index of street names):

Hyde, R. (notes), Fisher, J and Cline, R. (index): *The A-Z of Restoration London* (reduced version of Ogilby and Morgan's 1676 Large and Accurate Map of the City of London); Guildhall Library, London 1992.

The data on the Jewish settlement was extracted from the following text, which lists all Jews residents within and without the City walls, along with a calculation of the percentage of Jews to gentiles in each parish:

Arnold, Arthur P.: *A List of Jews and Their Households in London, Extracted from the Census Lists of 1695*; Jewish Historical Society of England, 1962.

It is important to clarify a possible confusion rendered by the title of this book by Arnold - since censuses were not carried out at the time in question, it is probable that Arthur Arnold was referring to the assessment made in 1695 for poll tax. This assessment was a result of the 1694 Act which was created in order 'to provide revenue, for carrying out the war against France, by levying taxes upon burials, births and marriages and annual dues upon bachelors over 25 years of age and upon childless widowers.'<sup>71</sup> The implementation of the Act necessitated a complete and accurate enumeration of the population.

It is interesting to note that the basis of the enumeration in London was the parish, in contrast with the more usual ward basis. This necessitated double checking to avoid evasion and the parish register was enlarged to include every marriage, birth, christening and burial in the parish. Even stillbirths were to be noted. Minority populations such as Quakers, Roman Catholics and Jews had the added burden of reporting marriages within five days (due to the tax levy this created); similarly, deaths were liable for a set of bureaucratic certification as to the deceased's situation prior to death. An additional factor important to this analysis is the definition of 'substantial households', which were defined as having a personal estate worth not less than £600 or real estate worth not less than £50 per year. According to Glass (1966, xx), 'The category so defined must have been very much the upper part of society in respect of income and status; for the eighty parishes [of the City of London], the proportion amounted to approximately 27 per cent'. Due to the fact that the £600 assessment is included in the Arnold text, it is possible to create a picture of the relative and absolute economic situation of Jews of that period. In addition to this economic data, the extract reproduces the comments on profession which were attached to the census.

It should also be noted that the Jews were occupying two of the poorest parishes in the city (St. James, Dukes Place and All hallows London Wall), the other three were also in the lower ranks, with

only 20-29% of 'substantial' households. According to Glass, this was part of a general picture of the poorer parishes being near the periphery, especially outside the Walls, with the proportions of substantial households growing towards the centre. This corresponds with the picture of the pre-industrial city discussed earlier in this paper (in part A), in which the centre of the city tends to be occupied by the richest classes.

Due to the fact that precise street locations are only given in the census 'without' (outside) the City walls, the analysis relates to parish percentages rather than percentages for a single street space, as was possible in the 1895 analysis. It is evident from examining the original records in the Guildhall (London Guildhall: *London Inhabitants Without the Walls*; Records Office Guildhall, typed list from 1695 assessment list.) that Arnold did not omit the addresses by accident. The parishes within the City walls generally comprised a very small number of streets in comparison with those outside the walls and the provision of precise street addresses outside the walls is probably (according to experts consulted at the Guildhall) due to these parishes being considerably larger than those within the City walls, necessitating greater precision in pinpointing the location of households for tax purposes.

According to Arnold (1962), at the time of the tax census of 1695, the city of London Within the Walls comprised 97 parishes and the city of London Without the Walls, 3, the latter being again subdivided into a number of precincts. Only 48 of the 110 parishes had any Jewish inhabitants at all (44%), while 681 of the 850 Jews extracted from the list (80% of all Jews counted in the Census) were found in a cluster of six parishes. These six parishes, noted by Arnold as being the main Jewish cluster, are all within the walls. They have on average 9.3% Jews to gentiles, whilst the rest of the parishes have such low proportions as to render them indefinable as 'Jewish' parishes. The six parishes were those chosen for study in this analysis.

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<sup>71</sup> Glass, D. V., 1966, ix.

## 1. Spatial Analysis

If we examine Plates 4 and 5 over-leaf we find several noticeable features. First, the Jewish parishes are clustered on the eastern side of the City. Second, they are located, especially in the case of the Local integration map, on the most integrated streets in the system.



Figure 1 shows the global to local correlation for the entire system. Taking the same variables, but limiting the range to the sample area, (see fig. 2) we find there is a much greater correspondence between the two elements than when considering the system as a whole. This duplicates the findings from the 1895 analysis.

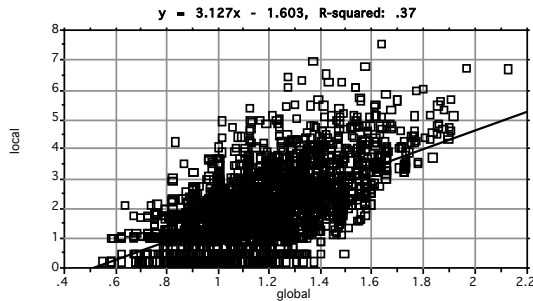


fig. 1 Intelligibility, entire system

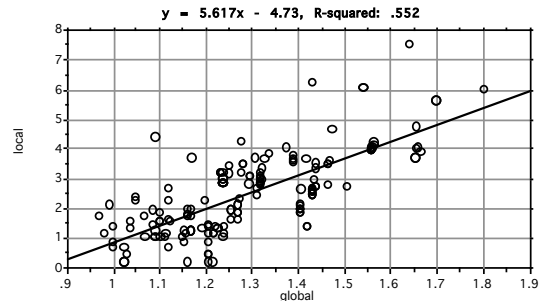


fig. 2 Intelligibility, Jewish streets only (r: 0.743, adjusted r-squared: .549, p=0.0001)

If we look at the correspondence between the ethnic factor and the spatial variables in figures 3 and 4 we find that neither of the systems correlate. Instead, we have a layering affect created by the fact that each band has a broad range of spatial factors. It is also apparent that there is a sharp disparity between St. James Parish, which has a very high proportion of Jews to gentiles, in comparison with the other five top parishes. This finding also duplicates the 1895 analysis.

Despite the fact that there is no correlation between integration values and levels of Jewishness, as in the 1895 map, (see figures 3 and 4), t-tests of 1695 Jewish London (see figure 5) shows that it is significantly more globally integrated that the average for the entire model; this means that although the levels of Jewish concentration do not correspond to integration patterns, we do find that the Jews are locating themselves in relatively more integrated streets.

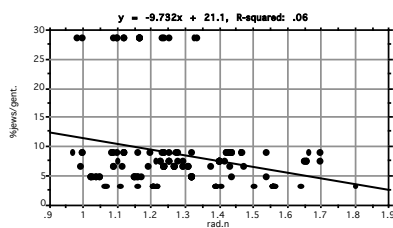


fig 3 global/ethnic values

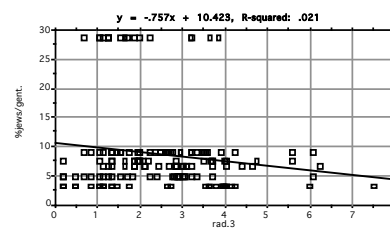


fig. 4 local/ethnic values

**One Sample t-Test X1: global**

| DF: | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
|-----|--------------|------------|----------|-----------------|
| 167 | 1.295        | 1.174      | 8.867    | .0001           |

fig. 5 t-test comparing mean global for 'Jewish' parishes compared with mean global for all steets.

We see that the Jewish streets are significantly more integrated than the model as a whole. The same test for local integration (figure 6) shows a significant larger average local value for the Jewish streets than for the entire model:



| One Sample t-Test X1: local |              |            |          |                 |
|-----------------------------|--------------|------------|----------|-----------------|
| DF:                         | Sample Mean: | Pop. Mean: | t Value: | Prob. (2-tail): |
| 167                         | 2.543        | 2.067      | 4.625    | .0001           |

fig. 6 t-test comparing mean local for 'Jewish' parishes compared with mean local for all steets.

Each of the parishes was plotted against the average spatial variables for all its streets. Figure 7 shows the results of correlations made between the various spatial variables and the percentage of Jews to gentiles: ( $r: .783$ , adj.  $r$ -squared:  $.516$ ,  $p=.0657$ ). Figure 8 shows the same correlation for local (The value for local is as follows: ( $r: .83$ , adj.  $r$ -squared:  $.612$ ,  $p=.0407$ ))

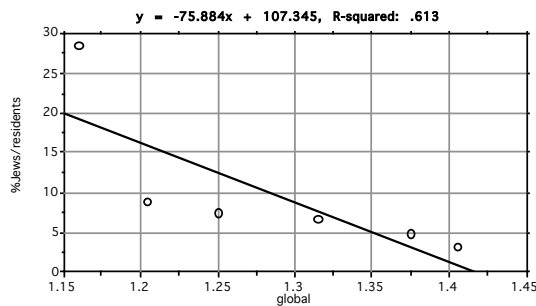


fig. 7 % Jews to Gentiles in parish plotted against mean global integration for each 'Jewish' parish.

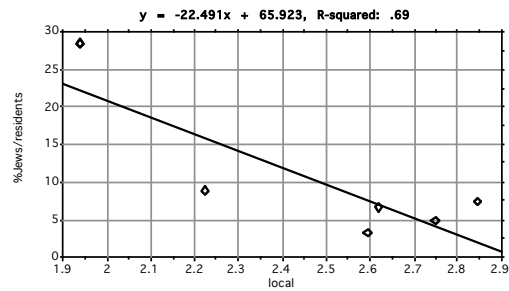


fig. 8 % Jews to Gentiles in parish plotted against mean local integration for each 'Jewish' parish.

This pair of scattergrams shows that in general, the greater the percentage of Jews in a parish, the higher the local and global values for that parish. If we now compare these spatial factors with the real number of Jews, on a parish by parish basis, we find these relationships becoming even greater (see figure 9:  $r: .900$ , adj.  $r$ -squared:  $.762$ ,  $p=.0146$ ).

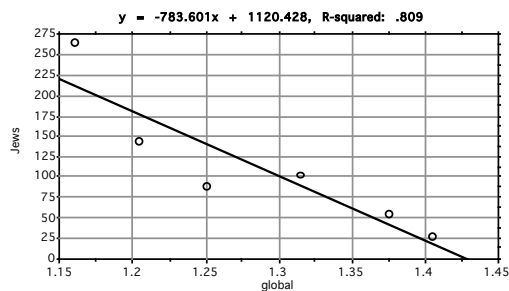


fig. 9 'Jewishness' of parish plotted against mean global integration for each 'Jewish' parish.

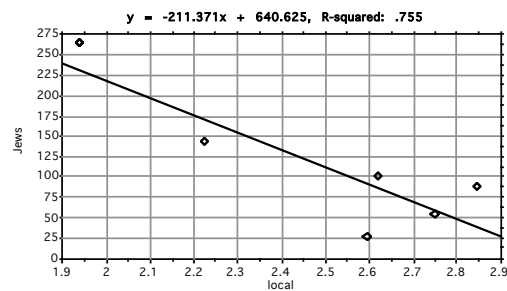


fig. 10 'Jewishness' of parish plotted against mean local integration for each 'Jewish' parish.

The correlation for local to real numbers of Jews is also stronger than with the proportion - see figure 10 ( $r: .869$ , adj.  $r$ -squared:  $.693$ ,  $p=.0248$ )

It seems evident that there is a clear relationship between spatial variables and both the real and the proportionate number of Jews. Any doubt that this is a factor related to the size (of the population) of the parish - i.e., that spatial factors are simply relating to the overall numbers of the population, can be allayed by comparing total population figures with the spatial factors, which give the following non-correlating results (see figures 11 and 12).

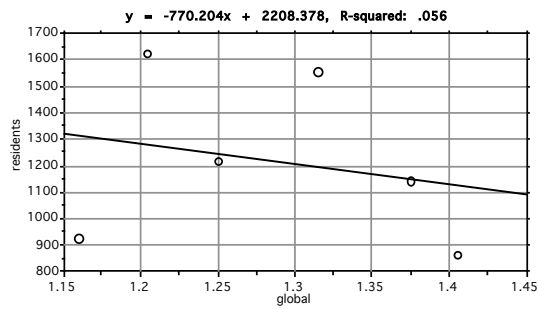


figure 11 mean population/global

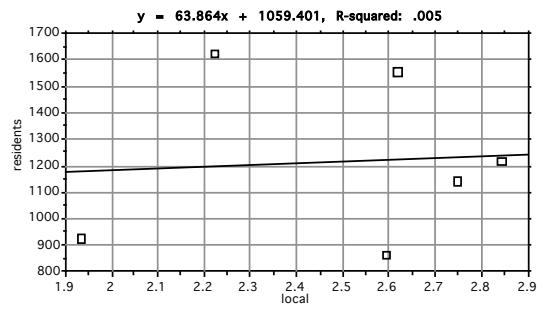


figure 12 mean population/local

An additional check was done by correlating the number of axial lines (another measure of parish size) and the spatial factors - the lack of correlation seen in figures 11 and 12 was replicated. Nor did studies of economic variables bring significant results.

#### IV. Statistical Analysis Summary

The spatial analysis showed that the majority of Jews were occupying the most well-connected, most easily negotiated streets of the area, with a strong correspondence between Jewish density and spatial integration.

The analysis of the spatial and ethnic variables showed that overall, the Jews are located in the most integrated streets. The band of streets containing the least Jews is still more integrated than the system as a whole, yet is much less integrated than the more densely Jewish streets. It could also be submitted that the integration factor is not only distinguishing between Jewish and non-Jewish streets, but also influences the percentage of Jews to gentiles, with more gentiles on a street being linked to less integration.

This group of findings also points to the conclusion that there is a distinguishing factor which is making the top two bands act differently from their less densely Jewish counterparts.

Step-depth analysis starts to strengthen the findings discussed above - the two top bands are evidently, not only slightly less integrated, but demonstrably step back from the core of integration. The relative distance of the least Jewish band of streets and moreover, of the non-Jewish streets from the integration core, also strengthens the findings above of the average integration values for these groups.

The institution analysis advanced the possibility that the location of institutions is linked to the location of the core of Jewish settlement, which had already been ascertained to be on the western side of the Jewish East End, where the integration core is located, and where the 50% and over Jewish streets are to be found. Plate 3 strengthens this finding by demonstrating that the majority of Jewish

institutions are located on the western side of the Jewish East End, which is visibly (see Arkell map) the location of the blue, core streets of Jewish settlement.

It might also be significant that the difference between 'non-institution' streets and institution streets is much stronger for local values; it could be conjectured that Jewish institutions are related to the local, rather than the global, patterns of space.

A tentative (due to the small number in the sample ) conclusion regarding differences between major and minor charitable institutions might be that the charitable institutions do not choose 'prime' sites as locations, rather choose convenient locations for the neighbourhood. Headquarters of institutions, such as the Board of Shechita (ritual slaughter) may have chosen more integrated sites, due to their importance for the Jews of London as a whole, not only those that live in the East End.

The fact that local synagogues have above average local integration may be due to a similar cause; a reflection of their position, as maintained in Part 2 of this paper, as the pivot and centre of communal life. It may be said that this is the spatial realisation of the local solidarity. It should be pointed out, however, that unlike the established synagogues, these buildings were not spatially distinguished from their immediate surroundings, and did not advertise their presence to the street. Indeed, as shown in appendix C, the purpose-built synagogues were generally constructed on in-fill sites which tended to be located away from the street frontage.<sup>72</sup>

The fact that the local synagogues are not spatially distinguished, despite their importance as centres of social and educational activity, in addition to religious activity, is not dissimilar to the position of local churches in the 17th century City of London - according to Hanson (1989, 282) 'the siting of the parish church within the parish seems equally arbitrary...There is no evidence for the provision of an enlarged public open space close to the church to act as a natural focus for local activity.' This might be explained by the fact that the activities offered by the minor type of synagogue are so localised in nature that it does not need to advertise itself to its surroundings. Indeed, appendix C states that many of the local synagogues were even less related to the local structure of space, by nature of the fact that they were connected with a group distinguished by trade.

Analysis of transpatial institutions suggest there seems to be a disassociation of the transpatial institutions, which are meant to serve the Jewish community of London as a whole, from the local Jewish community.

It seems that from the point of view of the institution dispersal, two spatial structures prevail: the global integration structure, among which transpatial institutions tend to occur in clusters; and the local

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<sup>72</sup> For instance, 'The Chevra at 35 Fieldgate St. was said to have been ... "approached through a somewhat dingy passage, and is built in the same way as many workshops in the locality on what was originally an open space at the back of the house... several such synagogues were admitted."' quoted by Glasman, 1982.

integration structure, in which it is found that spatial institutions tend to occupy significantly more locally integrated streets. It might also be concluded that there is a third set of institutions - the synagogues,, which do not distinguish themselves in the spatial structure, other than the local, dispersed synagogues, which have been found to be slightly more locally integrated than average.

The economic analysis showed that taken overall, the upper lower class and the upper middle class are much more widely represented in the Jewish quarter than in the East End as a whole. This helps corroborate the assertion made in the historical section (part A), that relatively small numbers of Jews moved to the suburbs, despite their attainment of economic mobility. This could be linked to the social aspects of the Jewish community (described in part B) - namely, family cohesion, and work ties, which were described in at least one source, as being the cause of individuals remaining in the area.<sup>73</sup>

Moreover, taking the ethnic bands one by one, we find that the top and bottom bands of Jewishness are significantly more poor than average, especially in the case of the figures for class C. This difference goes towards explaining the spatial difference that was found for the top two ethnic bands, in section 2 and 3, where it was observed that the top two bands of Jewishness were stepped back from the integration core and were relatively less globally and locally integrated (although these levels were only moderately less than their counterparts in bands 3 and 4). Sections 2 and 3 demonstrated that the bottom band was significantly distant from the integration core. In other words, the top and bottom bands of Jewishness are distinguished by their larger proportion of poverty streets - poverty seems to be linked to segregation.

It was also found that Class G becomes larger as the percentage of Jews rises, except in the top bands of Jewishness, where it dips down again (although not below the levels of the less than 50% streets). It is evident that Class G again reflects the spatial factors found above, namely, the more densely Jewish areas tend to be in less integrated areas, which also contain more of the lower economic classes, and less of the higher economic classes. In other words, the poorer classes location is related to economic factors whilst the middle classes are more directly related to space.

Despite the limitations of the data in this analysis, it seems that the 1695 data goes towards confirming the findings of the 1895 analysis.

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<sup>73</sup> See Russell and Lewis, 19 (quoted above in part B): there are naturally strong inducements to remain in a district which is full of Jewish institutions. Charitable relief may there be obtained from a great variety of sources... and there is every facility for the training of their children, from the great Free School...which provides free clothing and free meals, along with an admirable elementary education... amongst other attractions must be reckoned the daily market in Wentworth Street, where commodities and prices are adapted to their demands'

## Summary and Conclusions

This paper has achieved its initial aim of achieving a spatial description of the Jewish East End. It has shown that this settlement had various definable characteristics that distinguished it from its surroundings. The analysis of spatial variables with reference to the other bodies of data, showed various patterns and relationships, from which a claim might be made that the Jewish societies studied for this paper have specific spatial realisations. These characteristics can be summed up by stating that the Jewish East End was shown to be an intelligible, well integrated system

Other distinguishable characteristics of the Jewish East End, included the possibility of the existence of a distinguishing factor being common to the two most densely Jewish bands. These bands were found to be, both spatially and economically distinguishable from the rest of the Jewish streets. One speculation that might be made is that we have a case of *marginal separation - linear integration*, whereby, as was shown in the step-depth from perimeter analysis, the top two bands of Jewishness are relatively distant from the main integrators. If we also take into account the written sources, which note that the middle-classes and tradesmen occupy the main streets of the neighbourhood, we complete the picture: the most densely Jewish streets are set back from the main integrators, which contain the poorer sectors of the population - whilst the shop-keepers and tradesmen occupy the most integrated streets in the entire area, only a few steps away from the deepest parts. Considering the established importance of the market-place in 19th century Jewish life, it is possible that this few step-logic can be related to the spatial economy of the 19th century city, which (according to Hanson, unpublished lecture, 1992) assigns the market-place transactions to the most important place of encounter between visitor and inhabitant. Considering the importance of the market-place in 19th century life, it is significant that the Jewish East End seems to act as a system, whereby the visitor/inhabitant relationship is contained in the exterior spaces of the area, which are the most integrated, and therefore will attract much passing traffic, whilst the interstices of the neighbourhood remain relatively deep, (yet still retains views to the outside, unlike the modern housing estate) such that the local neighbourhood is contained and protected.

The above described theory of the nature of the Jewish settlement also throws light on the nature of the internal life of Jewish society. If this analysis shows that the most Jewish parts of the area are the deeper, stepped back streets, we may conclude that the inner life of the community is contained on the more private streets. The institution analysis helps to confirm this supposition, by proposing that there are two spatial systems to which the institutions relate, the minor, local institutions, which were seen to be related to the local structure of space and the major, global institutions, which tended not to be related to the spatial system at all. It might be possible to conclude from this that there are two types of realisation of Jewish solidarity, the spatial and the transpatial - with the local institutions being strongly spatialised and connected to the local grid (and it should be noted that it was shown that these institutions tended to be located off the most integrated streets (which would be connected to the global system), and therefore related to the local society. At this level, it could be said that the Jewish East End is functioning as an exclusive society, because it is relating to the local pattern of

space. However, if the spatial theory of intelligibility is correct, this form of spatialisation precisely answers the needs of the Jewish community since it retains its institutions on the local main structure of space, yet is also able to make connections with the exterior world, and indeed to invite movement inwards, but as with the 'deformed grid' example, the privacy of the internal life will be protected.

The external links with the host society have been dealt with above. All that remains to complete the picture is the links with Jews outside the East End. The institution analysis showed that the Jewish 'global' institutions were not linked to the spatial system. This finding is in keeping with the Guild buildings of the City of London, which as described earlier, were found to not relate to the local patterns of space. From this it could be speculated that the major institutions of the East End acted as realisations of a transpatial society - of the London Jewish community as a whole. It should be noted however, that a larger scale spatial model might reveal that these institutions are connected to a larger scale grid.

We have seen here that Jewish society works both as a spatial and as a transpatial entity. It is possible that Jewish society has survived time, because it works on these two levels; the strong family structure and local connections are balanced by strong transpatial connections. It may be that this is a hint at the way in which other minority communities might be spatialised successfully. It also suggests that not every spatial clustering is necessarily inward-looking and exclusive. Rather, that internal cohesion can actually lend strength to a community and allow it to venture outward and upward into (its host), society whilst maintaining its inner ties.

The limitations of available sources did not allow the study of other periods of Jewish settlement in London in this paper, it would be risky to claim, therefore, that the findings presented here are necessarily to be found in other cases, yet the analysis of the 1695 data, showed a possibility that this might be the case.

Certain sources presented in this paper have attested to the fact that the Jewish settlement in England had certain features in common with European ghettos, such as the location at the edge of business districts. It would be interesting to see whether these spatial entities have any characteristics in common with the findings of this paper. This paper therefore ends with a question as to the nature of European ghettos - and throws open the idea that an investigation could be made into whether these societies might not necessarily be as enclosed as has been perceived up to now.

## Appendix A - The Booth and Arkell Maps

Following are colour extracts of the following maps:

1. Booth, Charles: Descriptive Map of London Poverty, 1889 [reduction of the North-Eastern section of the four coloured reproductions of the original maps by Booth]; London Topographical Society, 1984.



The Streets are coloured according to the general condition of the inhabitants, as under—

|           |  |           |   |
|-----------|--|-----------|---|
| Black     | Lowest class. Vicious, semi-criminal.            | Light red | Fairly comfortable. Good ordinary earnings. |
| Dark blue | Very poor, casual. Chronic want.                 | Red       | Middle class. Well-to-do.                   |
| Blue      | Poor. 18s. to 21s. a week for a moderate family. | Yellow    | Upper middle and Upper classes. Wealthy.    |
| Brown     | Mixed. Some comfortable, others poor.            |           |   |

*A combination of colours—of dark blue and black, or pink and red—indicates that the street contains a fair proportion of each of the classes represented by the respective colours.*

2. Russell, C. and Lewis, H. S.: The Jew in London; T. Fisher Unwin, London, 1900. The map specially made for this volume by Geo. E. Arkell.



**JEWISH EAST LONDON**  
1900

The Map shows by Colour the proportion of the Jewish population to other residents of East London, street by street, in 1899.

**EXPLANATION OF COLOURING.**

|            |                            |
|------------|----------------------------|
| Black      | Over 50% of Jews resident. |
| Dark blue  | 25% to 50%.                |
| Blue       | 10% to 25%.                |
| Light blue | 5% to 10%.                 |
| Yellow     | 1% to 5%.                  |
| White      | Less than 1% of Jews.      |

**NOTE.**—In all streets coloured Blue the Jews form a majority of the population. In those coloured with the lighter tints, the Jews form a minority.

## **Appendix C - About t-test Analysis**

The t-test assesses the statistical significance of the difference between two sample averages. In order to determine whether two averages leads to reliable differences, a t-statistic is calculated. A t-test works by comparing the average value (of integration for example) for a sub-sample and comparing it with the average for the entire data-set (or any other group), and asking how likely it is that the average of the smaller sample would have been arrived at by chance. The t-statistic is the ratio of the difference between sample averages to its standard error - an estimate of the degree of fluctuation between averages to be expected because of sampling error rather than because of real differences between averages.

The degree to which the two averages differ is indicated by a t-value, where a high number (positive or negative) indicates greater difference. The significance level of .05 is considered the maximum allowable error, i.e., any significance level greater than .05, indicates that the difference probably occurred by chance. The probability that this could have happened by chance is indicated by the p-value, where the smaller the number, the less likely it is to have occurred by chance and the greater the significance of the result. Probabilities of less than .05 are generally considered to be statistically significant.

The population average refers to the large group to which the sample is being compared. The sample average is the average of the sub-set that has been selected for comparison.



## Appendix D - Synagogues in the East End

According to Glasman, 1982, there were two major Jewish forms of religious organisation in the period 1870-1900. The first group, belonging to the 'United Synagogue' movement had only marginal representation in the area; the atmosphere of its 'establishment' organisation had little in common with the East End Jews. The United Synagogue was established in an Act of Parliament in 1870, to bring a closer union between the three City Ashkenazi congregations and their two daughter congregations in central and west London (the Sephardi synagogues chose to remain separate). According to Wolf, The Council of the United Synagogue had access to large funds with which it promoted or assisted the establishment of local synagogues...

'on a scale befitting the dignity and satisfying the needs of the community... [however] the East End has been abandoned to the poor, and the United Synagogue, as a body, has done little to cultivate the sentimental relations which united classes and masses in the old days, when all dwelt together within walking distance of the three Shools.' (Wolf, 1934, 345).

This helps describe the divide that existed between the established synagogues, of the United Synagogue movement and the old Sephardi synagogues and the *stieblach* which had started to develop from small prayer groups (*minyanim*) in the 1850's. According to Lipman, 1990, these groups often met in private houses, and tended to also belong to larger congregations; in which case the group was usually formed for some religious purpose, such as study. But there was also a motive of mutual help, whereby the study group formed a benefit society.

As early as 1870, notice of the divide between the two forms of prayer started to be heard but it was only with the influx of 1881 that the divide started to sharpen. The new immigrants chose to worship in a different style of worship to the established Jews, who tended to adopt a building use, analogous to the more permanent state church model. The difference was also one of class and financial ability, which restricted newcomers from erecting purpose-built structures, but it is probable that this consideration was the least important. It is evident that the United Synagogue's relationship to the 'Chevra', or small scale synagogues, can be approximated to the relationship between the state church to dissenting chapels - possibly the deepest division between the East End Jews and the established synagogue was in the mode of prayer which among the former tended to be vocal and lively while the latter preferred a more decorous form.

According to Glasman (1982, 33), the stiebels were 'generally converted or extended houses or workshops, or a room undergoing a temporary change of function by the setting up of a piece of furniture to be used as an Ark' (used to contain the prayer scrolls during prayers) whilst a small number of medium sized congregations also existed (mainly for the pre-1881 population), who worshipped most frequently in converted buildings previously used by other denominational groups, such as chapels or Mission Halls.

The conversions were of any of the three types of described by Booth: 'the building of small houses back to back, fronting on to a narrow footway, with small courts utilising space at the rear of rows of housing; the building of workshops at the back and solid backwood extensions backing onto a house into another street'<sup>74</sup>. The poorer congregations made do with temporary conversions of an area within houses. These congregations might total only the minimum quorum necessary for prayer (minyan). Such was the divide that...

'the East End Jews of the working class rarely attend the larger synagogues (except on the Day of Atonement) [the holiest day of the year for Jews] and, most assuredly, they are not seat holders. For the most part the religious minded form themselves into associations (Chevrot), which combine the functions of a benefit club for death, sickness and the solemn rites of mourning with that of public worship and the study of the Talmud. (30-40 of these Chevrot scattered round the Jewish quarter.)'<sup>75</sup>

Glasman notes that many of the smaller congregations were members of the same economic group. It is also clear that the synagogues served as the social centres of the working groups, used by them 'as other workers have used pub or club'. One of the reasons for this link, were the additional functions some of these synagogues had as benefit societies (Chevrot), which organised the collection of dues for payment in the case of sickness, temporary incapacity and old age. In some of these cases, as was the eastern European practice, the congregants of one synagogue might be made up of members of the same trade. This is confirmed by Fishman, who writes:

'the "Russian Poles" were "recognised as a separate and now very large section of the East End population", with their own distinctive sub-culture...For they formed their own self-contained street communities...their ethnic unity perpetuated within their *stieblach* - small, house-based synagogues catering for the spiritual and social needs of the *landsleit* (families emanating from the same village or town in Russia or Russian Poland)' (Fishman, 1988, 133).

The establishment of the Federation of Minor Synagogues in 1887 set about to draw together the small synagogues under an umbrella organisation, with the main aim of regulating buildings. During the period considered in this paper, some of the smaller synagogues joined the Federation. These are listed below as 'Federation' synagogues, but all smaller synagogues were considered as a group for the purposes of analysis (after ascertaining that there were no statistical differences between the two groups.)

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<sup>74</sup> Booth, Vol. 1, 1969, 31, quoted by Glasman, 1932, 39.

<sup>75</sup> Beatrice Potter reporting for Charles Booth, vol. 1, 1969, 572-3, quoted in Fishman, 1988, 167.

**Following is a list of the synagogues used in the analysis.**

The italicised synagogues are those City synagogues which were (according to Glasman, 1982) marginal to the activities of the East End. These were called 'United and main' in the above section on institutions in Part C- all of these, aside from the Sephardi synagogue in Dukes Place, were mentioned in the Act and Deed of Foundation of the United Synagogue of 1870.

|                            |                         |                              |                    |
|----------------------------|-------------------------|------------------------------|--------------------|
| Sidney Street Synagogue    | Bedford Square          | <i>Bevis Marks Synagogue</i> | <i>Bevis Marks</i> |
| Synagogue                  | Charlotte St.           | <i>Hambro Synagogue</i> ,,   | <i>Church Row</i>  |
| Synagogue                  | Commercial St.          | "Shaar Hashamayim"           | Creechurch Lane    |
| Synagogue                  | Dorset St.              | Synagogue                    | Fenton St.         |
| <i>The New Synagogue</i>   | <i>Great St. Helens</i> |                              | 2 Synagogues       |
|                            | Grove St.               |                              |                    |
| Synagogue                  | Jubilee St.             | Synagogue                    | Middlesex St.      |
| 2 Synagogues               | New Road                | 2 Synagogue s                | Philpot St.        |
| <i>The Great Synagogue</i> | <i>St. James' Place</i> |                              | Synagogue          |
|                            | Stepney Green           |                              |                    |
| Synagogue                  | Walden St.              |                              |                    |

The following Federation synagogues were taken from the list given in the Glasman thesis (1981/82) and counter-checked in Newman, 1981.

|   |                        |                                  |                  |
|---|------------------------|----------------------------------|------------------|
| 'Eye of Jacob'                                      | Artillery Lane         | Limehouse Synagogue              | Burdett Road     |
| Kovnoh Chevra Torah                                 | Catherine Wheel All.   | Chevra Mishnayoth                | Church Lane      |
| (no name)   | Church Street          | 'Polish' Synagogue               | Cutler St.       |
| 'Mile End New Town'                                 | Dunk St.               | Bessarabia Kiev, 'Bikkur Cholim' | Fashion St.      |
| Beth David Chevra, Cracouw Chevra,                  |                        |                                  |                  |
| Glory of Jacob, Kehol Hassidim                      | Fieldgate St.          | Yanover Synagogue                | Finch St.        |
| 'Lodz'  | Goulston St.           | (no name)                        | Great Alie St.   |
| (no name)   | Great Garden St.       | (no name)                        | Greenfield St.   |
| Warsaw  | Gun St.                |                                  |                  |
| Hanbury St., (no name), 'United Brethren of Konin', |                        |                                  |                  |
| Suvlaki   | Hanbury St.            | 'Chevra Tehillim'                | Heneage St.      |
| 'Sons of Covenant Friendly Society'                 | Hope St.               | (no name)                        | Little Alie St.  |
| 'Peace & Tranquillity'                              | Mansell St.            | 'Bikkur Cholim sons of Lodz'     | New Castle St.   |
| 'Peace & Truth'                                     | Old Castle St.         | Kehol Hassidim, (no Name)        | Old Montague St. |
| (no Name)   | Princes(let)&Booth St. | 'Kindness & Truth'               | Sandy's Row      |
| (no name)   | Scarborough St.        | 'Bikkur Cholim'                  | Spital Square    |
| (no name), East Grodno                              | Spital Street          | Limcicz                          | St. Mary St.     |
| Kehol Hassidim                                      | Union St.              | (no name)                        | Vine Court       |
| Kurland   | Wellclose Square       | (no name)                        | Whitechapel Rd.  |

## Appendix E - Glossary

|                                      |   |
|--------------------------------------|---|
| ASCAMA (pl. ASCAMOT                  | One of the civil laws of the Congregation   |
| ASHKENAZI (pl. ASHKENAZIM)           | Jew originating in northern or central Europe.  |
| BETH DIN                             | A court of at least three members, administering Jewish law; in modern times, a Jewish ecclesiastical court.  |
| BETH MIDRASH                         | Theological College   |
| CHEDER                               | Hebrew School   |
| CHEVRA (pl. CHEVROT)                 | Social or voluntary association for religious purposes often forming the congregation of a small synagogue.   |
| HALACHA                              | The whole of Jewish law or a specific rule.   |
| HOLYDAYS                             | Period covering early autumn festivals: Jewish New Year, YOM KIPPUR (Day of Atonement), Tabernacles, (SUCCOT) and Festival of the Rejoicing of the Law (SIMCHAT TORAH). |
| KADISH                               | Prayer recited by mourners.   |
| KOSHER                               | Ritually approved (of food)   |
| JüDISCH (SEE YIDDISH)                |   |
| LADINO                               | Judæo-Spanish, spoken by SEPHARDI Jews.   |
| LANDSMANN(SCHAFT)                    | A person from a particular town or district (or organisation of...)   |
| MAHAMAD                              | The governing body of a Sephardi Congregation.  |
| MARRANO                              | A forced convert from Judaism or his descendant, who practices Judaism in secret.   |
| MINYAN (p. MINYANIM)                 | A quorum of ten males necessary for public worship.   |
| MIKVA(H) (pl. MIKVOT)                | Ritual bath   |
| SEPHARDI (pl. SEPHARDIM)             | Jew originating from Spain or Portugal.   |
| SHECHITA                             | The ritual slaughter and preparation of meat for consumption by Jews.   |
| SHOOL                                | Ashkenazi term for synagogue  |
| STIEBL (pl. STIEBLACH)               | Small synagogue   |
| TALMUD TORAH<br>(pl. TALMUDEI TORAH) | (lit. Study of the Law) Religious school.   |
| YIDDISH                              | A form of old German with words borrowed from many other languages, especially Hebrew, spoken by ASHKENAZI Jews. JüDISCH - German word for YIDDISH.                     |

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