The metropolitan rhythm of street life: a socio-spatial analysis of synagogues and churches in nineteenth century Whitechapel

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This chapter considers the streets, alleys, courtyards and buildings that shaped and mirrored Jewish life in London's nineteenth century East End. It uses a multi-layered history of place to provide an understanding of how life was lived on the streets at the time. Against this background, the chapter will compare and contrast the building/street relationships between synagogues and churches in order to address the way in which the Jewish inhabitants of the district shaped their social-cultural relationships with their surroundings. Focusing on a large area around Whitechapel the study uses Goad Fire Insurance Plans as well as other contemporary accounts (including the notebooks and maps of Charles Booth) to carry out a spatial analysis of the synagogues, chapels and churches of an area of Whitechapel to consider the way in which building interiors and public space exteriors interrelate. By distinguishing between *ad hoc* Jewish prayer spaces, more formalised (typically back yard) structures and other synagogues which are conversions from chapels and comparing these with the various church buildings, it will be argued that the East End provided a particular street setting which brought private, communal and public life into a nuanced balance.

1.   The time and the place, 1899

The German sociologist Georg Simmel wrote in 1903 how the city functions as an alienating environment that is strikingly different from the village or the town: in the city the individual has to adjust to the "metropolitan rhythm of events".[1] Simmel's proposition that the nature of the urban setting means that every street crossing creates an intensified tempo "of economic, occupational and social life"[2] is examined here to see the way in which East London functioned – as it has done so now over several centuries – to provide a specifically urban setting for incoming religious minorities to settle and form a community. This chapter focuses on Whitechapel in the year 1899, around a decade later than Charles Booth's first poverty survey and in the year in which the update to his great map of poverty was drawn up.[3]

The period leading up to the time covered by this chapter was one of great upheaval for the inhabitants of the East End of London. As shown by Fishman in his seminal *East End 1888,[4]* a massive influx of refugee (or, as some would have it, refugee and economic) Jewish migrants from Eastern Europe led to the area east of the City of London to be termed "Little Jerusalem".[5] They had fled severe restrictions under Russian law, with confinement to areas reserved for Jewish residence within the Russian Empire, from the early nineteenth century onwards as well as violent anti-Jewish persecutions, which came to a peak following the assassination of Tsar Alexander II. Although there are no precise numbers for the Jewish presence in the area, the 1891 census shows a three-fold rise of Eastern Europeans resident in England and Wales, with a total of 45,808 across the country, with many of these in the Whitechapel area.[6] Russell and Lewis state that "There is no available material for anything like a trustworthy statistical estimate of the number of immigrants who come here to stay. Such evidence, however, as is obtainable,

points to the fact that the influx of Russian and Polish Jews had increased to a considerable extent in the last few years".[7] Pre-existing slum conditions that had caused great suffering to the previous generation's Irish incomers were worsened by ever increasing overcrowding for the area's latest inhabitants.[8] By the time of Charles Booth's first poverty survey in the 1880s, work and dwelling conditions were found to be shockingly poor. Indeed, despite fears of poverty (and the poor) having been stoked by a sensationalist press, its true extents were poorly understood until Booth's maps made poverty "seem a problem that could be addressed, rather than an insurmountable crisis".[9] The morphology – the physical form and layout of the city– was itself viewed by the general public as a source of the immorality of its inhabitants, and was considered to be a significant obstacle to policing.[10] Booth's maps, which showed the gradations of poverty and prosperity from the warmer shades of red and pink for streets above poverty, through purple to the colder shades of blue and black for streets below poverty **(see Figure 1)** were able to lift the curtain of image and stereotypes and create an informed basis for new legislation to alleviate the situation of the East End, leading to a series of legislative acts that sought to tidy up the rookeries and streets of the area.[11] 1899 marks the end of a period during which many slum clearances had taken place, with the erection of new model dwellings in locations such as Flower and Dean Street alleviating the physical condition of housing in the area, although doing little for the worst off of the area, who were unable to pay the required regular rents demanded by the dwellings' landlords. The clearance of the notorious Old Nichol slum and its replacement in 1900 by London County Council's first housing estate – the Boundary Estate – is an important example of this.[12]

Figure 1: The study area – captured by a section from the Booth map of poverty 1898-9. Maps from Charles Booth's Inquiry into Life and Labour in London (1866-1903). Courtesy: London School of Economics.

In George Duckworth's account of his walk with the Superintendent Mulvaney, head of Whitechapel Division of Police on 7th January 1898, he reports that the district was "very peculiar" in its being a "hybrid" district with a large number who couldn't speak English. Polish Jews and Russians who had "come over" were "mostly strong socialists", whose "first inclination in coming over and finding their liberty is to break out…".[13] The street setting in which they found themselves was one of tightly packed

houses, workshops, factories and shops, set on narrow streets leading off the broad thoroughfares of Whitechapel Road and Commercial Road East. The vicinity of Fieldgate Street, with its shops and four-storied buildings, mantle and corset makers included also the Great Eastern Dwellings, comprising a "court entered by iron gates ('necessary to prevent prostitutes from using the place in the evening')".[14] Booths' poverty maps illustrate that the policeman's perception of his beat's population as being "hybrid" was similar to the streets, which ranged from reasonably comfortable shops on the main roads to miserable tenements on the back streets, never more than a few turnings away. Elsewhere, Duckworth reports a

> Great mess in Jewish streets – fishes heads, paper of all colours, bread... orange peel in abundance. The constant whirr of the sewing machine or tap of the Hammer as you pass through the streets: women with dark abundant hair, olive complexions, no hats but shawls – Children well-fed & dressed. Dark beards, fur caps & long boots of men – The feeling of being in a foreign Town.[15]

The apparently foreignness of the town is evident from this eye witness account, but it leaves open the question of the extent to which the most hidden aspects of Jewish life – in clubs and schools, let alone in synagogues, was apparent to their fellow Whitechapel inhabitants.

2.   The study

The year 1899 is also significant due to it almost coinciding with the publication of *The Jew in London*, a joint effort by a Jewish and non-Jewish pair of authors to uncover some of the reality of life in the area.[16] The current study builds on previous research that used the book and its map of "Jewish East London", which showed the patterns of Jewish immigrant settlement in the area. This research found that the Jewish settlement in a tight spatial cluster on the edge of the City of London constituted a strongly supportive milieu of coreligionists whose communal institutions – from clubs, hospitals and schools to dozens of synagogues – were situated so as to make the most of the local street network's pattern of connectivity.[17] The layout of the East End was such that its main streets were well connected to London's economic heartland, allowing for trade and other economic activity to take place, whilst the back streets facilitated a quieter setting for immigrant communities' less public activities. The research concluded that this area of the East End operated as a mechanism for acculturating immigrants into society by allowing them to form a network of self-support whilst building connections to the wider neighbourhood through participation in the local spatial economy. Subsequent research has found that the synagogues of the East End were by far more secluded than earlier Huguenot chapels and other churches.[18] The object of the current study is to assess the exact position of synagogues within their urban setting in order to see if this had any systematic relationship with the social and economic context of those streets. In order to further validate this analysis, in addition to studying all synagogues in the study area, the analysis was carried out comparatively for all churches within the study area.

The study focuses on an area of Whitechapel all within the parishes of Mile End New Town and St Mary Whitechapel **(see Figure 1)** which had a high Jewish presence, serving as an ideal case for examining the spatial and social setting of synagogues at the time.

The study used a variety of maps and data sources, starting with the large scale Goad Fire Insurance plans of the study area, which were used to map building outlines and streets.[19] The study area was also selected due to it being the only one in the vicinity which Goad updated in 1899. Missing data on the urban built fabric and information on the streets surrounding the plans were completed with historical maps of East

London.[20] The Goad plans also provide a categorisation and description of historical land uses **(see Figure 2)**. All synagogues and churches that appeared within the study area were identified on the Goad Plan and these, along with the land use functions of adjacent buildings were recorded within a geographical information system (GIS). The Goad plans were cross-referenced with lists of locations of synagogues from other sources in order to obtain information on date of foundation, affiliation and so on.[21] In total, there were fourteen synagogues and seven churches recorded by Goad in the study area. (**see Table 1),** though any existing smaller one-room synagogues or other more temporary arrangements are not captured here, due to there being no historical record of their precise spatial location.

An important aspect of the study was a consideration of how the religious buildings in the late nineteenth century communicated their presence to their surroundings, raising the question of how visible the synagogues were to their neighbouring streets. In order to address this question, the study was designed to analyse the embeddedness of the Jewish community within wider society by taking account of how the street setting provides opportunities for encounter between Jewish and Gentile[22].

The visibility and presence to the street for both synagogues and churches was established by drawing isovists and analysing their shape and extents. An isovist[23] captures the visual field of an individual or object. It marks the directly visible area from and around a vantage point. To construct isovists as realistic representations of a building's presence on the street, four distinct types of buildings were identified: 1) *Prominent* and *purpose-built* structures, which could be recognised at a distance due to their size, distinctive style and décor; 2) *Converted* buildings, many of which would have been religious buildings of another denomination, also visible from afar; 3) *Passage* types: buildings situated in courtyards with no direct access or façade to the street. Access instead was through a passage, often with signs on a street façade indicating the presence of a synagogue. 4) *Hidden*: these are synagogues located in courtyards with neither direct access to the street, nor any visible sign to the street. They were often accessed through shops or workshops. **Figure 2** shows examples of all four types while Table 1 lists the classification of all religious buildings within the study area.

A recent study of urban Jewish culture in this period indicates the importance of Yiddish shop signs, billboards or newspaper stands as "visible markers" of a Jewish territory,[24] raising the question of how visible the synagogues were, given that they would only needed to have advertised their presence to the Jewish community itself (or indeed only to its own congregation). In addition to their visibility − therefore − the analysis also enquired to whom they were likely to have been visible (whether to Jewish people or the wider community) and whether the degree of visibility changed according to the type of synagogue and/or the situation of the street within its urban context (namely, its degree of poverty). The *hidden* synagogues may not intentionally have been located in a completely invisible setting. Indeed considering the ramshackle nature of the premises of all six examples, it seems likely that they were not hidden by intention, but simply were located wherever financial circumstances allowed them to be.
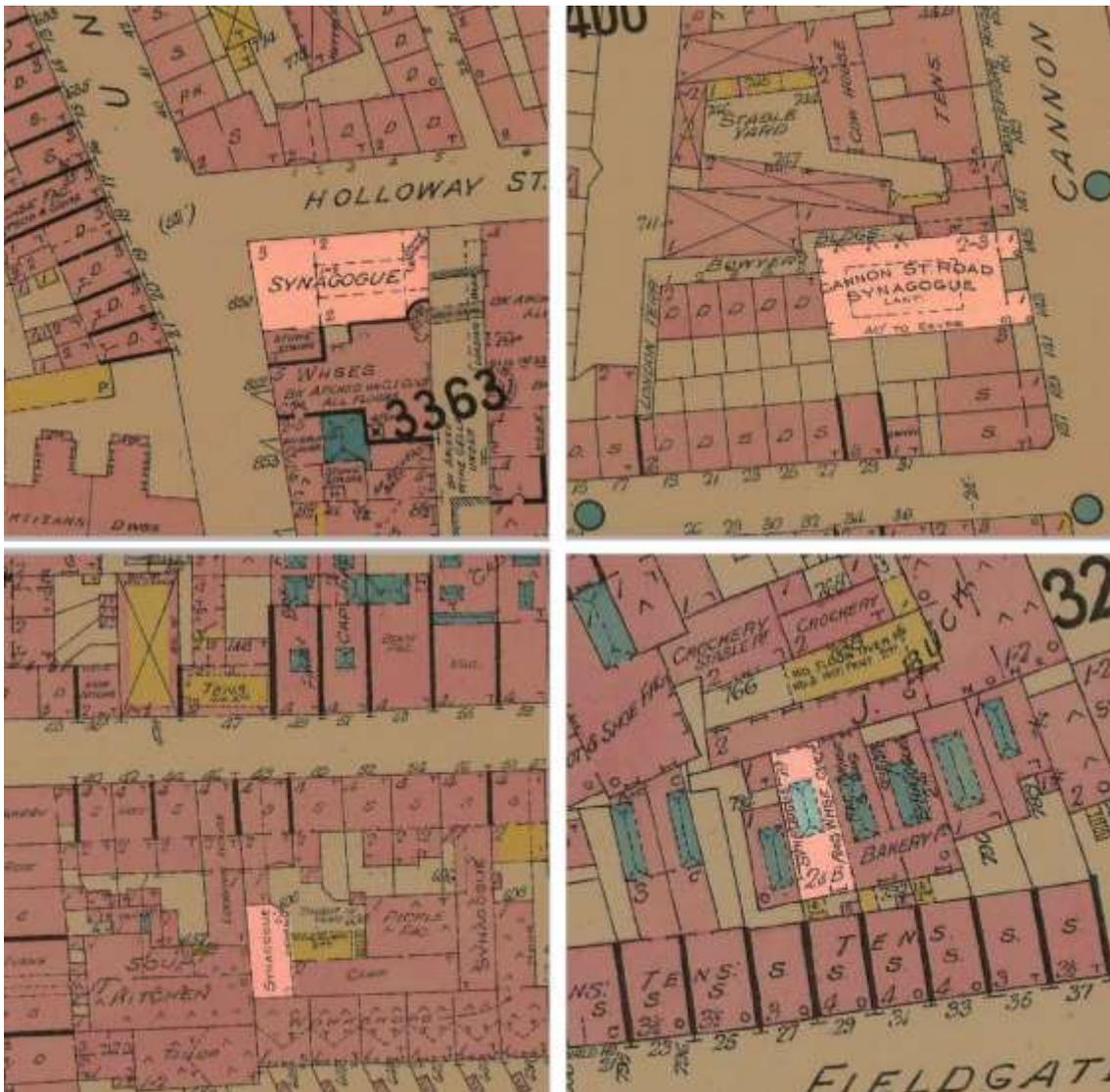
Figure 2: **Four types of synagogue, showing from top-left to bottom-right, examples of prominent, converted, passage and hidden types** featuring on the Goad Plan of 1899, sheets 336, 339, 320 and 323, respectively (c) Crown copyright and Landmark Information Group.

The classification of all religious buildings within the study area (table 1) demonstrates that the most common type amongst synagogues was Hidden (6), followed by Passage (5), Prominent (2) and Converted (1). In contrast, nearly all the churches were Prominent, with only a single Mission Hall hidden behind the street building line.

	Building	Name	Address	Position on street
1	Synagogue	Chevra Torah	Booth Street 20	Prominent
2	Synagogue	Cannon Street Road Synagogue	Cannon Street Road 143	Converted
3	Synagogue	Plotsker	Commercial Road East 45	Hidden
4	Synagogue	Mile End New Town Synagogue	Dunk Street 39	Passage
5	Synagogue	Crawcour Synagogue	Fieldgate Street 29	Hidden
6	Synagogue	House of David United Brethren Chevra	Fieldgate Street 33	Hidden
7	Synagogue	Fieldgate Street Synagogue	Fieldgate Street 41	Passage
8	Synagogue	Great Garden Street Synagogue	Great Garden Street 9-11	Passage

9	Synagogue	Greenfield Street Synagogue	Greenfield Street 81	Hidden
10	Synagogue	Brothers of Konin	Hanbury Street 48	Passage
11	Synagogue	The Brethren of Suwalki Synagogue	Hanbury Street 56	Hidden
12	Synagogue	Chevrah Shass—25	Old Montague Street 42	Passage
13	Synagogue	Limciecz Synagogue	St. Mary Street 3	Hidden
14	Synagogue	New Hambro	Union Street 850	Prominent
1	Church (Congregational)	St John the Evangelist	Grove Street 861	Prominent
2	Church (Anglican)	St Olave	Hanbury Street	Prominent
3	Church (various26)	Trinity Chapel	Hanbury Street 211	Prominent
4	Church (unknown)	Unknown (Gospel Hall)	Osborn Place 879	Hidden
5	Church (Anglican)	St Augustine's	Settles Street 882	Prominent
6	Church (Catholic)	German R.C. Chapel	Union Street 760	Prominent
7	Church (Anglican)	St Mary's	Whitechapel Road	Prominent

Table 1: List of synagogues and churches within the Whitechapel study area

The isovists were drawn according to a careful consideration of what was the likely visibility of on the one hand, a prominent building such as church with a spire and, at the other extreme, a synagogue with no sign on the street to indicate its presence.

1) *Prominent* and *purpose-built* structures and 2) *converted* buildings:

In the case of the first two types isovists were drawn from all the faces of each building's façade and extended until they met another building. To ensure the visibility of a façade was appropriately modelled according to human perception we used an angle of 170° (since façades would not be recognisable from a completely obtuse angle). All but one of the seven churches plus two synagogues in the study area fell into these two categories.

3) *Passage* buildings:

In the case of the passage type of synagogue, a photograph dating from c. 1959 of one the synagogues, *Chevrah Shass*, provided evidence for the way in which such synagogues announced their presence to the street, with a sign bridging the passageway at the point at which it met the street – this being the first point of connection of the synagogues to its urban environs. As can be seen in **Figure 3,** an isovist was constructed from the passageway opening towards the street. Since a sign would neither be legible at a great distance, nor readable at an obtuse angle, two further limitations were introduced: first, that isovists were constructed at a degree of 135 (rather than 170° as above);[27] second, isovists were ended after 70 metres, given that any distance beyond this the sign would cease to be readable.[28]

The last category of hidden synagogues was excluded from the isovist analysis, since they would not have any visible presence on the street.

Figure 3a: An isovist drawn from passage entrance to Montague Street synagogue (Chevrah Shass) drawn on the Goad Plan of 1899, sheet 322 © Crown copyright and Landmark Information Group;

Figure 3b: **A photograph c. 1950 showing the Chevrah Shass Synagogue**, Whitechapel, London, with a sign in Hebrew and English above the passage entrance; marked up with the measurements that were used to calculate assumed readable distances for all passage-type synagogues; c. 1946-1959. Artist: John Gay © Heritage Image Partnership Ltd / Alamy.

In order to assess whether there were measurable differences between the street setting of synagogues and churches, additional data were captured from key historical sources for all buildings situated within the religious building isovists. Three different street block classifications of the buildings in the visual field of a synagogue or church were analysed:

1) Land use: namely the numbers of dwellings and non-domestic buildings according to the Goad Plan information (although much more detailed land uses were recorded for exploration at a future date).

2) Poverty as determined by the Charles Booth survey in six classes ranging from red (middle class) through pink, purple and then to the poverty classes of light blue, dark blue and black.[29]

3) Percentages of Jewish population showing proportion of Jews to Gentiles in six bands from 0-5% to 95-100%, from dark red to dark blue.[30]

3.   The house of assembly

In the first century and a half since the readmission of Jews to England in 1656, only a handful of purpose-built synagogues were erected in London. Aside from the Sephardi Bevis Marks, which was situated in a relatively hidden location on the edge of the City of London, these comprised the Great in Dukes Place; the Hambro, ultimately located in Fenchurch Street; and the New in Hambro Street.[31] Sharman Kadish describes how following the establishment of the United Synagogue movement – set up to centralises resources for the funding of new synagogues – a "Golden Age" of synagogue architecture emerged, leading to a "boom [in the] erection of large-scale synagogues". These so-called cathedral synagogues, whose style of worship and architecture was in tune with the state church model, were set up to cater to an increasingly acculturated, English-born Jewry.[32]

In contrast, the position of the synagogue in East London Jewish life was not purely as place of worship.[33] Anne Kershen describes how "it was almost a second home, a club and some-time friendly society which might provide benefits during sickness, unemployment and old age".[34] The East End practice of praying in smaller, self-organised synagogues represented an alternative institutional structure, with some synagogues formed as benefit societies, which organised the collection of dues for payment in the case of sickness, temporary incapacity and old age – hence the naming of many of these as *chevra.*[35] 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, also assisting in negotiating a way into a new urban environment by providing a familiar social and cultural network for the newer immigrants. [36] As the meaning of the Hebrew (*beit knesset*, or house of assembly) would suggest, it served as a community gathering place and was one of several aspects in which East End Jewish immigrants lived in a specifically Jewish milieu of "workplace, synagogue, theatres[37] and clubs, shops, politics or in the home".[38] Notably though, the synagogue was very much a male domain, with minimal (or no) accommodation for women congregants, other than in segregated galleries, or even entirely separate domains situated above the main men's hall.

A handful of the East End's medium-sized congregations worshipped in converted buildings previously used by other denominational groups, such as chapels or Mission Halls[39], but most East End synagogues were shtiebels, or small synagogues.[40] In their most restricted incarnations they were simply temporary prayer rooms, set up at the back of workshops or living spaces. An anonymous account in *The Jewish Chronicle* of a visitor to a sick woman in Hanbury Street highlights how impoverished some of these settings could be, describing his climb up a steep staircase into what he thought initially was a bedroom, only to discover that it doubled as prayer hall, with an Ark (containing the holy scrolls of the Torah) and

Reader's Desk: "the room was not only a kitchen and a bedroom, it was also a Shul…"[41] Many poorer congregations made do with temporary conversions of an area within houses. These congregations might total only ten, the minimum quorum necessary for prayer (*minyan*).[42]

The eleven hidden and passage type synagogues in the study area (out of fourteen in total) highlight the predominance of shtiebels over more prominently placed and visible synagogues in the East End overall. Historical evidence shows that most synagogues were accommodated in the sort of piecemeal extensions, lean-tos and other haphazard structures that according to Booth fell into three types: "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… extensions backing onto a house into another street".[43] In one example, the synagogue at 35 Fieldgate Street was said to be approached "through a somewhat dingy passage… built in the same way as many workshops in the locality on what was originally an open space at the back of the house".[44] In many ways these constructions were the only way the burgeoning population could be accommodated in the tight confines of the area, since very few open spaces had been left by the previous generation's infilling of small cottage properties with housing.[45] The Goad plans for 1899 Whitechapel in fact show remnants of that previous generation's less intensified industrial nature being intermingled amongst the area's workshops and tenements (see "cow house" and "stable yard" featuring in the Goad Plan for Cannon Street Road synagogue in **Figure 2**).

The *Federation of Minor Synagogues* in 1887 was established to draw together the East End's small synagogues under an umbrella organisation, with the professed aim of attracting formally trained preachers, to have representation at the established central Jewish organisation – the Board of Guardians, to organise ritual slaughter and to fund burials.[46] Reading the *Jewish Chronicle* of the preceding years indicates that it was also a response to growing discomfort that the unaffiliated synagogues would delay assimilation of the new immigrants and attract anti-alienism for the community overall. In this context, the erection of model synagogues could be seen as a form of "architectural colonialisation"[47] that would bring west London modes of behaviour into the streets of East London. The impact it was likely to have had on making the Jewish presence in the vicinity more visible is highlighted in the analysis of prominent synagogues in the next section.

The model synagogues were also constructed to improve problems with the unsanitary nature of some of the buildings as well as risk due to lack of safety from overcrowding (such as upper storey doorways opening outwards onto staircases).[48] The Fieldgate Street synagogues in the bottom-right example in Figure 2 show such a layout, with a skylight apparently being the only source of lighting. Beatrice Potter described such a setting in 1887, where she found that:

> It is a curious and touching sight, to enter one of the poorer and more wretched of these places on a Sabbath morning. Probably the one you will choose will be situated in a small alley or narrow court, or it may be built out in a back yard. To reach the entrance you stumble over broken pavement and household debris; possibly you pick your way over the rickety bridge connecting it with the cottage property fronting the street. From the outside it appears a long wooden building surmounted by a skylight, very similar in construction to the ordinary sweater's workshop. You enter; the heat and odour convince you that the skylight is not used for ventilation. From behind the trellis of the 'ladies gallery' you see at the far end of the room the richly curtained Ark of the Covenant you may imagine yourself in a far-off Eastern land… At last you step out, stifled by the heat and dazed by the strange contrast of the old-world memories of a majestic religion and the squalid vulgarity of an East End slum.[49]

Despite the Federation's records showing several of the synagogues in the study area having been incorporated by the year 1899, Booth's notebooks show that whilst some of the buildings had met the standard demanded by the organisation, many of them were located in rundown premises on or near to

highly impoverished streets, confirming the findings of our own sample area. Booth's researcher reports that Booth Street, for example, was comprised of three-storied buildings containing Jews, in tailoring and shoemaking occupations, with a decent purple classification (namely, just above the three poorest classes). Yet, the street opened up to Booth Street Buildings, with its:

> "Rough and… poor Jewish inhabitants", with " broken windows stuffed with rags, dirty, no curtains or blinds to windows only a bit of stuff drawn across lower half, ragged dirty children… Corners of the yard used as urinals, 'stench in hot weather'...".[50]

Great Garden Street's situation was worse still:

> "Across Great Garden Street, the [east] corner of which both on the [north] and south sides are brothels, thieves, prostitutes and bullies, Black. In map Purple."[51]

Our analysis of the street setting of the study area's fourteen synagogues, compared with the seven churches in the area demonstrates that this juxtaposition of poverty and religion was not incidental. The poverty classes of the streets of all synagogues and churches observed in the study area, indicate subtle differences between synagogues and churches: while mixed populations (shown in purple in Booth's maps) can be found across the sample, the lowest poverty class (marked in black and classified as "vicious, semi-criminal") can only be found amongst the synagogues sample (Chevra Torah and Chevrah Shass), while the better off classes (marked in red and classified as "middle-class, well-to-do") are exclusively in the vicinity of churches within the sample (St Augustine's, German R. C. Chapel and most notably St Mary's) – see **Figure 4**.

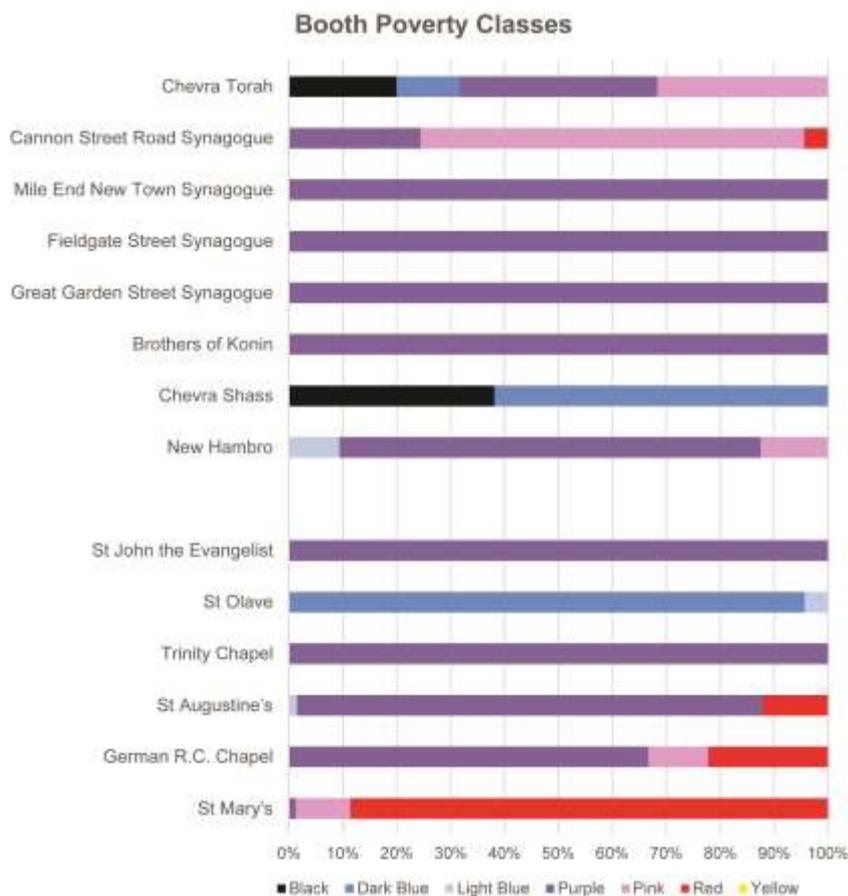**Figure 4**: **Bar chart showing the proportion of Booth Poverty Classes in the visual fields of synagogues** (top) and **churches** (bottom); the yellow category of 'Upper-middle and Upper classes' was not found in the sample;

Interestingly, differences among the synagogues were found, too. The three synagogues visible from afar (Chevra Torah, Cannon Street Road Synagogue and New Hambro) were the only synagogues in the study

area in close proximity to the class marked in pink by Booth (labelled as "fairly comfortable, good ordinary earnings"). Specifically in the case of Cannon Street Road, as a converted synagogue, it makes sense to find its proximity to a higher class. However, this also shows that some of the synagogues created a visible interface to different segments of the population. What is clear is that simply equating the presence of synagogues with poverty in the surrounding population would be misleading.

A similar picture emerges when the location of synagogues and churches is compared to the composition of Jewish population. A clear pattern can be found: all churches were within the vicinity of lower percentages of Jewish population (lower than 75 percent Jewish); in contrast, all synagogues (but one) show at least 75 percent Jewish population in the directly visible neighbourhood. This means that the synagogues communicated their presence to a predominantly Jewish population and were not visible to the Gentile population to the same degree. It seems that religious practice, living and working were very closely intertwined, evident in patterns of spatial clustering.

4.   Society: together but apart

The first section described the densely woven streets and closely packed buildings of the East End, creating a setting in which the Jewish community had a large variety of its activities within reach from each other. The large concentrations of Jewish presence on a relatively small number of streets around the area suggests a high cohesiveness to their settlement. Nevertheless, the map of Jewish East London plays a visual trick, emphasising the relatively few dark, 95-100 percent Jewish streets clustered in the westerly edge of the East End, rather than the many streets in which Jewish inhabitants were intermingled with the non-Jewish population.[52] Booth's notebooks confirm how both poverty and prosperity, both mixed and exclusively Jewish or Irish streets, intermingled turn by turn around the district. It is because of this spatial complexity that there is a need for a thorough understanding of the way in which Jewish spatial solidarity enacted through its communal institutions, was visible to the community at large.[53] To what extent did the synagogues play a role in making the community visible?

Analysis of the visibility of religious practice in London's East End shows a significant difference between churches and synagogues. First of all, six of the seven churches in the study area were prominently positioned, while only a minority of the synagogues (three out of fourteen) enjoyed a similarly exposed and visible position in the urban fabric. Further analysis highlights important variations in the size and shape of the relevant isovists (namely, visual fields; see **Table 2**). Isovist areas for the synagogues range from 74sqm for the smallest (Great Garden Street Synagogue) to 2570sqm for the largest (Chevra Torah), while those of the churches range from 930sqm (Trinity Chapel) to 24,501sqm (St Mary's). While there is an overlap of isovist size in the mid-range,[54] synagogues tended to have smaller isovists than churches and thus clearly show less visibility of the religious practice at street level, especially if one takes account of the fact that a large number were completely invisible and not included in this analysis. Even more telling are the differences regarding the longest length of the isovist. This measure indicates prominence and visibility, since longer isovists mean that the building is visible from further afar. With the exception of Chevra Torah, all synagogues were characterised by a significantly shorter isovist length (28-133 metres) than the churches in the study area (139-1093 metres).[55]

	Building	Name	Isovist Area [sqm]	Longest length of isovist [m]
1	Synagogue	Chevra Torah	2,570	287
2	Synagogue	Cannon Street Road Synagogue	2,268	267
3	Synagogue	Plotsker	------ [Hidden] -------	
4	Synagogue	Mile End New Town Synagogue	206	45
5	Synagogue	Crawcour Synagogue	------ [Hidden] -------	
6	Synagogue	House of David United Brethren Chevra	------ [Hidden] -------	
7	Synagogue	Fieldgate Street Synagogue	1,353	85
8	Synagogue	Great Garden Street Synagogue	74	28
9	Synagogue	Greenfield Street Synagogue	------ [Hidden] -------	
10	Synagogue	Brothers of Konin	142	38
11	Synagogue	The Brethren of Suwalki Synagogue	------ [Hidden] -------	
12	Synagogue	Chevrah Shass[56]	483	60
13	Synagogue	Limciecz Synagogue	------ [Hidden] -------	
14	Synagogue	New Hambro	1795	133
1	Church (Congregational)	St John the Evangelist	962	160
2	Church (Anglican)	St Olave	3,644	284
3	Church (various)	Trinity Chapel	930	139
4	Church (unknown)	Unknown (Gospel Hall)	------ [Hidden] -------	
5	Church (Anglican)	St Augustine's	2798	280
6	Church (Catholic)	German R.C. Chapel	2921	192
7	Church (Anglican)	St Mary's	24,501	1093

Table 2: Properties of visual fields of the synagogues and churches in the sample

As the most prominent religious building in the study area, St Mary's takes on a special role in this analysis. It was described as a "noble spire" visible from a distance "far above the houses of the populous and struggling district around, a striking and commanding feature visible far and wide." (**Figure 5**) The description also demonstrates the strikingly different street setting from many of the synagogues: "Through the crowded streets of loungers, well-to-do church-goers of the middle classes are wending their way to morning service."[57] This particular position of St Mary's is clearly reflected through the data analysis of this study: it has the largest isovist area and length **(see Figure 6 and Table 2)**; it has the highest proportion of middle-class populations in its visible neighbourhood; and shows the lowest percentages of Jewish populations nearby. It stands in stark contrast to the majority of the synagogues, which were characterised as mostly small, hidden and make-shift, communicating their presence to the street in a much more subtle way, if at all.

Figure 5: St. Mary's Church, Whitechapel, c. 1900 © Ian Galt/ Museum of London. The banner on the side is advertising sermons in Yiddish.[58]

Another significant result of the analysis is that despite the presence of twenty-one religious buildings in the study area and some very prominent and large isovists, not many of the visual fields overlap. Where synagogues are clustered spatially, for instance in Hanbury Street or Fieldgate Street, many of them are hidden or are barely visible to the street. It is mainly the churches that are visible to each other, for instance inside the visual field of St Mary's, the German R.C. Chapel can be seen as well. Likewise, there was inter-visibility between St Olave and Trinity Chapel in Hanbury Street. The only visibility overlap between a church and a synagogue was present in Union Street (see street running north-south in the centre of **Figure 6**), where the New Hambro (in the southern end of Union Street) and the German R.C. Chapel (in the street's northern end) communicated their presence to the same shared neighbourhood, which was part Jewish, part Gentile and generally relatively prosperous according to Booth's poverty classifications (purple and pink). The New Hambro was one of only two of the fourteen synagogues prominent in the area and given that it was a transplantation of a synagogue originally situated in the City of London, it is unsurprising to find it being the outlier from this point of view also.[59]
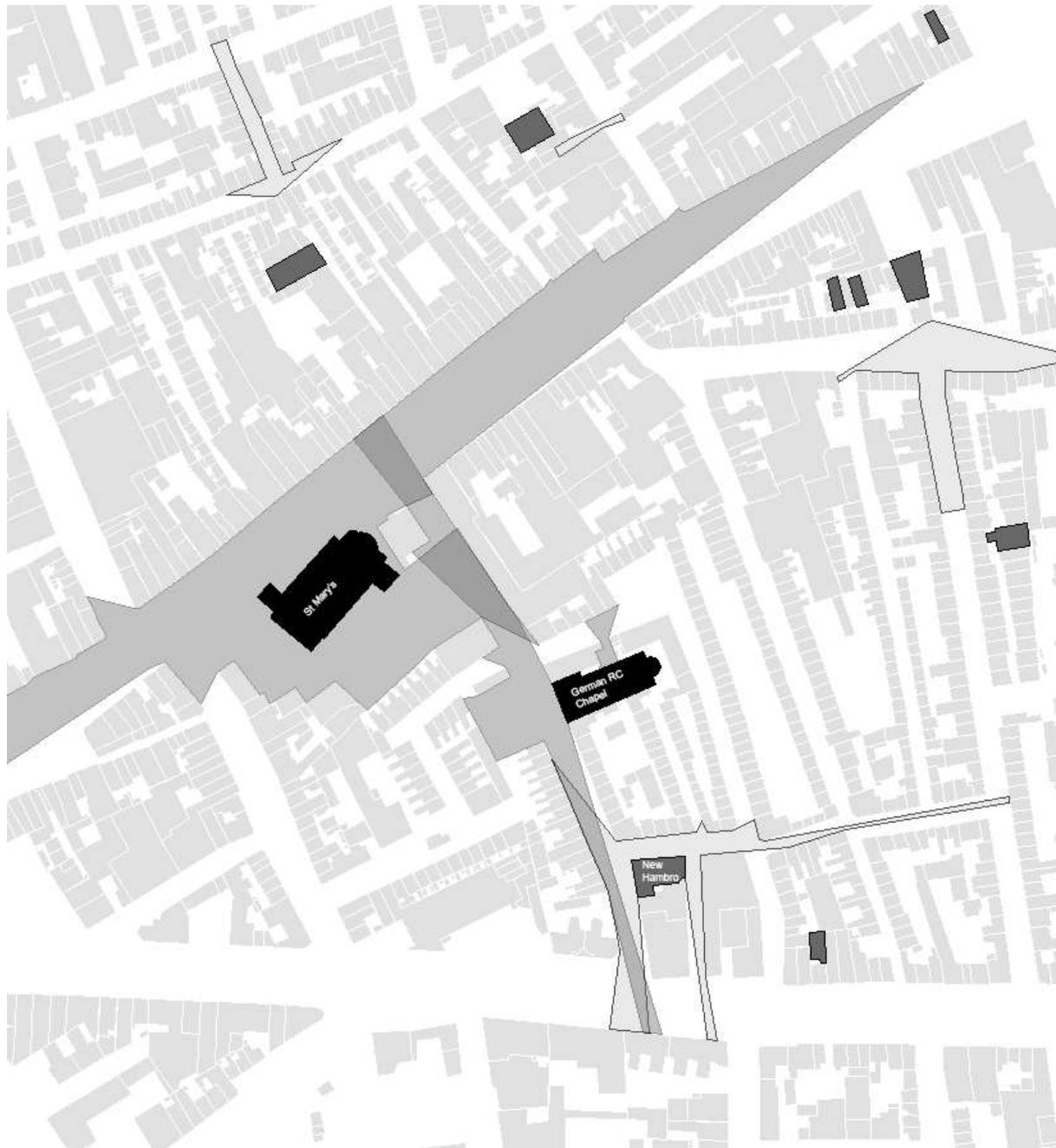
Figure 6: Overlapping isovists in the vicinity of Union Street with St Mary's church and German R.C. chapel as well as New Hambro synagogue marked.

5. Conclusion: the 'intensified tempo' of urban life in Whitechapel

Simmel's argument mentioned at the start of this chapter was that urban life was a distinctly different manner of living, constituting an intensified tempo, whereby the narrow streets of the city paradoxically free one spiritually from the small-mindedness of small town life. At the same time, we have shown here how the street setting (as well as the mode of organisation) of small synagogues meant that they created an interior world, which allowed the Jewish community – in all its multiplicity – to negotiate their way into the urban environment "by providing a familiar social and cultural network".[60] It has been proposed that the variety of religious institutions since the inception of settlement in London's East End were due to "the particular structure of urban space in this area… [enabling] a state of co-presence which is shaped

by the specific pattern of space of the area, which is integrated at a large scale, but locally segregated", [61] suggesting that the relative seclusion of the areas of concentrated Jewish settlement allowed them to shift from the public, urban realm into the more Jewish milieu of the area's back streets. Our analysis here confirms this: showing that the interfaces between Jews and Gentiles, between poor and well-off and between synagogues and churches followed subtle spatial patterns, characterised by both segregation and integration in a densely populated community, with the majority of synagogues having little visual prominence to streets with a low Jewish presence, nor to the more prosperous streets in the area.

Whitechapel comprised an open network of streets, some connected with the wider sphere of the city, with others quieter and more remote from city life. The lack of strong boundaries to the area meant that alongside the close-knit social circles of the Jewish community, were myriad opportunities – at least in principle – to encounter people from other backgrounds. Instead, whilst the home remained a "fortress" against an alien world and the synagogue formed a place of exclusively Jewish space, often hidden from the outside world, the main point of connection to wider society was the street – "a meeting place for peoples of different cultures".[62]Arguably, contact between Jew and Gentile worked in concentric circles of increased levels of encounter, from the domestic realm and religious sphere, where the worlds were apart, through to the streets themselves, which ranged from back streets with little likelihood of interaction – and hence a perception of foreignness and a "world apart" – to the truly urban thoroughfares, where one's foreignness could dissipate within the "metropolitan crowd". This is arguably what explains the vital importance of the "distinctively urban" aspect of London: the city serves as an integrating device – like many other nineteenth century cities – to bring disparate people together.[63]

Simmel wrote how "the deepest problems of modern life derive from the claim of the individual to preserve the autonomy and individuality of his existence in the face of overwhelming social forces, of historical heritage, of external culture, and of the technique of life."[64] Simmel is pointing out a general truth that applied just as well to East End 1899: the nature of urban space was that it could provide a setting in which the Jewish immigrant could preserve his autonomy and individuality, sometimes connecting with the city at large and sometimes seeking out the sanctuary of Jewish life in the largely exclusive preserve of the synagogue. Yet importantly, this study has shown a divergence within the sample of fourteen synagogues found within the study area. Although our research shows that the majority of synagogues within the study area were exclusive in the way in which they set themselves apart visually and physically from the mixed streets of the area, the purpose-built "New Hambro" on the corner of Union Street and the converted premises of Cannon Street Road synagogue (founded 1899 and 1895, respectively), represent the start of a process initiated by earlier generations of Jewish immigrants in London, to move from back street, hidden locations, into prominent buildings with a clear architectural identity.

This process sits well within the spatial logic of the wider range of public-facing institutions that the Jewish community had at this time. As Gidley has written, "in that historical moment, the East End hosted a complex web of contentious, subaltern, multi-lingual micro-public spaces" which included posters advertising English products in Hebrew script [i.e. in Yiddish], street corners and parks, "which functioned as open air debating societies" and other places for quasi or actual political activity, such as "working men's clubs, reading rooms, mutual aid associations and friendly societies". Whilst the majority of synagogues were exclusively Jewish spaces, Gidley suggests that the transformation of the profane attics and backrooms into temporary synagogues: sacred spaces of prayer, learning and "Talmudic dialogue" were part and parcel of the way in which the Jewish population created spheres of engagement with both local London issues as well as with transnational politics, given that they served a meeting places for political discussion as well.[65] Thus, even within the supposedly singularly exclusively Jewish domain of the synagogue, the world outside was never completely cut off.

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Recommended further readings:

R. Evans (1978), 'Rookeries and Model Dwellings: English housing reform and the moralities of private space', *Architectural Association Quarterly,* 10 (1), 25-35.

J. Glasman (1991), "Assimilation by design: London synagogues in the nineteenth century", *Immigrants & Minorities,* 10 (1-2), pp. 171-211.

B. Hillier, (1989), 'The Architecture of the Urban Object', *Ekistics,* 334 & 335 (January/February 1989 & March/April 1989), pp. 5-21.

A. Kershen, *Strangers, Aliens and Asians: Huguenots, Jews and Bangladeshis in Spitalfields 1660-2000* (London, 2005).

T. Metzler, (2014), *Tales of Three Cities: Urban Jewish Cultures in London, Berlin, and Paris (1880-1940)* (Jüdische Kultur, 028; Wiesbaden: Harrassowitz).

G. Simmel, "The Metropolis and Mental Life (original German, 1903)", in Kurt H. Wolff (ed.), *The Sociology of Georg Simmel: Translated, edited and with an introduction by Kurt H. Wolff* (New York and London, 1950), pp. 409-19.

NOTES

[1] Georg Simmel, "The Metropolis and Mental Life (Original German, 1903)", in Kurt H. Wolff (ed.), *The Sociology of Georg Simmel: Translated, Edited and with an Introduction by Kurt H. Wolff* (New York and London, 1950), pp. 409-19, p. 410.

[2] ibid.

[3] Charles Booth, *Life and Labour of the People in London*, 17 vols. (3rd series edn.; London, 1902).

[4] William J. Fishman, *East End 1888: A Year in a London Borough among the Labouring Poor* (London,: Gerald Duckworth & Co. Ltd., 1988).

[5] Rachel Lichtenstein, *On Brick Lane, a Chronicle of Changes in the East End* (London,: Hamish Hamilton, 2007).

[6] Anne Kershen, *Strangers, Aliens and Asians: Huguenots, Jews and Bangladeshis in Spitalfields 1660-2000* (London, 2005), p. 140.

[7] Fishman, op cit, p. 131 states that a dozen years earlier, Charles Booth estimated the Jewish population of Whitechapel to be 28,790, although a slightly later account maintained the difficulty of any precision in numbers, other than that there had been a considerable increase in the past few years, C. Russell and H.S. Lewis, *The Jew in London (with a Map Specially Made for This Volume by Geo. E. Arkell*) (London,1901)., p. 7.

[8] Bronwen Walter, 'England People Very Nice: Multi-Generational Irish Identities in the Multi-Cultural East End', *Socialist History Journal*, 45 (2014), 78-102.

[9] Miles A. Kimball, "London through Rose-Coloured Graphics: Visual Rhetoric and Information Graphic Design in Charles Booth's Maps of London Poverty", *Journal of Technical Writing and Communication*, 36/4 (2006), pp. 353-81.

[10] Robin Evans, "Rookeries and Model Dwellings: English Housing Reform and the Moralities of Private Space", *Architectural Association Quarterly*, 10/1 (1978), pp. 25-35.

[11] Laura Vaughan, 'Mapping the East End Labyrinth', in Alex Werner (ed.), *Jack the Ripper and the East End* (London, 2008), pp. 218-37.

[12] Michael Hebbert, *London: More by Fortune Than Design* (Chichester, 1998), p. 53.

[13] Charles Booth, 'Poverty Series Survey Notebooks (Online Archive)', </booth.lse.ac.uk/>, accessed 23/6/07, B350, p. 43, 45.

[14] op cit, B351, p. 37.

[15] B351, p. 47 cited in Victor Bailey, *Charles Booth's Policemen: Crime, Police and Community in Jack-the-Ripper's London* (London, 2014), p. 95.

[16] C. Russell and H.S. Lewis, *The Jew in London (with a Map Specially Made for This Volume by Geo. E. Arkell)* (London,1901).

[17] L. Vaughan, 'The Relationship between Physical Segregation and Social Marginalisation in the Urban Environment', *World Architecture*, 185 (2005), pp. 88-96.

[18] Anne Kershen and Laura Vaughan, 'There Was a Priest, a Rabbi and an Imam...: An Analysis of Urban Space and Religious Practice in London's East End, 1685-2010', *Material Religion*, 9/1 (2013), pp. 10-35

[19] Charles E Goad produced detailed (scale 1:1056, namely 1 inch to 88 feet) and coloured plans of urban areas in Britain between 1885 and 1970 to assess the risk of fire for fire insurance companies. This study used Goad Fire Insurance plans, Vol. 11, sheets 320-4 and 336-9; copyright and database right Crown Copyright and Landmark Information Group Ltd.

[20] The maps, dated 1864-1911, were provided by the Ordnance Survey/EDINA Digimap service.

[21] The lists featured in Judy Glasman, 'London Synagogues and the Jewish Community, c. 1870-1900', MSc dissertation (unpublished) (Bartlett School of Architecture, University College London, 1982), whilst Sam Melnick, a synagogue historian, provided access to his list of "Sites of Synagogues 1800 to 1940'" through personal contact with the first author in 1990.

[22] Gentile is the term used in the Jewish East London study to describe non-Jewish people. In fact, this would have covered many different groups, such as Irish Catholics or Chinese.

[23] Originally defined by M.L. Benedikt, 'To Take Hold of Space: Isovists & Isovist Fields', *Environment and Planning B*, 6 (1979), 47-65.

[24] Tobias Metzler, *Tales of Three Cities: Urban Jewish Cultures in London, Berlin, and Paris (1880-1940)* (Jüdische Kultur, 028; Wiesbaden, 2014), p. 139. Indeed, shop signs continue to be a subject of discussion regarding signs of the presence of a "foreign" culture in public space, as discussed by Hall and Datta in their study of contemporary London [Hall, Suzanne and Datta, Ayona (2010), 'The translocal street: Shop signs and local multi-culture along the Walworth Road, south London', *City, Culture and Society,* 1 (2), 69-77.], or in the study of contemporary Sydney, Australia by Amanda Wise: 'Foreign' Signs and Multicultural Belongings on a Diverse Shopping Street', *Built Environment*, 37/2 (2011), pp. 139-54.

[25] The normal transliteration to English spells *chevra*, but this is the spelling used by the synagogue (see Figure 4).

[26] This church had different denominations over time including Calvinist, Independent and Congregational; from 1862 it was known as Trinity Congregational Church. Source: Survey of London, Vol 27, pp. 265-288.

[27] This was established experimentally by a researcher noting signage sizes, distances and angles at which urban signage could still be read.

[28] Based on research on the readability of signage and relevant distance thresholds, the formula presented in Kuhn et al 1997 was applied, which suggests a readable distance of 3.6 metres per cm of size of font used on the sign. Beverly Kuhn, Philip Garvey, and Martin Pietrucha, 'Model Guidelines for Visibility of on-Premise Advertisement Signs', *Transportation Research Record: Journal of the Transportation Research Board*, 1605 (1997), pp. 80-87. An image of the *Chevrah Shass* served as an example of contemporary signs indicating passages to synagogues, where a distance threshold of 70 metres was established.

[29] These were the Charles Booth's Maps Descriptive of London Poverty, 1898-9, digitised and made available by the London School of Economics library's Charles Booth Online Archive project http://booth.lse.ac.uk/ (accessed September 2015).

[30] The map, published in Russell and Lewis (1901), was drawn by George Arkell, a cartographer who also worked on the Booth maps. According to the book (p. xxxiv), the main source of information on Jewish presence in each street was the London School Board, along with the Superintendents of Visitors of the Tower Hamlets and Hackney Divisions. The School Board provided data on all families with children under 14, distinguishing between Jewish and non-Jewish children by forename and surname, observance of Jewish holidays and so on, extrapolating from households with Jewish children to all households within the street (or for long streets, within the street section). The area was divided into six classes, of which the three in shades of red denoted a Jewish minority presence in a given street (whereby the darker the colour, the lower the proportion of Jews) and the three shades of blue did the same in reverse (the darker the blue, the higher the concentration of Jews).

[31] Anne Kershen, *Strangers, Aliens and Asians: Huguenots, Jews and Bangladeshis in Spitalfields 1660-2000*, p. 85.

[32] Sharman Kadish, 'Constructing Identity: Anglo-Jewry and Synagogue Architecture', *Architectural History*, 45 (2002), 386-408.

[33] The decision to form independent, self-governing prayer houses, rather than join those affiliated to the United Synagogue was due to a variety of reasons: cost (the membership charges would have been prohibitive for the new immigrants), logistics (there were very few such synagogues within walking distance of the East End, which would have limited access for the orthodox practice of not travelling on the Sabbath and indeed there was limited leisure time to attend services at any distance from the workplace), but most importantly it was a matter of difference in style of service; the formal Anglo-Jewish practice would have been very much at odds with the more casual style of worship familiar from Eastern Europe.

[34] Anne Kershen, *Strangers, Aliens and Asians: Huguenots, Jews and Bangladeshis in Spitalfields 1660-2000*, p. 86. See also Table 1, where Limciecz Synagogue is one of many examples of the time of the "fusing of *der heim*

with the here" as Kershen puts it (op cit), whereby smaller synagogues would name their congregation after the town of origin of its founders.

[35] A *chevra* (plural: *chevrot*) is the Hebrew/Yiddish word for a social or voluntary association for religious purposes often forming the congregation of a small synagogue. Many East London *chevrot* were just as much friendly societies as synagogues, set up to assure funds for funerals and burials. Although the term *shtiebel* is frequently used interchangeably with *chevra*, it simply denotes a small synagogue (from the German *Stüberl* which means small room).

[36] Metzler, *Tales of Three Cities: Urban Jewish Cultures in London, Berlin, and Paris (1880-1940)*, p. 129. See also R. P. Kalman, 'The Jewish Friendly Societies of London, 1793-1993', *Transactions of the Jewish Historical Society of England*, XXXIII/1992-1994 (1995), pp. 141-61.

[37] See more on the Yiddish theatre in the chapter elsewhere in this volume.

[38] T Kushner, 'Jew and Non-Jew in the East End of London', in Geoffrey Alderman and Colin Holmes (eds.), *Outsiders & Outcasts: Essays in Honour of William J. Fishman* (London, 1993), pp. 37-38.

[39] An example of building adaptation of this nature is revealed by the newspaper report of a dispute over a bill from an architect commissioned to "convert business premises in Hanbury Street into a synagogue... to look at the buildings and see if they could be altered as desired." (*The Jewish Chronicle,* October 23 1896)

[40] See note 35 for meaning of shtiebel. The transliteration from Yiddish follows various English spellings. We have standardised these, except when quoting directly.

[41] 'A Humble Chevra Room', Jewish Chronicle August 23 1895, p. 13. *Shul* is the Yiddish word for a synagogue.

[42] Beatrice Potter reporting for Charles Booth, C. Booth (ed.), *Life and Labour of the People in London* (1-IV; London, 1889-93). vol. 1, pp. 572-3, quoted in Fishman, East End 1888, p. 167.

[43] Booth (ed.), *Life and Labour of the People in London*, vol. 1, p. 31, quoted by Judy Glasman, 'Architecture and Anglicization: London Synagogue Building, 1870-1900', *Jewish Quarterly*, 34/2, 16-21, p. 18.

[44] Federation Minutes January 19, 1897, quote from Glasman, 1987, *Architecture and Anglicization*, p. 18.

[45] Judy Glasman, 'Assimilation by Design: London Synagogues in the Nineteenth Century', *Immigrants & Minorities*, 10/1-2, 171-211, p. 183.

[46] *The Jewish Chronicle* October 21 1887, pp. 6-7.

[47] Judy Glasman, "London Synagogues and the Jewish Community, c. 1870-1900", p. 57.

[48] The Jewish Chronicle of 7 March 1890, p. 16 reports that the Federation's Honorary Architect had found a number of synagogues to be "dangerous", requiring the urgent material assistance of the Federation. His report on the decrepit built fabric of two of the synagogues in Fieldgate Street stated that it was "only a matter of time" before an accident were to happen, due to women rushing down the staircase from the gallery, where the door opened the wrong way.

[49] Booth (ed.), Life and Labour of the People in London, vol. I (1889), p. 170. Beatrice Webb, an important social scientist in her own right, assisted Charles Booth in his investigations.

[50] Booth, 'Poverty Series Survey Notebooks (Online Archive)', B351, p. 151.

[51] Ibid., B351, p. 133. "Bullies" at this time this would mean either a ruffian hired for purposes of violence or intimidation or a protector of prostitutes. The reference to black and purple in the notebooks is due to the 1898-9 survey being a revisiting of the earlier, 1889 survey. Here the notes are indicating that the 1889 survey classified the street as purple, but now it is being reclassified downwards to the lowest classification, black.

[52] See for example the notebook entry for Brushfield Street: "West along Brushfield St. North up Gun St. very rough. Mixture of dwelling houses and factories… a Jewish common lodging at the N.W end. Where the Jew thieves congregate… South of Brushfield St. Gun Lane is rougher than the north end. Street narrow. Loft across from wall to wall. Old boots & mess in [street]. Dilapidated looking: ticket of leave men living here: at least dark blue on map purple. But it is not a street particularly noted for prostitutes! At the North end is Fort St. Fairly well to do. Pink rather than purple of map: Jew middlemen live here … Duke [Street] has houses on East side. The west side is all factories & warehouses. Character [dark blue to light blue,] in map purple. The coster flower & fruit sellers in Liverpool St. come from here! Inhabitants are a mixture of Jews & Irish." C. Booth, 'Religious Influences Survey Notebooks', (1897), B351 pp. 100-101.

[53] Vaughan, L. (2005), "The relationship between physical segregation and social marginalisation in the urban environment", World Architecture, 185 (Special issue on space syntax), pp. 88-96.

[54] This overlap means that a t-test indicating differences of sizes of isovists between synagogues and churches is not statistically significant, indicating that size of the isovist alone is not a definite predictor of religious building type.

[55] In this case, the t-test delivers statistically significant results, i.e. isovist length is indicative of building type. In addition, the three churches of Anglican denomination (St Mary's, St Olave and St Augustine's) have the longest isovist lengths among the churches, pointing to subtle differences among the sub-sample of churches.

[56] The normal transliteration from Hebrew or Yiddish to English spells 'chevra', but this is the spelling used by the synagogue (see Figure 4).

[57] Henry Walker, *East London: Sketches of Christian Work and Workers* (London, 1896).There are no obvious page numbers in this source.

[58] This image of St Mary's shows the church tower with a huge banner advertising Yiddish sermons. According to the Museum of London caption, "On Saturdays at 5.00pm, addresses to the Jewish community would be made from St Mary's open-air pulpit. Special services for Jewish festivals would also be conducted, read in Hebrew and German, and sermons preached in English and Yiddish. Up to 500 people would make up the congregation.' (http://www.museumoflondonprints.com/image/141270/john-galt-st-marys-church-whitechapel-c-1900, accessed

8/4/2016). St Mary's seems to have formed part of the effort that the Anglican Church devoted at that time (almost totally unsuccessfully) to the conversion of the immigrant Jews. Indeed, Bill Fishman quotes the American Missionary Societies' analysis of the cost of doing religious work around the world, which listed the outlay required for "converting a Jew" to be $2800 in contrast with an African, $14 and so on up the scale to "A Chinese, $100". Fishman, *East End 1888*, p. 173.

[59] Another point of difference was that the New Hambro was a constituent member of the United Synagogue movement, rather than the Federation of Synagogues.

[60] Metzler, *Tales of Three Cities: Urban Jewish Cultures in London, Berlin, and Paris (1880-1940),* p. 122.

[61] Kershen and Vaughan, 'There Was a Priest, a Rabbi and an Imam...: An Analysis of Urban Space and Religious Practice in London's East End, 1685-2010', p. 31.

[62] Kushner, op.cit., p. 39.

[63] Bill Hillier, 'The Architecture of the Urban Object', *Ekistics*, 334 & 335/January/February 1989 & March/April 1989 (1989), 5-21., p. 18.

[64] Simmel, "The Metropolis and Mental Life" (Original German, 1903), p. 409.

[65] Ben Gidley, 'Cultures of Translation: East London, Diaspora Space and an Imagined Cosmopolitan Tradition', in Nando Sigona et al. (eds.), *Diasporas Reimagined: Spaces, Practices and Belonging* (Oxford: Oxford Diasporas Programme, 2015), 37-40. Quote from pp. 38-9.