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A democratization of urban space: gender and ethnicity in the Whitechapel Market

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A democratization of urban space: Gender and Ethnicity in the Whitechapel market

Abstract

This article examines how the replication of familial, communal patterns from the home country is shaping public space. Combining the synergetic aspects of subjective experience with the objective measurements of the space we study Whitechapel market in the East End of London. We shed new light on the term public sphere revealing two socio-spatial mechanisms: The first is an adaptation of the spatial structure: a way of the local community to create separation between females and males in the heterogeneous western public space. The second is the 'invisible hands' of the females: The unobservable force that contributes to the community's wealth and cohesion. Our findings show the capacity of a given urban form for adaptation - it creates a new public sphere, partly democratized, but still segregated. A sphere, that from one hand provides traditional gendered roles, and from other a fertile environment for social and economic prosperity.

Introduction

The public space, which forms a place of work, retail and community activity throughout the world today, is a central theme of urban studies (Jamal, 2003; Barrett and McEvoy 2006; Legeby, 2009). The creation and impact of public realms were empirically studied and theoretically investigated from various points of view, with studies including a focus on the physical public space as a spatial location for conflict, social association and change (Staeheli and Mitchell, 2008; Brash, 2011; Watson, 2013); and the de-spatialized concept of the public sphere (Habermas, 2001; Smith and Low 2006; Arendt, 2013). The relationship between the physical public space and the universal and spatially undifferentiated public sphere as an expression of civil society - "the sphere of private people coming together as a public" (Habermas, 2001) - has been attracting wide scholar attention (Low, 2017). Yet, the clarification of how public space plays a critical role in social practices that are emerging in the

1 urban sphere and accompanied by a different set of politics and ideas of civil society still await deeper
2 insight.

3 Many researchers have identified institutions and practices that contribute to the generation and
4 interpretation of the public sphere (Iveson 2007; Staeheli and Mitchell 2008). Howell (1993) describes
5 the public sphere as “a normative ideal of political action and a historical phenomenon... It had its
6 origins in Western Europe in response to late eighteenth century ideals of citizenship in the context
7 of an increasingly informed male public, emerging from new forms of political action, and
8 representative and participatory government”. Following Sophie Watson notion of 'space of
9 heterogeneity' (2006), Low (2017) explains that public space can be seen as "a site of political practices
10 that go beyond the politico-philosophical notions associated with the public sphere and overcomes
11 some of its limitations. Once recognized, the spatiality of the public sphere transforms an
12 understanding of the politics of public space". Thus, public space and the public sphere represent
13 conjoined terrains of socio-political interrelations.

14 Built upon Mitchell (2003) argument that recognition of the public spheres spatiality will transform
15 our understanding of the politics of public space, Low & Iveson (2016) describes that "if this material
16 and spatial context is regulated in unfair ways, and through its management and design communicates
17 that some are not welcome, then not only public space becomes less accessible and diverse, but so
18 does the public sphere". Donaghy (2017) explains that civil society must act from the inside to have
19 equal access to the benefits of urban life and to achieve political and territorial inclusion. In
20 resemblance to Dewey's (1927) idea that democracy is "the cultivation of shared understandings
21 through diverse voices —individual and collective—that can be heard", recent studies describe the
22 public space as produces the public sphere through a location. At this location diverse people's voices
23 and bodies are recognized and included, moreover, sometimes they change the local political and
24 representational processes (Warren et al. 1992; Robeyns 2003; Young et al. 2001; Koch and Latham,
25 2011; Low, 2017).

1 In line with de Lucio's statement (2000) that any definition of public spaces should include "a vision of
2 public spaces as psychical places where people can participate in public life and where people's claims
3 can be voiced", Ortiz et al. (2004) defined public spaces as "places of interrelation, social encounter
4 and exchange, where individuals and groups with various interests converge". It is now common to
5 assume that in addition to class and income, ethnic identity and gender are the main factors that affect
6 the way in which people can consume and shape the public spaces (McDowell, 1999; Yusof and
7 Kozlowski, 2018; Friendly, 2019). Following globalization processes, the adaptation of the public space
8 in the western inner-cities to the use of minority ethnic communities was empirically studied and
9 theoretically investigated from various points of view. These studies focus on the social life of groups
10 residing in current multi-cultural inner-cities in social units larger than a household (Vaughan, 2016,
11 Hall, 2015). Social networks (Zhou and Alejandro, 2012) motivate community members to congregate
12 in defined areas where the known order prevails and they encounter people of the same values and
13 affiliations (Johnston et al. 2007; Cimino, 2011). Yet, the role of the replication of familial patterns
14 from the home country in shaping public space and its effect on the public sphere still awaits deeper
15 investigation.

16 Robinson (1984) coined the term 'encapsulation' to describe "the existence of a group in spatial
17 concentration in a 'sort of social bubble', distinct from the host society, speaking a vernacular
18 language, with their own modes of dress and rules of marriage". In the context of the local public
19 space in the UK, recent studies have found similar patterns for contemporary immigrants (Hall, 2015).
20 In a post-industrial time of mass migration, the emergence and growth of the small independent
21 Minority Ethnic Business (MEB) selling ethnic food, clothing, music and entertainment along the high
22 streets, for example, has become a common feature that has been seen to make a considerable
23 contribution to local communities (Barrett and McEvoy, 2006). Vaughan et al. (2018) state that "often
24 due to the lack of skills required and low initial capital outlays, and /or a degree of prejudice and
25 exclusion on the part of the host community, migrant businesses tend to occupy the lower end of the
26 market in easy-to-enter businesses" (see also Barrett et al. 2001). As a survival strategy, MEB has

1 proven to be advantageous to minority communities in providing a protected employment for co-
2 ethnics within the community's defined territory (Hall 2011).

3 Previous research has determined that such 'encapsulated' public spaces function best when they are
4 sustained by a high ethnic diversity amongst proprietors, and corresponding diversity goods, with a
5 tendency of small independent units to further subdivided and alter space for greater social and
6 economic benefits (Jamal, 2003). In this respect, planning and design have a fundamental role in the
7 democratization of the use of urban public spaces and in the fight against social exclusion (Mitchell,
8 2003). Synergetic aspects of subjective experience and action of the individuals who use the space in
9 their daily life together with the objective aspects of planning (Ortiz et al. 2004; Fenster, 2004) can
10 therefore become a central element in the construction of place where communal practices replicate.
11 Gender roles usually affect the way in which people consume and shape the public space - as females
12 are carrying out tasks which are mostly related to family affairs and they have a much closer
13 relationship with their immediate environment (Al-Haj, 1995; Justo, 2001). Almost entirely hidden
14 from the gaze of outsiders is the female domain, focused on familial, friendship and neighborhood
15 networks (Werbner, 2004). Therefore, the design of public spaces has a greater impact on the daily
16 lives of females than on those of males. There is a need to transform gender relations to support
17 women's empowerment (Hunt & Kasynathan, 2001). Throughout history, public spaces have given
18 females the freedom from male's dominance (Watson, 2013). On the other hand, public spaces are
19 considered inaccessible and dangerous, they encourage females to remain in the private domain (Pain,
20 1997). Females' confinement to the private sphere was reinforced by cultural and legal arrangements
21 and led to the ideology of 'separate spheres' (Tocqueville, 1840:101).

22 In this paper, we study how Whitechapel market in the East End of London, a prominent example of
23 contemporary public space, has been adapted for the use of both genders in Sylheti community.
24 Particularly, how their economic and social activities create a new public sphere through replication
25 of behavior patterns from the home country. Although democratization is the target western urban
26 planning hopes and strives for, we show here how ethnographically-based spatial analysis reveals

inequalities and social exclusion as well as offer the means for understanding the places where people work, shop and socialize. We question how ethnic, familial patterns reveal the changing roles of women in urban development in Whitechapel.

Starting with a theoretical framework that outlines the effects of communal identity on public space and public sphere, in the next section we present the research methods and study area. Following section examines socio-spatial roles of the studied population groups and provides analytical measurements of the influence of the socio-spatial aspects on local urban sphere. Last section concludes the paper assessing Whitechapel market's 'encapsulation', where the 'traditional' status of women is preserved and estimates its impact on the public sphere.

Whitechapel market

Whitechapel Road is a part of the historic Roman Road from London to Colchester (Figure 1a). Along the road, there are notable numbers of office buildings and several institutions, such as the Whitechapel Art Gallery, the East London Mosque and the established street market next to Whitechapel tube station.

[Place Figure 1 about here]

Towards the end of the twentieth century, Whitechapel Road became the center of the Bangladeshi-Sylheti community, the area's older and best-established ethnic minority. The other groups in the area are relatively small. British Bangladeshi-Sylheti community appears unified to outsiders, it shapes the internal spatial organization of the public space. Clans play an important role in the daily life of this relatively homogeneous community, managed by precise practices and communal codes. Belonging to the community, taking part in its networks and living in the territory of the group is a source of solidarity and mutual support for individuals (Glynn, 2006; Flint Ashery, 2017, 2019a, b). Fragmentation of the Sylheti society by gender's role is widely acknowledged by the community. They classify individuals accordingly, and individuals express their pro-differentiation behaviors. In the recent decade, however, Bangladeshi Sylheti transnational identity is in a growing tension between

those espousing pragmatic integration and those articulating a more oppositional, exclusionary politics. This tension is critical to understanding the conflicting pressures to which Bangladeshi women are subjected in Britain, which gradually contributes to the pluralization of the diasporic public sphere (Werbner, 2004; Ali, 2008).

Whitechapel Market area, between Vallance Road and Brady Street, consists of a very broad pavement, with stalls lining the Whitechapel Road roadside (Figure 1b). The stalls occupying the pavement present a virtually unbroken line from Vallance Road to Cambridge Heath Road. These are permanent pitches taken up by traders with a parallel unbroken line of van parking arrangements. Both the shops and the stalls run for many years by local families, and each one of the family's members (males) has clearly defined roles and responsibilities within the family business. Usually, the older generation runs the shops, while their married male children ran the stalls in front of the shops and their wives are usually assist in the shops (Figure 2a and 2b). Most of the residents live in and above shops in houses divided into flats, both in private ownership and renting.

Tower Hamlets council manages independent commercial street trading opportunities within the borough. The market is inner community-oriented, sensitive to the preferences of the local Bangladeshi community in terms of the range of products sold. The shop signs are also written in Bangla. There is a range of stalls at the weekday market, selling a range of authentic Asian clothes, jeweler, fruits and vegetables, in addition to more specialized product stalls sell products that made a good 'fit' with local community needs. In total, the research area of Whitechapel Road is 0.3 miles long, contains 642 families living in 63 buildings, 47 shops and 53 stalls.

[Place Figure 2 about here]

Methodology

The research methods combine quantitative and qualitative data analysis of (1) direct observations and (2) in-depth interviews, together with (3) morphological analysis.

Observations

For an entire week (15-21 May 2017), an observation was taken from the Idea Store tower on the pedestrians walking by the market and allowed us to map the use of Whitechapel market by users according to their gender. The pedestrians were counted and sorted according to their relative location to the lighting columns, which are positioned along the central axes of the market. Further these observations were used to define key location for the morphological analysis, locations where most interactions are taking place.

Men and women experience very different spheres. We wanted to confirm this 'common knowledge' empirically for Whitechapel market. Figure 3 shows an average of averages of people present in Whitechapel market.

[Place Figure 3 about here]

To better understand the impact of gendered social roles, we classified all the observed people into two main categories: female (F, in orange) and male (M, in green)¹. Green circles indicate the number of men gathered on the certain spots in the market, while orange circles show the number of women in certain market locations.

In-depth interviews

Field-work data was complemented by 103 one-hour in-depth interviews (63 females and 40 males) for further elaboration. The interviews aimed to learn how gender norms play out in the market. They were conducted with shops' owners, stalls' owners, wives of the owners, workers, business wo/men and people that come to the area through Whitechapel tube station. The interviewees were from different age groups (over 18) and most of them living in the neighbourhood. The interviews were shaped by an "interview guide", which indicated some open-ended questions to clarify how gender relations from the ethnic community replicated within the market setting (Scheurich, 2014). They were carried out in English and in Sylheti. The latter allowed to

¹ Although children were noted on all the days of observation, only children who were observed as holding defined roles and responsibilities (trading, gathering with the men, helped in stalls, arranged products etc.) were considered in this study.

1 communicate with several women who had recently migrated to the UK. All participant names have
2 been changed to pseudonyms.

3 ***Morphological analysis: Isovists***

4 To study how the local population organizes the psychical environment and adapts it to its needs, we
5 conduct a spatial analysis of the open urban space. We use an analytical technique called *isovist* for
6 spatial analysis of urban areas (Turner, 2001).

7 A single isovist is the volume of space visible from a given point in space, together with a specification
8 of the location of that point. It was first introduced by Benedikt (1979) and widely used by Space
9 Syntax community (Hillier, 1996). This behaviorally and perceptually oriented methodology measures
10 what area of the space is visible from a predefined viewpoint. One can also think of the isovist as the
11 volume of space illuminated by a point source of light. Every point in physical space has an isovist
12 associated with it. The isovist is constructed as shown in Figure 4.

13 [Place Figure 4 about here]

14
15 In this study, we construct a set of two-dimensional isovists in the horizontal section ("plan") of the
16 market. The resulted isovists determine visibility and accessibility to or from a particular point within
17 emerged morphological arrangements. The location of this particulargenerating point varies
18 depending on the needs of the analysis. Next section describes the rationale behind chosen generating
19 points of our isovist analysis.

21 **Results: Spatial relationships in democratization of urban public space**

22 ***The socio-spatial roles of the designated axes and the gathering points***

23 Based on the observations and interviews we were able to define main gathering points for both males
24 and females. Figure 5a reveals there are three main gathering points where males congregate: M1,
25 M2 and M3. M1 on the western side of the market is the traditional starting point of the market. It
26 has a good vista towards the City of London, the wide Vallance Rd and The East London Mosque &

1 London Muslim Centre. M2 is located near the entrance to Whitechapel underground and overground
2 station (Figure 1b). A ten meters' gap between the stalls in front of the station increases the vista
3 towards the opposite Hospital. M3 is located underneath the front roof of Whitechapel's' flagship
4 library (Figure 1b). This site is the Eastern side of Whitechapel market.

5 The observations over Whitechapel market revealed clear demarcation axes dedicated to different
6 population groups (Figure 5b). Nasre (male, 42, M3²) indicates that as the market expanded towards
7 the east, the gathering points have moved accordingly: "A few years ago we used to meet on the other
8 side of Brady Street, where Coral is. It felt like if I didn't come, my rice couldn't be digested. We have
9 a regular place where all our friends would sit together for adda [chatting]...But now the market had
10 stretches and people need to be next to the new stalls". At certain times of the day, local males are
11 congregating at their local gathering points (Figure 5a). They are usually accompanied, walk on the
12 path closer to the shops (Figure 5b). Sai (male 27, M2) describes his path: "When going out to the
13 mosque my youngest brother always joins me. He needs to learn how to behave, how to negotiate
14 with the world... We always take the left path by the stalls... As a child, I always took this way with my
15 father as well. It is very crowded here, and you don't want to find yourself in an awkward position
16 with a woman".

17 [Place Figure 5 about here]

18
19 Local females, however, can hardly be seen by outsiders. Unlike the males, who dominate the main
20 pedestrian way, females usually stay inside the shops or the stalls, or congregate along the narrow
21 "females' line", the demarcation axis between the stalls and the vans (Figure 5b) in a less organized
22 and more spontaneous manner compared to the males. As they are usually talking with other females
23 affiliated to their families, shop or stall, we can identify seven points, where up to eight females
24 congregate, with a relatively shorter distance between them (Figure 5a). Muntaha (female 19, F5) is

² Location marked on Figure 5a, where a person was observed and interviewed.

1 living in her family shop and working in the nearby stall. She describes the females' semi-private-semi-
2 public life along the demarcation axis between the stalls and the vans: 'What I'm doing is to check that
3 there's always available stuff to sell in the stall, and if something is over I immediately bring some
4 more from the van. The van parks here at the back, protecting me from the cars on the road. I am here
5 all day, organizing things. I have no time and no willing to walk around - I am too busy here (in the
6 stall) with all these chores'. Vani (female, 48, F2) explains the local rules: "...there are very clear rules
7 here, much older than me. It is good to behave properly, not to talk with people that you shouldn't
8 talk with, not to be touched, avoid anything that can cause people to talk about you, mainly when you
9 are young. When I come shopping, I walk next to the shops, on this side of the columns... It is not
10 something that is written anywhere, it's just the way to behave". Vani indicates that community
11 members who come for shopping or to visit friends are familiar with these orders, accept it and obey
12 to its rules.

13 'Visitor females' usually walk next to the shops on Whitechapel Rd while 'visitor males' usually walk
14 next to the stalls (Figure 5b). Occasional visitors (e.g. tourists or people who pass the market on their
15 way from the tube station to the hospital) who are usually outsiders to the community, are not familiar
16 to these orders. However, an analysis of an average of 15 minutes of observation (took from the
17 narrowest point of the market) revealed a flow of more than 16 people per minute per meter. Out of
18 these pedestrians, 78 females (out of 96) chose to walk close to the stores, while 107 males (out of
19 144) chose to walk close to the stalls.

20 The data shows a far greater presence of men, mainly shop owners and workers from the local
21 Bangladeshi Sylheti and Dhaka, sitting on their folding chairs or standing talking with each other
22 outside their shops/stalls in their gathering points (Figure 5, areas M1-3). Other men in the area are
23 mainly are from the local Somalis and Pakistanis communities, as well as occasional shoppers and
24 guests. The low relative presence of women of any age, culture and ethnic background can be
25 observed along Whitechapel Road with the exception of the Bangladeshi women standing along the
26 market (Figure 5a, areas F1-7) behind the stalls and next to their vans.

The social validity of gendered gathering points

To better understand the users' walking patterns, movement radius and space accessible for visual and physical contact, we use the isovist technique for each gathering point. In general, views in the area run along street axes, including the long views east and west through Whitechapel Road, highlighting the historic street frontages along Whitechapel Road north and exposing the colorful open space market activity. However, views and quality of open space observed from different alternative locations is changing according to the morphological conditions of the surrounding as depicted by isovists.

Figure 6 indicates that none of the females gathering points is located at the endpoints of the market, although F1 has a vista towards M1 and Vallance Rd., and F7 (as well as F6) are located eastern to Fulbourne St, where there are stalls with no nearby shops (the building of Idea store). Similarly, F2 has a vista through Court St. F3, F4 & F5, in the middle of the market, have more limited vistas. Moukthika (female, 19, F2) explains: "I need to be in the stall, to organize it. But if I am not too busy I go to chat with my friends. They are also family, running the nearby stalls. We are meeting there - you can see it from here - so if I see a friend there I join her, and others will come as well...There are few other places to go (i.e., gathering areas), but they are too far away, and I need to be around here".

Figure 7 shows the movement area that is available for actual walking trajectories at each gathering point from the overall of the visually accessible space. According to our observations, female movement is limited to some invisible, but well-known boundaries. While male's trajectories are not restricted, they can move freely within the market (points M1, M2 and M3 in Figure 6 and 7).

[Place Figure 6 about here]

[Place Figure 7 about here]

Devi (female, 33, F1) describes the benefits of F1&F2 locations: "This area can be called *Bengali para* (i.e., center or locality characterized by a strong sense of community). Every Bangladeshi item is available here. People with money who come from the City waste everything at the beginning of the market and have much less as they move towards the eastern part of the market. People say 'the

more you turn east, the less you spend'. Zara (female, 27, F4), on the other hand, describes points F3, 4, 5 as a less favorite: "It's boring here. Not much business happens in this area. Busy people rush, coming from the station, going to the hospital or the city, not interested in the market. Whatever we can offer, they could find it a few stalls earlier". Points F6 and F7 are an expansion of the market. Only in recent years, the market has expanded there. Renu (female, 61, F7) explains: "It is not the best location here, in front of the library. But we opened this stall for our youngest son. He helps in the shop, on the other side of Brady Street, so I take care of his wife here. She's a good girl, very modest so she stays inside, organizing things while I help with the business".

Table 1 shows isovist area and perimeter for both population groups and for both visually and physically accessible zones of use. Each gathering point has its own value, influenced by its location. Examining visually accessible zones, we can see that vistas available for women are smaller than those of men. However, their perimeter is bigger. So, women are given less space to observe and this space is more ambiguous, having complicated contours. In regard to the space for walking, men have the same volume of space for the movement as for seeing, while the females' movement space is almost twenty times less than one they can see.

[Place Table 1 about here]

The correlation between the strong/weak points of males and females

In-depth interviews and observations suggest that there are intra-gender relations within the gathering points. Females peeping from behind the stall's curtains, individual males arrive at their stall from opposite directions exchanging a few words and returning back to the gathering points from which they left. When a female was at the stall, the male arrived, exchanged a few words with her and left, and vice versa.

In order to understand how new morphological conditions produced by these gendered agents of the local community and depicted by isovists correlate with market productivity, we examine first the relation between strongest and the weakest market locations (Figure 8).

1 Afia (female, 31, F5), Muntaha's sister-in-law, lives in the shop: "We, the women, are at the back so
2 as not to talk to other men. It's not respectable, inappropriate, *izat* (respectability of the women of
3 the family). Our men are the ones who arrange all things, talk to other men about business. But I can
4 see from here exactly who Rifat is talking to. I do not have to be physically there - I see everything".

5 Farah (female, 32, F1) describes: "I can't take part in their conversation. We need to behave with
6 modesty and decorum at all times, or we'll bring *lajja* (shame) to the family name. But sometimes he
7 needs to ask me something or need my advice. So, he comes over for a few minutes. I see him coming
8 from here, so I leave the others and go back to the stall. That's my way to take part but not to be
9 involved". Rafi (male, 39, F1, Farah's husband) adds: "She knows these sort of things - what people
10 prefer, what they'll buy. Most of us order (vegetables) from the same places so it's cheaper. So, we
11 discuss business between us (the men), but sometimes it's good to ask her as well".

12 These intra-gender relations hints that females are not only 'experiencing' space through males, but
13 actively contribute for a greater economic benefit. In the spatial terms there are only three males'
14 points and seven females' points, so females' points are within the closest proximity are matching
15 males' points to contribute to a working set of urban economic prosperity. A comparison between
16 the total strength of the pairs (M1&F1; M2&F5) in all activity zones (area and perimeter in the visually
17 accessible zones as well in the physically accessible zones) clarify that together, M1&F1 (Area 4490;
18 Perimeter 2016) are much better locations compared to M2&F5 (Area 3243; Perimeter 1795). Note
19 that the strongest and weakest points belong to the same extended family units.

20 [Place Figure 8 about here]

21
22 Looking separately on males' and females' gathering points, we see that M1 and M2 exposes a large
23 difference in the 'area' and less in the 'perimeter', indicating that people who congregate in M1 have
24 better access to the market, as they are 'covering' more area, despite a more limited view of the
25 content (Figure 8). A comparison between F1 and F5, the strongest and weakest points of the females

exposes a large difference both in the 'area' and in the 'perimeter', indicating that F1 is a much more favorite location, in both means (Figure 8).

The influence of the socio-spatial synergetic aspects on the local market

Whitechapel market consists of four postcodes areas (Figure 1b). The 'strongest' points, M1&F1, are located in the postcode area E1 1DE, between Vallance Rd and Fulbourne St. There are 10 shops and 10 stalls in this traditional starting point of the market. The 'weakest' points, M2&F5, are located in the postcode area E1 1BY. There are 27 shops and 30 stalls in this relatively wide section of the market, between Court St and Brady St, near the tube station. Despite this numerical difference, the marketing mix is quite similar in both areas. Each area has jeweler, fashion, optician, groceries and tobacco shops/stalls as well as grill restaurants.

Figure 9 shows that the annual income of shops (in blue) and stalls (in red) in Whitechapel market vary between shops and stalls, and between the postcode areas. The annual income of shops is much higher than that of the stalls, which can be easily explained by the more expensive goods (e.g. jeweler, luxurious costumes) sold in the shops, compare to the more daily and relatively cheaper goods sold in the stalls (e.g. Betel leaves and lungis).

[Place Figure 9 about here]

More interesting is that despite the potential differences in the volume of businesses in these postcode areas (e.g. E1 1BY has almost three times more shops/stalls compare to E1 1DE), the annual income in E1 1DE (270K in shops and 83 in stalls) is much higher compare to E1 1BY (180K in shops and 56 in stalls). Aleya (female, 34, F1) explains the gap in revenue in her direct involvement in the family jeweler shop, highlights the impact of the females' "invisible hand" (Smith, 1776: IV.7.III) that shed light on the ways women are influencing and actively generating the local community: "I know what we need, what's fashionable now. The winter months, for example, are known as the wedding season in Bangladesh. Gold gets pricier as wedding season begins, and people ask for special designs. I'm asking friends for their opinions before ordering stocks and they make the inner-circle

advertisements”. Boshir (male, 27, M2), a fruit stall owner, describes that the income gap as dependent on the visitors' walking paths: “The Boishakhi Mela (Bengali New Year) in April-May and the Brick Lane Curry Festival in September are usually busier. Other than that, people tend to spend their money at the entrance to the market, on their way out of the mosque. That’s how it is; it is a matter of location”.

The location of the shop/stall, the nature of the merchandise, and the extent of the active involvement in the sales are expressed in the correlation between M1&F1 (the strong points in E1 1DE) and M2&F5 (the weak points in E1 1BY), the level of annual income in both areas, as well as in the property’s values. The property values are high/low at the same locations/postcodes as the income values. According to Zoopla property website, property values vary significantly between the postcode areas. While the average value of property in E1 1DE is estimated in 900K, similar property in E1 1BY is estimated in 410K. Despite the limited volume of businesses in E1 1DE (postcode of M1&F1), the level of annual income there, as well as the property’s values, is much higher compare to E1 1BY (postcode of M2&F5). As the annual income is the highest in areas were women are more involved (i.e., the ‘strongest’ points), it may hint on their potential contribution to this prosperity.

Conclusions

This article has revealed new, interesting aspects of the relationship between the communal structure and spatial patterns of public space, and the roles of women in urban development. Our case study, Whitechapel market, offers a relevant example of socio-spatial orders occur within a traditional close-knit ethnic enclave in the liberal, open-minded and creative culture of London. The research highlighted the impact of intra-communal hierarchy between females and males and the replication of familial, communal patterns from the home country on the public space of Whitechapel market. From the perspective of the public sphere, the Sylheti population's behavior exemplifies the influence of two socio-spatial mechanisms - the gender separation in the heterogeneous western public space and the females' contribution to the community's wealth and cohesion.

1 Our research shows capacity of a given urban form for adaptation and confirms that social
2 organization can have a dramatic impact on the inner- patterns of public spaces. In line with previous
3 studies (Koch and Latham, 2011; Yusof and Kozlowski, 2018; Friendly, 2019), we recognized that
4 diverse people's voices and bodies - of a different ethnic identity and gender- are encountered and
5 recognized, affect the ways people can consume and shape the public spaces. In Whitechapel market,
6 each gender has its own key activity points in the market and using isovist technique we showed that
7 these points differ in strength and weakness, influenced by location, vistas, number of users, and
8 functioning. Therefore, and in line with Habermas (2001), structural relationships between urban
9 space and social behavior of its agents (i.e., as an expression of civil society) are reflected physically in
10 the organized complexity of Whitechapel community. The morphological conditions of building
11 footprints, stalls and retail vans together with communal issues of modesty and hierarchy and the
12 female's 'points of view' shape diverse perception and accessibility of individuals.

13 Our research also revealed cultural mechanisms and resultant physical organization that exemplify
14 the public sphere in Whitechapel market and exposes the gender currents within the community. At
15 first glance, Whitechapel market is viewed as an unequal space. It displays specific hierarchical
16 relationships between gender and familial status and could be characterized by the prevailing
17 'stereotyped' spatial order of designated areas and axes for females and males. The relatively low
18 presence of females of any age is the first indication of their boundary limitation. While the socio-
19 spatial orders occur within the community are almost entirely hidden from outsiders, they shape the
20 internal spatial organization of Whitechapel market. Following Low & Iveson (2016) description, we
21 identified that the material and spatial context of the market is regulated in a discriminative way; thus,
22 the public space becomes less accessible and diverse. Our analysis reveals the restriction and
23 ambiguity of the females' viewsheds and trajectories, despite a more significant number of the
24 gathering points. These morphological findings are in line with in-depth interviews that explain how
25 social orders limit women's contacts, usually within the extended family. Men, on the other hand, are
26 more visible. Without movement boundaries, they can move freely within the market and contact

1 people outside the community. Unlike the females' designated axes, the males' areas involved
2 occasional visitors, external to the community and cannot, therefore, create complete dominance in
3 the 'living room' of the Whitechapel market. Thus, this nuanced social organization resulted in
4 adaptation and partial transformation of the existing spatial structure.

5 A comparison between the total strength of the male and female pairs of the visually and physically
6 accessible zones that exist in both area and perimeter reveals the power of the matching points.
7 Together, the strong pair (M1&F1) has more successful locations compared to the weak one (M2&F5).
8 This self-organized pattern, with its stable inner division into sub-routes for different users of the
9 public space, raises questions regarding the social mechanisms that produced and continue to
10 maintain this 'encapsulation', in Robinson's (1984) term. A specific type of relationship between
11 individuals and the community is required for constructing as well as maintaining such a 'social
12 bubble'. Our research shows that the vast and inclusive social system producing this spatial
13 arrangement includes precise practices and communal codes. Replication of familial patterns from the
14 home country by dividing the market into sub-areas, demanded the direction of the individuals, both
15 males and females towards obedient behavior over time. Explicitly, the interviewees stated that they
16 were accepting and obeying this behavior and emphasized the importance they attached to the
17 gender-oriented orders when consuming the public space. People's acknowledgement of divisions
18 between gender and articulation of pro-segregation attitudes suggest active social organization within
19 the community in the form of indirect and complex relationships between females and males.

20 The intense community-individual relationships and active role of gender in individuals' spatial
21 behavior within the Sylheti community hint on the influence of gender relations in this one community
22 for urban development: Despite the significant differences between the opportunities of each gender,
23 as reflected by the visually and physically accessible zones of each gathering point, the study indicates
24 on the female's contribution is critical in shaping the everyday life and spatial organization of the
25 community. As such patterns are likely to emerge within other traditional groups and in the city hub,
26 a more in-depth geodesign investigation could reveal the typical footprint of gender relations and its

consequences for urban development. It is safe to assume that the contents of these codes will affect the urban structure. As gender relations have the power to affect the local area as well as the entire urban matrix, further comparison between the use of public space by females and males may reveal the degree to which the 'invisible hands' of the females is a more common mechanism.

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