

# #156

## URBAN INTEGRATION OF REFUGEE HOMES

### Spatial potential for integrative social processes

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#### ABSTRACT

While local integration as a solution to forced migration was widely disregarded in the past decades, it regains importance amidst the current refugee crisis in Europe. The socio-spatial and syntactic research on the built environment about movement and interaction in space offers a new approach to this topic. This research follows the acknowledgement of urban co- presence and encounter as a contribution to social cohesion, and links it to computational model building and fieldwork on the process of arrival. Three case studies were selected in Bremen, Germany, and studied throughout all scales from the building site to the whole city. The methods are derived from the space syntax theoretical framework, and combined with Gravity analysis into a new formula using the UNA toolbox for Rhinoceros software. Furthermore, Grasshopper software is used to create multi-layered visual models for analysis of privacy and interaction patterns. The conducted fieldwork involved ethnographic description, behavioural observations and interviews.

The findings suggest, that a less active environment with fewer access to sociability leads to longer journeys to areas of high sociability such as the city centre. These areas were identified using the Gravity of Sociability measure as a combination of syntax and Gravity. Also, higher accessibility to jobs relates to more employment through local businesses approaching homes. The special contribution of this research is the synthesis of integrative social processes and studies of the built environment through parametric and computational tools, as well as offering a new perspective on migration and cities.

#### KEYWORDS

Space syntax, refugee homes, urban segregation, una toolbox

#### 1. INTRODUCTION

The current geopolitical conditions have created large scale forced migration towards Europe, which each country has different approaches to dealing with. This research looks at 'Transitional Residential Facilities' for refugees in Germany, which form a connection between the 'Reception Facilities' and the normal housing market. In the following, the influence of urban form on the potential for social integration and movement patterns are studied. It will be examined how segregation can be overcome and what the role of public space and the built environment is in the specific case of newly arrived migrants. Furthermore, the integrative potential of public transport as well as job opportunities is included in the analysis. This will then be related to the larger picture of refugee integration.

For that, three case studies have been selected in Bremen, Germany. Computational methods from the space syntax theoretical framework have been used in this research and were also combined with the Gravity method for metric urban land use accessibility. In addition to the

computational analyses, on site semi-structured, qualitative, and anonymous interviews were conducted with 23 inhabitants in total, revolving around their daily routine, activities, use of amenities, and movement in the city.

The findings suggest that a less active environment with fewer access to sociability leads to longer journeys to areas of high sociability such as the city centre, which were identified using the Gravity of Sociability measure as a combination of syntax and Gravity. Higher accessibility to jobs relates to more employment through local businesses approaching homes. The special contribution of this research is the synthesis of analyses of integrative social processes and studies of the built environment through computational tools. Its results are part of a Master of Science dissertation (Utzig, 2016).

## 1.1 CURRENT REFUGEE SITUATION AND THE ROLE OF THE BUILT ENVIRONMENT

The United Nations High Commissioner for Refugees (UNHCR) has stated in their most recent Global Trends report for 2015 (UNHCR, 2016) that 65.3 Million people worldwide are currently displaced from their homes. In the year 2015 alone, two Million people have applied for asylum, while only 201,400 returned home. The largest country to receive the applications being Germany with 441,900, followed by the US, Sweden and Russia (172,700; 156,400; 152,500).

In their policy, the UNHCR described 'local integration' as one of their three 'durable solutions'. It contains three prerequisites as discussed by Crisp (2004). First, the refugee population must be equalised in law with the host population. This includes basic human rights such as the right to work, to education, to free movement and to property as well as the access to public services and entitlements. Second, the refugee populations' living standard must be matched with the host population. They must then be able to become progressively less reliant on welfare and re-establish economically self-reliable, independent lives. Thirdly, the social and cultural environment of the host population must enable the refugee population to live free of fear, discrimination or exploitation. The UNHCR policy thus acknowledges the importance of social integration as a solution to refugee crises.

Since Europe became a focal point in recent crises as a place where large scale isolated camps do not seem acceptable to political leaders and the host population, the matter of local refugee integration is a very important one. The contribution of the built environment to this social process has not yet been discussed, despite the fact that there are numerous works on the technical aspects of the camps (Herz, 2007). There is however an extensive body of work on the role of architecture and urban planning in producing and reproducing an integrated society.

As Hillier and Hanson (1984) argued, space is not only a reflection of society, but a set of strategies to achieve its actual form. Space is used to order social relations by means of spatial relations. In the urban society of cities, the street network, or public realm, is the main tool for that. Its configuration is the generator for human movement (Hillier et al., 1993). The resulting co-presence of individuals from all different groups of society is the primary source of social cohesion (Hillier, 1996). It has been shown, that social network and friendship relations are often segregated from other groups of society, while everyday life activities in public and work spaces overcome this social division (Schnell and Benjamini, 2005).

With a new, significant part of society joining the host population, it is important that a special emphasis is put on societal integration. This can only take place if there are aspects in daily life that connect the different parts of society, which cities are traditionally very suitable places for. Durkheim (1893) describes them as places of organic solidarity, which is based on economic interdependence and division of labour. It is opportunistic and depends on the differences of individuals. The resulting co-presence and encounter produces high exchange and mutual tolerance among people (Simmel, 1921; Jacobs, 1961; Senett, 1970). If the local integration of refugee populations is being investigated, the body of work that connects social theory to the built environment of cities can provide answers on explaining interactive and integrative patterns of behaviour.

## 1.2 URBAN INTERPLAY AND MATTERS OF SEGREGATION

The overall function of built form on a larger city scale is to bring and hold together the different parts of society, and enable the newly joined members to choose their place in a diverse variety of urban solidarities. Legeby (2009a; 2009b) described the problem of interplay segregation as the missing opportunity of seeing others and being seen in public space. This can be measured employing the space syntax framework as established by Hillier and Hanson, since movement is a mathematical function of the spatial configuration of the street network (Hillier and Hanson, 1984; Hillier et al., 1993; Hillier, 1996; Hillier, 2003). Co-presence is thus a collective urban resource, and its distribution has, together with other common resources, to be considered regarding matters of inequality and disadvantages (Legeby, 2009a; 2009b; Legeby et al., 2015).

The term activity segregation has been used by Franzén (2009) to describe patterns of behaviour of different groups of society, which rarely overlap and thus pose a threat to the overall coherence of society. Franzén uses activities such as going to work, for shopping, or leisure as examples, which may not be shared with members of other social groups than one's own. This concept ties in with Schnell and Benjamini's (2005) notion of territorial segregation, as the separation of groups in their routine everyday life spaces has proven to be very low compared to residential and social segregation. People thus do not necessarily have to establish social network connections to members of other groups as long as their co-presence and casual interaction maintains societal peace and coherence. The term 'encounter' is crucial at this point and it will be used in this research to describe momentous contact, verbally or visually.

For these interconnections, the urban form and positioning is of great importance, as it influences not only to which workplace people attend but less urban accessibility to jobs also relates to unemployment of recent immigrant population (Legeby, 2013). Similar results have also been suggested by the research of Vaughan (2005; 2007), who found that historically, immigrant settlements were located in close proximity to active economic centres. This was to avoid high travel costs but also due to the fact that new, unskilled labour immigrants relied and still rely on informal job hires through contacts in their group of ethnic origin. Vaughan argues furthermore, that concentration happened without segregation, in order to benefit from full integration into the host society, while still being able to let the own culture flourish, which has been defined by Marcuse (2001) as an 'enclave' through voluntary clustering. 'Ethnic segregation' in this research however does not necessarily mean enforced or hierarchical grouping as Marcuse (2001) described it, but any kind of disproportionate concentration of contact among one and lack of contact with another group.

Finally, Jacobs (1961) also suggested that the presence of anonymous flows of strangers which move through the streets plays an important role for neighbourhood policing and the feeling of reciprocal safety. It furthermore provides the basis for social interaction by forming the 'animated background' which encourages for social interaction in the public realm (Peatross and Peponis, 1995) and forces individuals into a state of tolerating diversity in order to be able to live in a city (Simmel, 1921; Senett, 1970). Urban integration and co-presence of different groups in everyday life is thus an important aspect to social integration into the host population. The mutual tolerance arising from that is crucial to repression free living and the achievement of local integration.

## 1.3 ORIGIN AND CULTURAL BACKGROUND OF STUDIED INHABITANTS

The large majority of inhabitants during the study period came from Syria, followed by Afghanistan, with smaller numbers from Iran, Iraq, former Soviet states as well as Africa. This implies a significant influence of Islamic religion on daily life and cultural habits in the inhabitants' home countries. Abu-Gazzeh (1995) argues that the built environment in Islamic countries strongly follows religious behaviour principles such as privacy and gender rules. These rules also mediate the public interaction of strangers (Abu-Gazzeh, 1995; Tomah). Furthermore, a significant amount of public spaces in Arabic countries has been created during the colonial ages to express the occupiers' superiority, which often makes them unsuitable for leisure activities by the local population, either by design or symbolic meaning. In addition to these traditional

influences, the recent developments towards authoritarian forms of government and police surveillance have an impact on the perception and use of public space (Rabbat, 2012). Long before people decide to flee from their country, the entirety of public life was controlled by the government to suppress civil uprisings. This forced social interaction as well as public debate into the private realm such as non-governmental mosques or people's homes. These aspects may also have an underlying influence on the behaviour and urban movement for newly arrived refugees in Germany.

## 2. METHODS

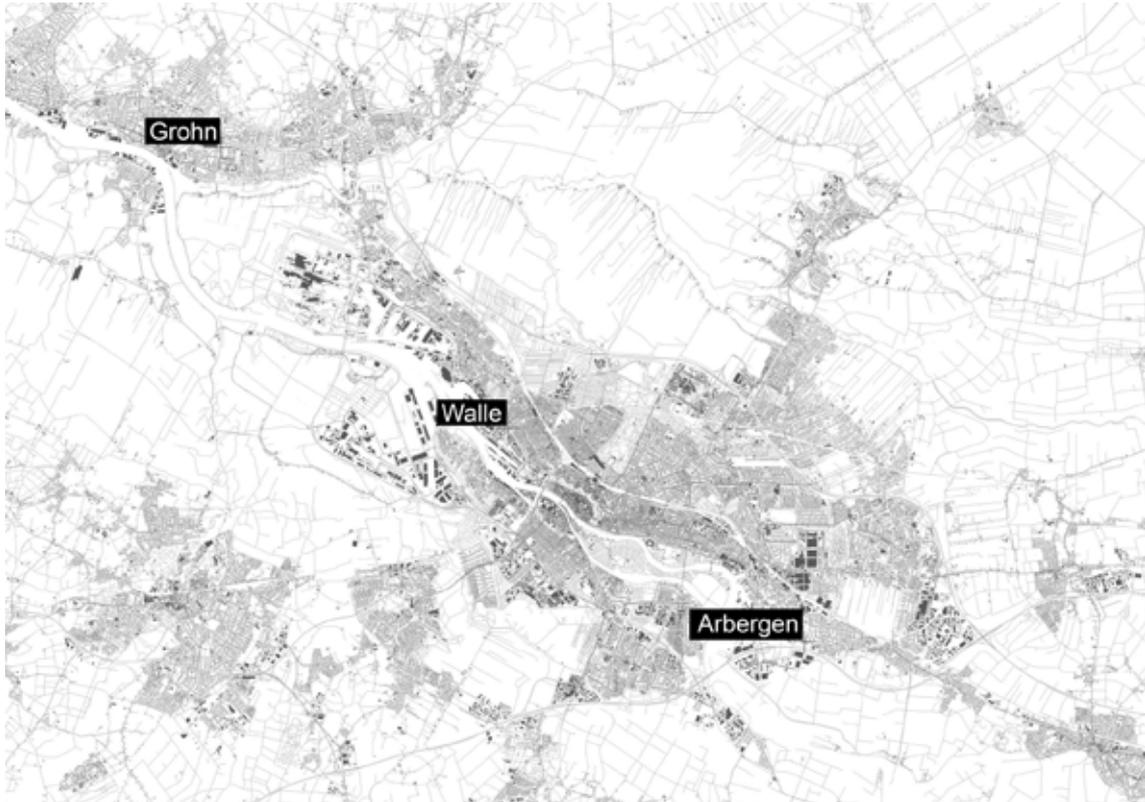


Figure 1 - Map of the city of Bremen with the three case studies

### 2.1 CASE STUDIES

In this research, three recently built transitional refugee homes are studied in the city of Bremen, located in the North-West of Germany. All of the homes have been designed by the same local architects and use the same container modules and two-storey building blocks, but are different in terms of the arrangement and number of blocks. They are also situated in very different parts of the city [Figure 1], with one in Bremen-Grohn, another in Bremen-Walle and the third in Bremen-Arbergen. Each of the two and four bed apartments is autonomous with their own front door, kitchen and sanitary facilities. Next to communal facilities with rooms for activities, the non-profit organisation's management office is also located on site with two to six staff during working hours. They are providing help with the bureaucratic procedures of the inhabitants as well as their papers, financial organisation and everyday-life problems. After working hours and during the weekends, security personnel is present on site to supervise access control and overlook the inhabitants. All homes have been publicly perceived as well built, clean and safe.

## 2.2 MEASURING URBAN SOCIABILITY AND TERRITORIAL INTEGRATION

In the previous paragraphs it has been referred to several descriptions of segregation in everyday life. The contact and mixing of refugees with the German host population is crucial due to several reasons. First, unlike migration patterns to the United Kingdom for example, there is little networks with connections to migrants that have already established a self-sustaining life in the new country. Second, the access to the job market is very controlled and relies almost exclusively on a good German language proficiency which can only be acquired through regular contact with proficient or native speakers. Third, the migration as well as integration process is overseen widely by the state which restricts the agency of individuals but on the other hand provides a high degree of help and security which has been perceived very positively by the inhabitants of the three case studies during the conducted interviews mentioned above.

Since the financial means of the newly arrived refugees are mostly scarce, they rarely visit locations with entry at the door, the need for a ticket or the obligation to consume, such as cultural institutions or cafés and restaurants. This increases the importance of public space as an affordance to encounter, as being co-present with others is crucial to urban life and several inhabitants have even made loose friends with the host population in that way. To determine the degree of accessibility to co-presence, and on the other hand the 'interplay segregation' (Legeby, 2009a; 2009b) several measures of urban centrality and topological street network analysis are used in this research. First, the concepts of angular choice and angular integration from the space syntax theoretical framework as established by Hillier and Hanson (1984) will be compared as indicators for human movement activity. Angular choice, which is based on the betweenness measure of graph theory, indicates the through-movement intensity on a certain segment in the street network. Angular integration acts as a measure for to-movement to a specific segment (Hillier, 1996; 2003). The angular distance measurement means that those routes are the shortest that have least angle turns from start to end segment. This has been shown to produce the highest correlation with human perception and movement patterns (Hillier, 1996). Both analyses have been limited to the radii of 2,000 meters to determine local, i.e. pedestrian and bicycle movement and 10,000 meters for the global structure and car movement in the city.

Hillier's (1996) argument of the movement economy shows, that the physical shape of the street network and with it the intensity of pedestrian movement gives rise to economic activity along these segments. This allocation of land uses then acts as a multiplier effect to the expected footfall that is already been generated by the street network.

To calculate an absolute measure that takes account of all these multiplier effects, the land use based Gravity measure as used by Sevtsuk (2010) has been modified with a weight formula. It measures the impact of a set of destination land use points on an origin point. For each destination, the metric distance (d) of the walk along the street network is calculated and put into the decay formula that has been determined empirically by Sevtsuk and Mekonnen (2012). The destinations that have been selected as most suitable to indicate street activity, as they themselves rely heavily on it, are retail points as well as locations of the food and beverage service economy.

$$G = \sum \frac{1}{e^{0.004 \times d}} \qquad G = \sum \frac{\log(1 + Int2000m) \times \frac{NACH2000m}{NACH2000m_{max}} \times (1 + \frac{n}{l})}{e^{0.004 \times d}}$$

Original, unweighted Gravity formula

Weighted formula for 'Gravity of Sociability'

The first part of the weight is the angular integration value with a radius of 2,000 meters (Int2000m), as it accounts for the intensity of pedestrian to-movement. Secondly, the normalised angular choice (NACH) with a radius of 2,000 meters is used to account for through-movement (NACH2000m). Both values are normalised with the maximum measure of the entire map, producing a relative value from zero to one. Finally, the density of land uses per meter is taken into account by dividing the number of points (n) by the length of the segment (l).

This metric analysis will be calculated for the three case studies and for all 260,000 buildings in the map extent around the city of Bremen to create a complete map of the distribution. As limiting radii for this analysis, 800m and 3000m will be selected for pedestrian and bicycle distances, which are also considered as the two scales of the neighbourhood each location is surrounded by. The software used for the calculation is the MIT una-toolbox (Sevtsuk and Mekonnen, 2012) for CAD and modelling program Rhinoceros 3D. All land use data as well as the base map data for streets, buildings and points has been taken from the Openstreetmap website ([www.openstreetmap.org](http://www.openstreetmap.org)).

To compare the findings with urban movement behaviour of the inhabitants, the conducted semi-structured, qualitative interviews entailed questions about habitual movement destinations in the city as well as the amount and type of contact with the host population. Furthermore, questions were asked about the desire to be in contact with German people and the preference for spatial clustering in the event of moving into a private apartment.

The distribution of public transport connections throughout the city is not only an economic one, but also a matter of equal distribution of common resources (Legeby, 2009; Sá et al., 2016). Especially in this case, that people are not able to use other means of transportation for longer distances since the driving licenses from their home countries are not valid in Europe, and travels have to be made to distant bureaucratic institutions and learning centres on a regular basis, the significance of a well-developed and equally accessible transport network is very high. Public transport however is not just to be seen as a means of transport but also as a public space in which all, or at least many different groups of society are co-present (Rokem, 2016). It is thus an important aspect to overcome 'activity segregation' (Franzén, 2009) or 'territorial segregation' (Schnell and Benjamini, 2005). For this analysis, the unweighted Gravity formula will be used so that each public transport stop will be of equal importance independent from the frequency, only the distance to the origin point is determining its influence.

Since the case studies in this research are transitional refugee homes, with inhabitants that have been in the country only for a short time, the opportunity to learn the language and acquire job qualifications is very limited, and also often legally restricted. It is thus that the types of businesses that have been looked at, is from a low- to medium-skilled labour background. This incorporates the service industry with for example logistics and storage jobs, as well as crafts and other manual labour. Legeby (2013) has shown, that reduced urban accessibility to job opportunities relates to rates of unemployment in social housing estates. In the same way, it will be investigated in this analysis, if a better accessibility to businesses, that may theoretically be a potential employer, relates to inhabitants having a job or apprenticeship or the outlook of starting one in the near future. For that, in the interviews with them, it will be assessed in a qualitative manner to what degree this economic activity takes place. As data source for business locations, the voluntary company archive of the city of Bremen was used ([www.bremen.de/branchensuche](http://www.bremen.de/branchensuche)), which is similar to the yellow pages. In an automated process using Grasshopper, the addresses have been extracted from the HTML-documents and geocoded. Then, the Gravity value has been computed in the same way as it has been done for the public transport accessibility.

### 3. RESULTS

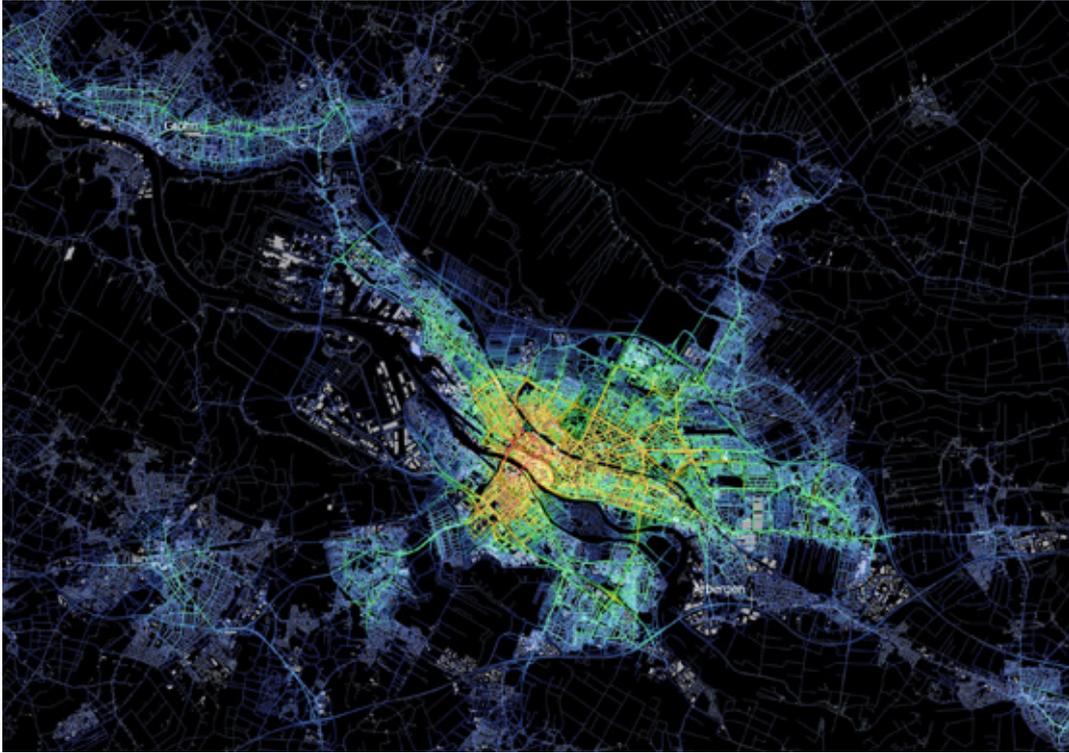


Figure 2 - Integration (radius 2000m) angular segment analysis

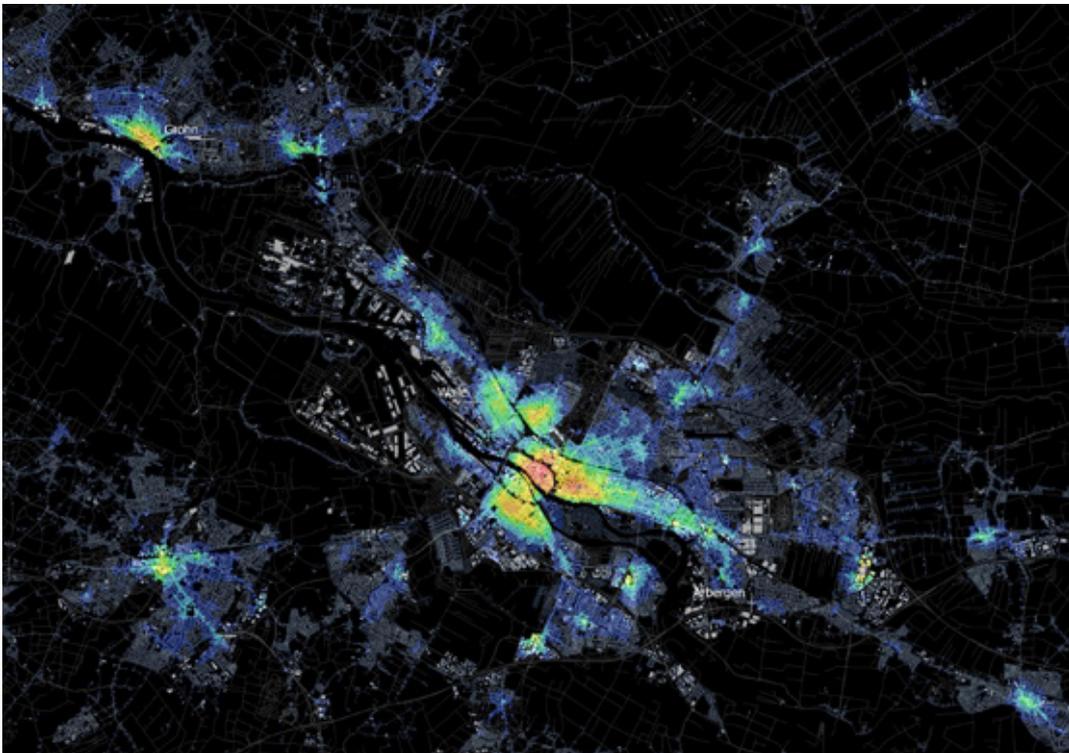


Figure 3 - Gravity of Sociability analysis results (radius 800m)

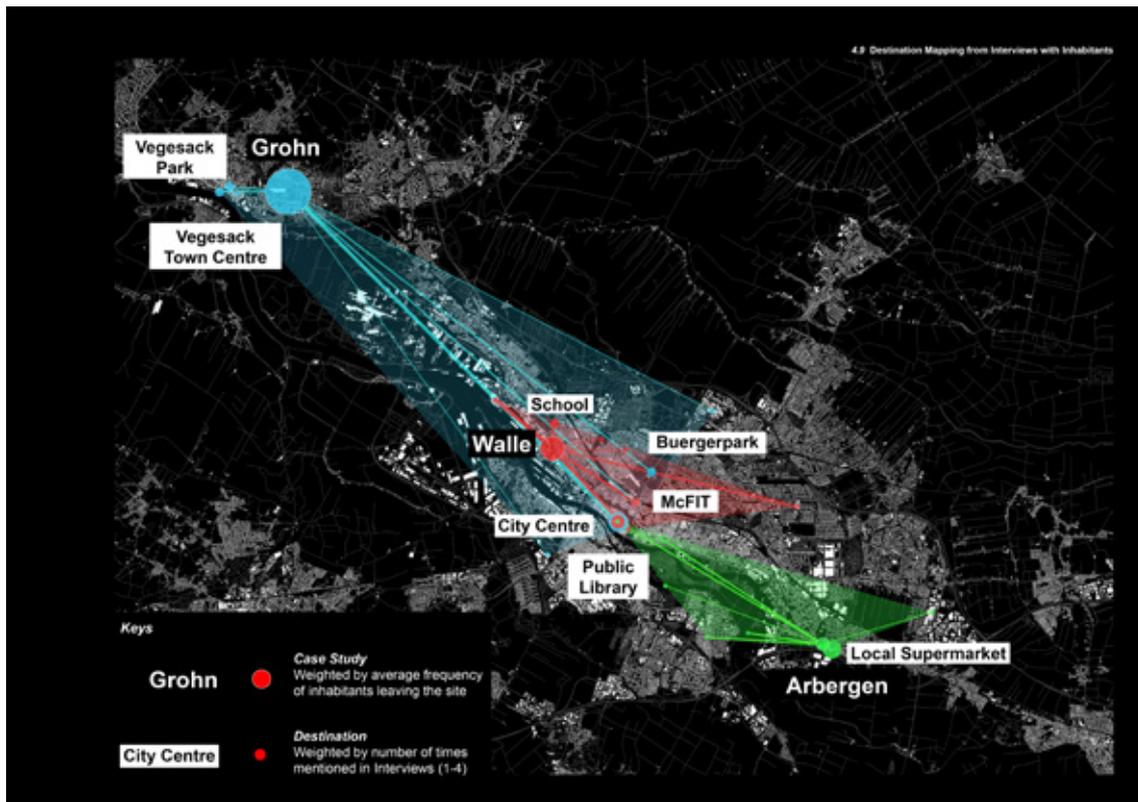


Figure 4 - Mapping of movement based on the interview results

### 3.1 SPATIAL POTENTIAL FOR URBAN CO-PRESENCE

In the semi-structured interviews with inhabitants, it has been observed that not only the city centre, but in Grohn also the Vege sack town centre and parks Vege sack Park and Bürgerpark [Figure 4] were popular destinations in the city to spend time. In Walle and Arbergen, the movement patterns were more local, also due to the low distance to the city centre. People in Arbergen however focused more on their immediate surroundings, with destinations for shopping and leisure at the river. While in all three case studies, errands such as grocery shopping were done in the most convenient, local radius, it has been mentioned predominantly in Grohn that destinations are visited regularly with the explicit aim to seek interaction with strangers, preferably Germans. Furthermore, the average frequency of leaving the site is the highest in Grohn and the lowest in Arbergen [Table 2]. In all sites, the wish for more interaction with people from the host population was expressed, despite initiatives such as the 'contact café', a weekly tea time with inhabitants and German neighbours in each site, about every two weeks. Especially middle-aged and older inhabitants have found this very helpful. Asked about whether they preferred to live among neighbours from their own cultural background and language once they move into private accommodation, the large majority clearly stated they preferred to live surrounded by predominantly German culture. Two families that were about to move out were particularly happy to have found a suburban home in a traditional German neighbourhood.

Mosques were mentioned as frequented destinations in the city by some inhabitants, but less than possibly expected. It seems logical however, as the majority of inhabitants expressed the wish to form connections with the culturally traditional German host population, which is more likely to be encountered in public spaces of the city centre or parks. A small number of inhabitants even stated that they prefer to not have contact with people from their home culture because they would like to avoid bringing up conflicts that divide the people, as there are supporters of opposing sides fleeing at the same time.

Name	Gravity of Sociability		Gravity of Public Transport Stops		Gravity of Jobs		ISD <sub>3</sub> [km]	NACH <sub>2000SD<sub>3</sub></sub>	NACH <sub>10000SD<sub>3</sub></sub>	Int <sub>2000SD<sub>3</sub></sub>	Int <sub>10000SD<sub>3</sub></sub>
	3000	800	3000	800	3000	800					
R [m]	3000	800	3000	800	3000	800					
Grohn	2.78	2.21	1.51	1.22	0.18	0.09	15.25	1.20	1.16	1055	5075
Walle	5.95	3.57	4.42	4.02	2.19	1.99	58.82	1.15	1.08	1718	12174
Arbergen	3.05	2.66	2.61	2.53	0.01	0.00	35.38	1.09	1.00	607	8027

Table 1 - Urban analyses results

	Average times per week that inhabitants leave the site	Most frequently named destination (Nr. of occurrence)
Grohn	9.8	City Centre (4)
Walle	5.2	City Centre (3)
Arbergen	2.8	Local Supermarket (4)

Table 2 - Interview results from site visit

Looking at the immediate and wider neighbourhood, it can be seen that Walle is located in more urban surroundings with higher building and land use density, while the other two show suburban features [Figure 1]. This is confirmed when comparing the streets that can be reached within three turns from each place (ISD<sub>3</sub>) [Table 1] with Walle being the most walkable and Grohn the least. Within this distance, Grohn shows the highest pedestrian through-movement (NACH<sub>2000SD<sub>3</sub></sub>) and Walle the highest to-movement (Int<sub>2000SD<sub>3</sub></sub>) potential, with Arbergen in both analyses with the lowest values [Figure 2] [Table 1]. This is explained by the juxtaposition of Grohn to Vegesack town centre and Walle to the city centre.

The Gravity of Sociability analysis shows that Walle has the highest access to sociability in its immediate surroundings (3.57) and the wider neighbourhood (5.95), with a large increase from one to the other through the impact of the city centre [Figure 3] [Table 1]. In Grohn however, the lowest values have been recorded, with a low increase of 0.57 (from 2.21 to 2.78), suggesting a low impact of the adjacent town centre. Despite lower syntax values, Arbergen thus has higher access to urban co-presence. Upon comparison of the city wide map for Gravity of Sociability [Figure 3] with the destination mapping from the interviews [Figure 4] it can be seen, that the majority of trips are made to areas with high sociability. This is particularly the case for Grohn, which has the least active sociable neighbourhood and the highest frequency of leaving the site. In addition to that, it was the least active and quietest of the three homes during the visits and interviews.

### 3.2 SPATIAL POTENTIAL FOR TERRITORIAL INTEGRATION

Public transport was described by the inhabitants during the semi-structured interviews as easily and frequently used, even in Grohn as the farthest from the centre. The differences in the Gravity of public transport analysis [Figure 6] [Table 1] do not seem to influence the behaviour, as long as a decent level of service is provided. The questions that revolved around the inhabitants' job situation however have shown that this is a highly sensitive topic. Very few people have jobs in general, due to their early stage of arrival and bureaucratic obstacles. It was hard to distinguish sometimes between if job positions are held, about to start or only a vague plan. Every person however strongly expressed the wish to obtain a job as soon as possible. It was found however, that in Walle several local companies approached the management looking for low- and medium skilled workers. The same happened in Grohn with one company.

Looking at the Gravity of Jobs analysis [Figure 5] [Table 1], Arbergen has almost no access to local businesses (0.00, 0.01), while Walle achieves very high values (1.99, 2.19) with Grohn in between (0.09, 0.18). While the sample size of these values is too small for any correlation, the logic of local business approaching the homes in search for low-skilled labour is strengthened by them.

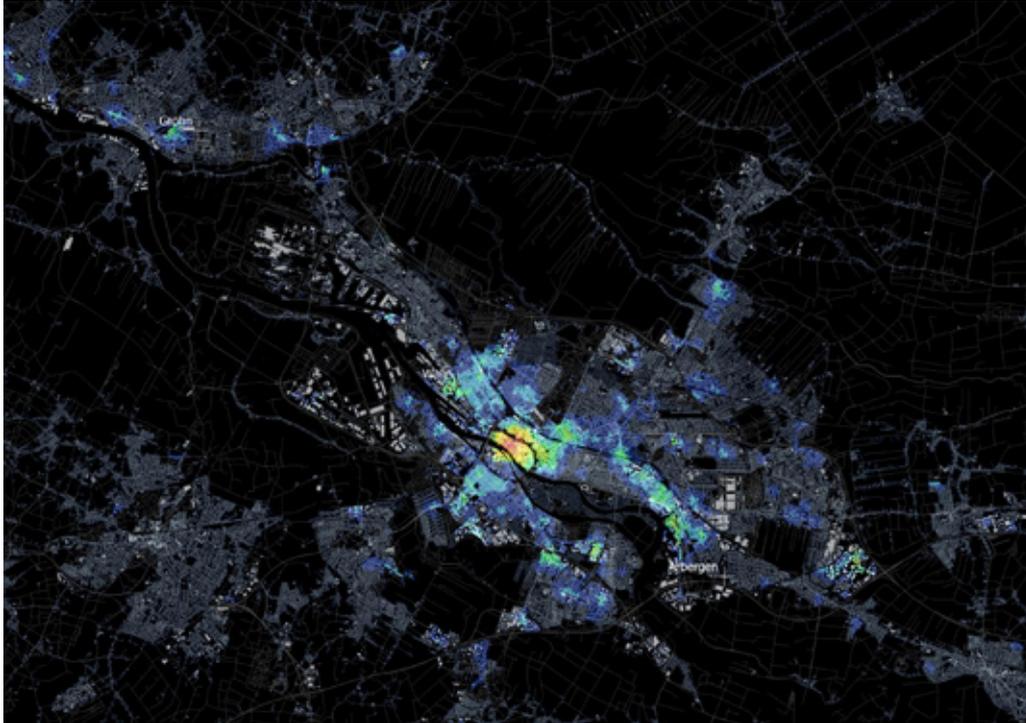


Figure 5 - Gravity of job accessibility (radius 800m) analysis results

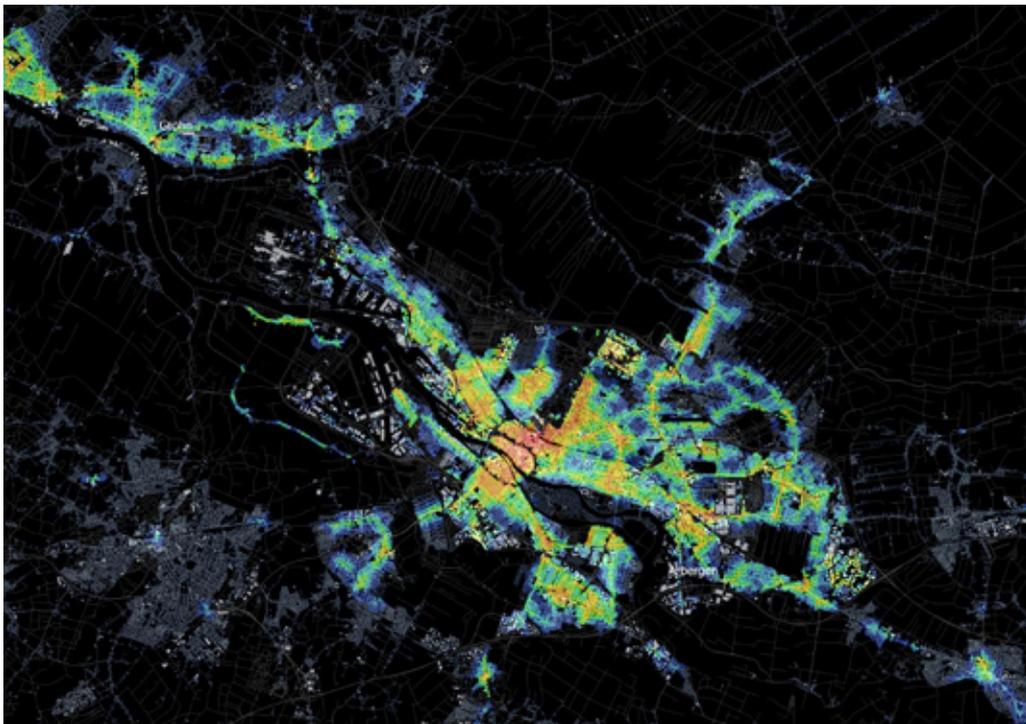


Figure 6 - Gravity of public transport accessibility (radius 800m) analysis results

### 3.3 DISCUSSION

These findings suggest that 'interplay segregation' (Legeby, 2009a; 2009b) through a neighbourhood with less co-presence, motivates inhabitants to go longer distances towards centres of high sociability. While this improves the co-presence of different groups of society and thus increases awareness and potentially tolerance among their members, it may exclude people of less confidence or reduced mobility, such as the old or disabled, as well as in the war injured people. It furthermore requires a cheap and easy to use public transport system with good level of service, such as the one in Bremen.

The built environment thus contributes to facilitate social interaction as the urban form generates movement and co-presence of people. The street layout of the city shapes the level of human activity which has been shown to be unequally distributed, and concentrated in and around central locations in the city. The presence of people not only generates social land uses alongside it, it also acts as an attractor to people from further afar to enjoy the co-presence with others in public space, as has been the case for the inhabitants in Grohn.

The relation between jobs and their accessibility is however differently working as described by Legeby (2013), as it is not individual agency of the inhabitants, but initiative by local businesses that is the main factor. As this is not a clear bottom-up, but neither a top-down approach, it has a place somewhere in between.

Furthermore, the absence of the desire to form clusters with people from the same cultural background is of interest as it seems to contradict other research on migration and cities (Kershen and Vaughan, 2013; Vaughan, 2005; 2007) that suggests the need for a certain degree of spatial clustering for new immigrants. This is however not the case, as in forced migration it is not so much an existing social network that is being used for the arrival process, as it does not exist very often. Instead, the state agencies and charitable organisations lead the integration process. For that, a high degree of assimilation and language proficiency is needed, especially to access the job market. As most people want to avoid marginalisation in this process, the desire to learn German in everyday contact with locals and build social ties with them is very strong. In addition to that, a few inhabitants have mentioned that they do not know and do not want to know what role was played by fellow refugees in the conflicts they fled from, so they rather avoid contact in general and focus on building a new life in Germany.

In summary, it can be said that local 'interplay segregation' does not necessarily lead to marginalisation, as long as urban movement is taking place towards centres of high sociability. At the same time, the desire to see and be seen by others in public space is important to the inhabitants. Being co-present with other groups is part of the integration process and offers a large potential. Job accessibility has proven to be of importance to employment, as businesses search for local low-skilled labour.

### 4. CONCLUSIONS

In this research, three transitional refugee homes in the city of Bremen, Germany, have been studied regarding their potential for social integration in the city. The built environment was examined for the influence of urban form on the level of interplay segregation and access to sociability. Together with semi-structured interviews with 23 inhabitants, space syntax and Gravity of Sociability analyses were employed to look at urban movement patterns and behaviour. The Gravity measure was also used in a similar way to analyse the accessibility to jobs. This was done to see if there is an influence of urban low- and medium-skilled job and business accessibility on employment.

The findings suggest, that seeing others and being seen in public space (Legeby, 2009a; 2009b; Legeby et al., 2015) is an important part of the inhabitants needs, whether consciously or subconsciously. Many people also have expressed the wish for more interaction with people from the host society, especially concerning their prospective location of residence. This differentiates this specific forced migration process from other research on urban space and migration, which suggested the tendency to form residential clusters or enclaves (Vaughan,

2005; 2007; Kershner and Vaughan, 2013). It has been observed that in places with less access to co-presence in the surroundings, the explicit visit of destinations for sociability including parks, even if they were further away, was more important. This implicates a certain necessary level of desire for co-presence, which is either fulfilled in everyday life errands or otherwise by visits to places of sociability. It is important to note that since the financial possibilities of most inhabitants are limited, destinations with entry at the door or obligatory consumption are rarely visited. It also places a certain importance on the cheap availability of public transport, to overcome those distances for integration with the wider society. Especially in the case of the home in Grohn, which has the lowest Gravity of Sociability, the observed journeys go either to the workplace or to destinations for sociability. In Walle on the other hand, which has the highest Gravity of Sociability and potential for co-presence in the surroundings, the interviewees rarely mentioned explicit visits to these destinations. This points towards the existence of a spatial-social interdependent aspect and underlines the importance of co-presence in public space.

The relation that was found between higher job accessibility and more employment relates to the findings of Legeby (2013) was not so much based on the agency of individual inhabitants, but on the initiative of local companies from the neighbourhood, that approach the management of the home with open job positions or offers for collaborations. Those businesses often recruit in a very local radius unlike the process for higher-skilled jobs which rely on more global recruiting. Since it is neither state-led nor individual-driven, this process is a mixture of top-down and bottom-up processes.

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