The role of the city in an era of migration.

Do urban qualities affect levels of social cohesion? Study case: forced migrants in Weimar, Germany.

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abstract

As the era of migration forms part of urban reality, strong challenges facing multiculturalism are on the urban agenda. Societies, and in fact cities have become heterogeneous and the response of urban planning to it, has remained with a lack of a long-term perspective. Cities concern is not limited to housing or temporary asylums, but it's rather a matter of qualities that enhance positive social behaviors.

Public discussion available on refugees and integration into new communities is latent, and conflicts between newcomers and hosting communities are unfortunately on the daily basis. A lack of emotional connectedness and common goals towards the future good for everyone is one of the major links missing. In social research, we can term these missing links 'social cohesion'.

Social cohesion and multiculturalism in cities are the main interest of this research. In a context where sociological aspects of integration have been broadly discussed, we inquire what does the city addresses when multiculturalism appears. Can cities influence social behaviors that encourage the construction of harmonious and peaceful society of multiple identities which work together towards common good?

The approach of this research has been to quantify social behavior and spatial configurations related to social cohesion according to literature available. As the focus of this research is on migration and multiculturalism, the evaluation has been done among people with forced migration background (refugees), specifically in Germany due to the polemic this topic has generated between the citizens as hosting community, and the difficulties of newcomers for assessing a successful integration.

Research available has recognized on one side physical factors (spatial configuration) of social cohesion, and on the other side nonphysical (social behavior) factors which influence social cohesion. The nonphysical factors evaluated in this research concern sociological aspects: Social relationships, Connectedness and Orientation towards common good (Schiefer, van der Noll, Delhey, & Boehnke, 2012), each of them with its sub-dimensions respectively. All of them have been evaluated and quantified under a voluntary questionnaire. The Physical factors which talk about urban qualities of space, evaluate the following qualities: Density, Land Use, Accessibility, Connectedness & Permeability, Legibility, Attractiveness, Extent of natural surveillance, Inclusiveness and Maintenance (Dempsey, 2008). Each urban quality has been designated by a measurement method based on existing

literature and evidence.

Previous evaluation of social cohesion and social behaviors using a similar method as here described has showed that no direct relation can be evidenced between urban qualities and behaviors that enhance positive social outcomes. However similar, our finding agrees on the fact that no direct relation can be found but rather the focus on specific characteristics of the urban space have shown correlations that allow for assuming behavior tendencies.

Different to other results, the present research provides a detailed evaluation of each nonphysical factor and its interconnectedness to each urban quality dimension (physical factor) taken into account. Findings provide clues for further research in this topic. In fact, the focus on facilities, extent of natural surveillance, attractiveness and maintenance indicates sub-dimensions that are worth it to observe in a greater context. This research allows for new inquires as the influence and comparison in different cultural contexts, considering that social cohesive behaviors just as much as urban qualities perceptions can vary depending on the user's background.

To:

Cosmo, Linus and Danny above all,

Rudy, Nicolas and Eduardo, without whom it would not be possible

Those who participated and trusted in this research in such a sensitive topic, my respect and gratitude.

My friends, who were always supporting Sandra, Maria Claudia, Tehya, Alberto, Ze, Miriam and Helena.

My supervisors for great advices, guideline, time and support, Sven Schneider and Philippe Bernd Schmidt.

contents

01/

Introduction

1.1.The city in an era of migration: The challenge of successful inclusion processes and cohessive societies within a multicultural context.

The present introduction section aims to explain the reason why migration start playing a relevant role in cities, it gives a brief overview of the topic in different aspects such as geographical manifestation and causes, political discussion available, social problematics and economic arguments. The section offers a general framework of the situation in European context and identifies the gaps that have been already found in academic research in what urban planning, and migration is concerned.

European countries have been facing what's being termed 'migrant crisis' or 'refugee crisis' since 2013 when rising number of migrants started to arrive to Europe. More than 464 thousand migrants crossed Europe by sea. Some of them were/are fleeing wars, others escaped from low resources and limited opportunities in their home countries. In April of 2015 there was the highest number of deaths at sea. At this moment, the forced displaced people number worldwide reached the highest level since World War II (United Nations High Commissioner for Refugees, 2015). Is for these reasons that the current period is seen by some authors as an 'age of migration' where

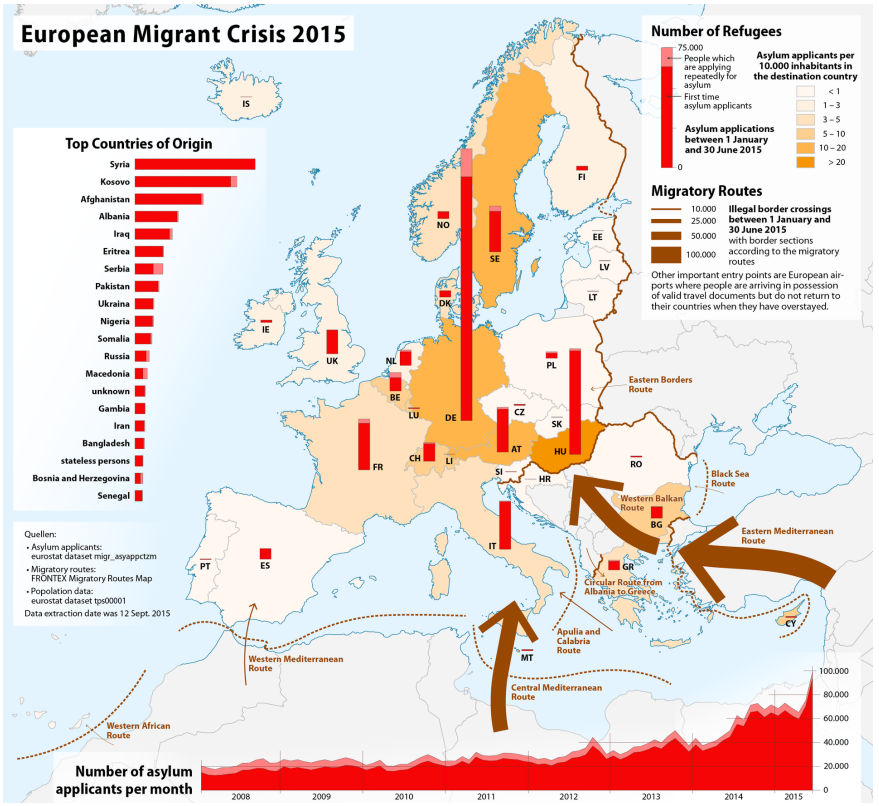

Figure 1. European migrant crisis. Asylum applicants in Europe between 1 January and 30 June 2015 (From Dörrbecker, 2015).

refugees and migrants take a major role in cities (Taran, Neves de Lima, & Kadysheva, 2016).

The age of migration has been on the top of the European discussion since already long time now. Joschka Fischer succinctly identifies three causes of mass migration: 1) economic malaise in the Western Balkan countries; 2) the turmoil in greater Middle East; 3) Africa's civil wars and conflicts (Fischer, 2015). In addition, the expansion of the war in Eastern Ukraine would easily add a fourth cause (Fischer, 2015). Further on, climate change is considered another cause of migration as a consequence of environmental degradation, natural disasters and reduction of natural resources (UNESCO/UN-HABITAT, 2010).

The upheaval of the European migration crisis/Refugee crisis was between ends of 2014 and mid of 2015 and from there on it has had different stages

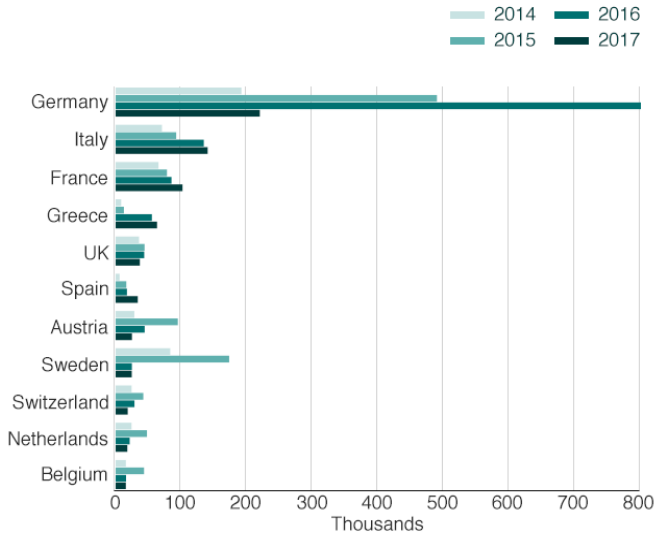

Figure 2. Top 10 EU countries for asylum application. (From "Migration to Europe in charts" 2018).

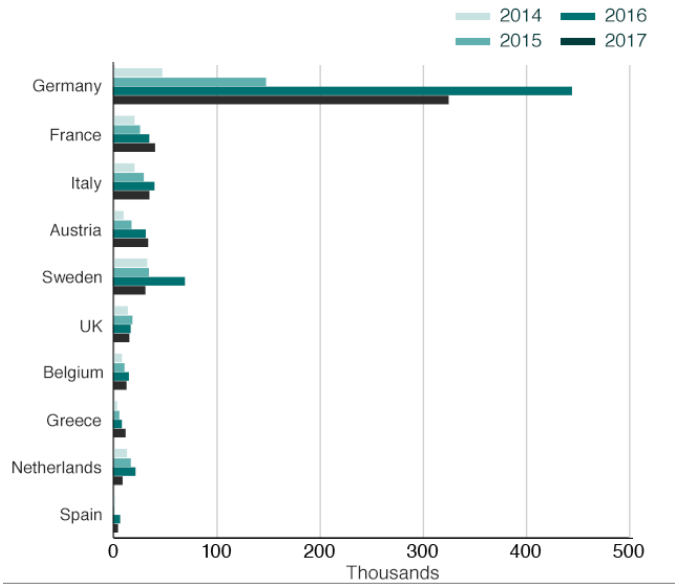

Figure 3. Successful asylum applications, 2014-2017 (From "Migration to Europe in charts" 2018).

marking a second peak on the year 2016. The top 10 of countries for asylum applications has been Germany, Italy, France, Greece, UK, Spain, Austria, Sweden, Switzerland, the Netherlands and Belgium in that order. Figure 1 (Top 10 EU countries for asylum applications) reveals the numbers classified by years to be more specific. Germany has shown the highest number of asylum applications with highest number of positive results at first instance. As explained in the Figure 2, the most of the refugees were coming from Syria, Kosovo, Afghanistan, Albania and Iraq in that order.

According to Figure 3 (successful asylum applications, 2014-2017) the peaks are shown on the year 2016 where Germany is on the first position. A considerable decrease of successful asylum applications is revealed in 2017.

Concerning economical impact countless studies exist that exhibit the importance of migration in labor markets, creation of jobs, strengthening demand of good and services, enhancement of tax revenues although adding value to innovation which indeed contributes to urban development (Taran, Neves de Lima, & Kadysheva, 2016).

As the era of migration has undergone major changes, it faces crucial challenges for future development. One of the main changes is the fact that societies have become more diverse and inclined to multiculturalism. Despite challenges, multiculturalism is not a weakness sign, in turn, is an opportunity, a sign of development and indeed one of the representative attributes of the 'global city.' According to UNESCO, the successful inclusion of migrants within the receiving communities is essential for a city to be 'socially dynamic, culturally innovative and economically successful' (UNESCO/ UN-HABITAT, 2010).

Despite the existing evidence of previous studies about the benefits of migration, until now migrants continue to face difficulties in integrating themselves fully within their receiving societies in all aspects: economically, politically and socially (UNESCO/UN-HABITAT, 2010). In general, surveys reveal that European citizens are rather dissatisfied with the way how the integration process is organized than in accepting refugees itself (Eckardt, 2018, p. 61).

Refugees integration depends on a number of factors, which includes pre-migration experiences, the migration experience itself (In-Transit),

post-migration and context (Bhugra & Jones, 2001, Keyes & Kane, 2004; Khawaja et al., 2008; Miller, Worthington, Muzueovic et al., 2002; Wessels, 2014). Nevertheless, the concept of integration itself is a multidimensional concept that refers to adding new users into an existing social, economic and political system. Integration is in any case a two way process: from the new comers and from the hosting community. The present paper takes the definition of Integration of the European Commission which affirms:

'integration should be understood as a two-way process based on mutual rights and corresponding obligations of legally resident third country nationals and the host society which provides for full participation of the immigrant. This implies on the one hand that it is the responsibility of the host society to ensure that the formal rights of immigrants are in place in such a way that the individual has the possibility of participating in economic, social, cultural and civil life and on the other, that immigrants respect the fundamental norms and values of the host society and participate actively in the integration process, without having to relinquish their own identity.'

(European Commission: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on immigration, integration and employment. COM (2003) 336 final. Brussels, 2003.)

The inclusion of newcomers still needs to make shift into a long-term perspective. This is what's called the shift from 'guest' to citizen.'In line with this, Castells (1997) inquires what does citizenship means in a multicultural and heterogeneous society, whereas Reich (1991) puts into question the meaning of citizenship where those inhabiting the same geographical area probably inhabit quite different social worlds.

It is in a context of conflict assessing integration between newcomers and hosting communities where UNESCO and UN-HABITAT identify the key principles importance of fostering social cohesion and shared belonging among their key principles for success creating more inclusive urban policies (2010). Besides social cohesion, urban planning orientated towards common good are also mentioned. In line with this, the European Union declared that the main goal of Europe's policies was reaching economic and social cohesion.

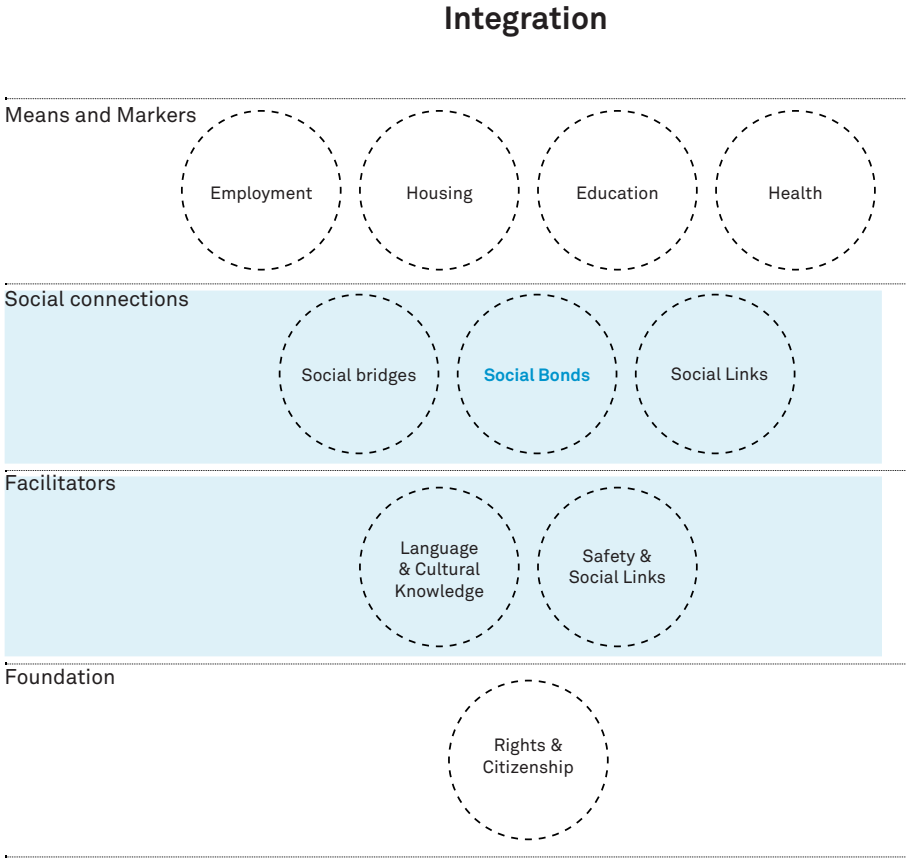

Figure 4. 'A Conceptual Framework Defining Core Domains of Integration'. Adapted from Ager & Strang (2008)

The definition of social cohesion has at the moment no general consensus in academic research even though it shows a clear background which will be discussed later in section 3. Amidst the overlapping and sometimes confusing concepts of social cohesion and social inclusion, it was meaningful the insight from the Council of Europe in 2001 giving a clearer message of what social cohesion is, at least, for Europe:

'Social cohesion (as defined by the Directorate General of Social Cohesion of the Council of Europe) is a concept that includes values and principles which aim to ensure that all citizens, without discrimination and on an equal footing, have access to fundamental social and economic rights. Social cohesion is a flagship concept which constantly reminds us of the need to be collectively attentive to, and aware of any kind of discrimination, inequality, marginality or exclusion." (Jenson, 2010).

As explained by Forrest & Kearns (2001, p.2127), social cohesion is about 'getting on at the more mundane level of everyday life.' Cezar Busatto affirms the link between migration problematic and social cohesion explaining that in the current integration process of migrants there is a lack of more social capital, confidence, affection and emotion links, cooperation, community feeling, solidarity towards common good (cited in UNESCO & UN-HABITAT, 2010). The construction of 'links of affection and emotion' between newcomers and hosting communities as well as supportive social networks defending their collective and individual interests together is a key aspect for social inclusion and sustainable development which is still on pursuit.

In contrast to homogeneous societies, the multicultural and, in fact, heterogeneous society needs to reach a cohesion that somehow finds the unifying link among multiple identities. The capability of dealing with diversity - regarding age, ethnic background, values, lifestyles, etc.- is according to Schiefer et al. (2012) the 'most successful community life'.

It is within this problematic that the present research at first inquired: What do cities address concerning integration of migrants? According to Taran, Neves de Lima, & Kadysheva (2016) urbanization and migration are currently considered to be interrelated processes. In this context they affirm:

"Cities everywhere have long been shaped by migration. Cities emerge from and develop through processes of migration and concentration. New-

comers weather from other cities within and beyond national borders or from rural areas contribute to the increasing diversity and complexity of interactions of cities."
(Taran, Neves de Lima, & Kadysheva, 2016, p. 10)

In line with this, UNESCO/UN-HABITAT refers to the challenge of cosmopolitan cities, where among countless identities local authorities need to put their focus on enhancing social cohesion and solidarity (2010).

Cities are capable of managing and regulating issues relevant to the inclusion of new comers. For instance, access to housing, public transport, public services, employment and facilities cluster the majority of activities of daily life and are indeed embraced by the city. As outlined by Brian Ryan (2003) one main point is the fact that cities can create positive encounters in public spaces for newcomers and hosting communities, giving place for a 'two-way integration' process. Furthermore, Ray (2003) expresses the lack of urban planning involvement in integration policy concerns and affirms:

'The enforcement of building codes, management of social housing, police, schools and transportation services, and supporting economic development for a range of social groups and communities may not be leading national policy concerns. Such issues, policies, and their delivery do, however, make a difference at the scale where social inclusion is lived and negotiated on a daily basis.'
(Ray, 2003)

As the influence of spatial configuration in social behaviors date from very long in academic research, we believe social cohesion and urban planning might have a meeting point. The presence of urban policies towards common good has been recognized with the importance it deserves, although urban planning response to it seems to show weakness signs. Within this multiculturalism and cosmopolitanism challenge towards socially cohesive cities, the following section aims to have an overview of the significance of our research.

02/

The research

The conflict generating a harmonious environment for all has become a crucial aspect of the multicultural societies resultant of causes aforementioned. The section that follows goes deeply in the topic selected for this research and clarifies the direction of it, the focus on Germany, the interest on examining social cohesion, the overview of the literature available concerning cities and inclusion factors, and the importance of the research scale.

2.1.The research: background & significance

Urbanization and migration are currently considered to be interconnected processes (Taran, Neves de Lima, & Kadysheva, 2016). Despite the large political and public discussion available, the role of the city in matters of integration has not been precisely taken into account when building up basis for asylum policies. The role of the city in the context of the European migration crisis is still a challenge in academic research.

Germany has registered 59% of all the asylum applications in the EU; 69% of those resulted positive as a first instance decision(European Migration Network, 2017). Nevertheless, according to the German Federal Statistical Office (2016) most of the emigration and immigration is predominantly caused by Europeans (45%). The public debate in Germany is polarized. 'Voices have emerged in almost every corner calling for isolation, mass deportations and constructions of new walls' affirms Joschua Fischer (Park, 2015, p.9-10).Statistics affirm that half of German population perceive refugees/foreigners integration as the country biggest problem (Forschungsgruppe Wahlen, 2017), 60% worry that spending on refugees means saving somewhere else, 52% fear that migration will increase crime rates (Express.co.uk, 2017), under 30% fear that Germany's cultural and social values are in risk due to the refugee wave. Other surveys show that it is not that the European citizens reject refugees in general, but are not accepting the way

the process of integration is organized (Connor, 2018).

While a huge "Refugees Welcome" movement is taking place, extreme right-wing parties, xenophobia and racism have opened a new chapter. Violence against foreigners does exist, currently has re-emerged and increased over the time. On the other side, studies affirm that "Violent crime rises in Germany and, it is attributed to Refugees" (2018). Considering arson, assault, demonstration or miscellaneous attack as violence, research demonstrates that absolutely all federal states of Germany had seen different kinds of right-wing violence and social unrest between 2014 and 2015 (Benček & Strasheim, 2016).

Criminology expert Christian Pfeiffer explains there is a large difference between refugee groups depending on the country where they come from and on how high are the chances of staying and gaining legal status in Germany. In other words, a strong feeling of hope and belonging to a certain place certainly affects the way people with forced migration background are able to integrate themselves into the new community. Moreover, Pfeiffer affirms that the situation is different for those who understood themselves, as soon as they arrived here as a 'undesired' (no chance of working, of staying here, 'no hope'). It is not a coincidence that, those asylum seekers who have relatively better chances of staying in Germany, are likely to avoid any trouble ("Study blames migrants for increased violence, calls for integration", 2018).

The East and West situations show different reactions from native inhabitants concerning 'strangers, foreigners, refugees' (Eckardt, n.d.). Eastern Germany, as a result from historical substantial political, economical and social changes, show higher resistance than western cities in front of the current migration situation. Compared to western regions, the east triplicates (or more) the number of violent events against non-Germans. Sachsen(1), Mecklenburg(2), Brandenburg(3), Berlin(4), Thüringen(5) and Sachsen-Anhalt(6) are -in that order the areas that show the highest number of violent events (Benček & Strasheim, 2016).

The existence of citizens welcoming displaced people and those leaded by fear of cultural differences and financial stress have led to more polarization of societies (Riederer, 2017). Riederer (2017) affirms that polarized societies will only lead to more vulnerability.

The present project understands that we face a historical moment where societies have become more heterogeneous and multicultural. The challenge of Multiculturalism is faced by many hosting countries like Canada, Australia, United states, New Zealand and the 'more recent immigrant-receiving societies' in the European Union (Spoonley, 2005). Multiculturalism is inevitably an issue that either develops positively over the time or it will lead to a stronger social vulnerability. Ensuring positive outcomes for immigrants and hosting communities is a crucial aspect for assuring high social cohesion levels within welcoming countries.

Surveys on German public opinion reveals that most of the people *'believe that cohesion is declining or threatened'*. Furthermore, a survey conducted on 2011 also said that society *'is becoming more fragmented'* (Zick & Küpper, 2012 cited in Dragolov, et al., 2013, p.8).

This research focuses its interest on social cohesion arguing that cohesion is the key for a livable society which is considered under the challenge of multiculturalism (Schiefer, van der Noll, Delhey, & Boehnke, 2012, p.7). The concept of social cohesion has been strongly discussed among sociologists and put many times into question, the concept itself will be clarified later on this research. At this point, we will limit ourselves to say that a social cohesive society is that one **which fosters stability, has trust-based relationships, where people feel connected and where members of the society contribute to the common good** (Schiefer, van der Noll, Delhey, & Boehnke, 2012, p.6).

In this context, many questions come across and as aforementioned, one of the first inquiries the present research had was to which extent is urban planning related in matters of migration.

A recent review on this topic shows that the urban debate about migration, and more specifically forced migration has remain limited. Forced migration and urban planning is not limited to refugee camps and settlements. If cities are the place where migrants, refugees and in general human beings develop themselves integrally, there must be much more to discuss about urban form and its capabilities for facilitating integration processes.

'Cities are where migrants interact with communities, society and, at least indirectly with the state of the host country' affirms Taran, Neves de Lima, & Kadysheva (2016). Literature available show that cities represent the political and spatial field that has the capability of facilitating or impeding

refugees integration.

'Cities represent political and spatial scales that allow for re-imagining political communities and experimenting with alternatives of governance' (Taran, Neves de Lima, & Kadysheva, 2016)

Many efforts on the development of settlement strategies has been done. In fact, research has revealed the importance of location factors to facilitate integration. Some of the physical elements mentioned in this context among urban policies and forced migration debate are: 'access to jobs, education, social infrastructure, urban amenities which remains of crucial importance, as well as the neighborhood effects, segregation and spatial mismatch' (Eckardt, 2018, p.63). This paper will later define the physical factors which we consider necessary for our research.

The local level of the city, or commonly mentioned as neighborhood has become a central issue on the field of integration. Forrest & Kearns (2001) affirm that neighborhood, community and social cohesion issues have an extensive repertoire on sociology and social policy fields. And even though the heyday of this topics was on the first part of the 20th century, it remains visible but with 'other peaks of interest' affirm Forrest & Kearns (2001, p.2126)

*' The **local level is the newcomers place** to arrive and live, and political-administrative actors are setting the formal framework for their social and economic participation in society' (Werner, Haase, Rink, Rottwinkel, & Schmidt, 2018, p.117).*

As mentioned, at the urbanism field most studies have focused either on refugee camps or housing settlements but this last ones remain few. Our approach takes a comprehensive focus and analyses those social behaviors which are related to social cohesion, in relation with the urban form characteristics of the neighborhood where refugees are settled. For this reason we consider that this research acknowledges a comprehensive perspective which is able to deal with the space as a whole in relation to social behaviors that facilitate the development of strong social bonds among people with forced migration background. This research aims to identify which physical factors and non-physical factors are adding value or not and to which extent to the development of social cohesion.

The research objectives of this thesis are, on one side, to create a better understanding of the influence of the urban environment in the development of social cohesion among people with forced migration background. On the other side, to create a better understanding of the interrelation between non-physical (merely sociological) factors and physical factors (urban qualities) of social cohesion if it exists.

At the end, this research aims to make recommendations for integration policies and identify facilitators that encourage the construction of higher social cohesion levels. As this section reported the research direction, context, problematic and objectives, the following section expresses the research questions we try to answer at the end of our study.

2.2.The research: questions

After defining research objectives, this section expresses the research questions that this research aims to answer at the end of the results evaluation.

The influence of urban environment in social behaviors and social sustainability has been widely discussed in academic research (Lynch, K., 1960; Alexander, C., 1977; Jacobs, A. & Appleyard, D.,1987 ; Hillier & Hanson, 1989; Forrest & Kearns, 2001; Bramley & Power, 2009; Gehl , 2010; Dempsey N., Brown, Raman, Porta, Jenks, Jones & Bramley, 2010; Ewing, R., & Clemente, O., 2013; Harvey, 2014). In the light of the recent challenges cities face towards a multicultural society, many concerns have risen about how to keep societies socially cohesive *'where those inhabiting the same geographical territory may inhabit quite different social worlds'* (Reich, 1991). The role of the built environment and the newly multicultural user of the city life need to be taken into consideration in order to contribute for the livability of cities.

The aim of this study was to find out if urban configurations are able to affect degrees of social cohesion among people with forced migration background. For this reason the questions that structure this research are the followings:

Which urban qualities (physical factors) influence social cohesion dimensions (non-physical factors)?

How are non-physical factors of social cohesion interrelated with physical ones, and to which extent?

Several authors have defined how social cohesion can be related to the urban form. Nevertheless there is few research which focus this topic on migration. As mentioned, academic research about migration and urban planning remains limited, still many efforts have been made with a main focus on housing or refugee settlements whereas the importance of the neighborhood has been already recognized. An evaluation of the urban qualities as a whole and as a comprehensive format is still on the urban agenda. In this context, this paper contributes to a detailed overview of the influence of the city configuration in socially cohesive behaviors at a meso and microscale.

The first step is the recognition of the concept of social cohesion this research takes as reference in order to identify the sociological (non-physical) factors of social cohesion. Consequently, the second step is to identify, according to literature, which are the urban factors (physical) related to social cohesion. Later the definition of concrete case studies will be held for later evaluation of physical and non-physical factors of it that will allow us to establish (when it exists) the correlation between them.

2.3.The research: organization of the thesis

The following section offers a brief summary of how this paper is structured for a better comprehension of the overall research.

This research is developed in Germany, specifically in the city of Weimar among people with forced migration background (refugees). The present thesis is structured as follows. Chapter one has provided an introduction of the problematic in the era of migration and limited presence of urban planning involved. The second chapter has defined specifically the goal of this research providing the specific context of it, the significance of the place due to evidenced conflicts with integration of newcomers, research objectives and research questions.

Chapter 3 presents the literature review that concerns our topic, it evidences the role of the city on social behaviors, specifies the concept of social cohesion taken for this research, and identifies and describes Non-Physical and Physical factors of social cohesion from literature available.

Chapter 4 offers expected results according to literature review done which will be challenged later by the results found in Chapter 6.

Chapter 5 reveals under the basis of the literature review done in Chapter 3, the research methods and strategies for this research in both of its facets: sociological and morphological. In addition to this, chapter 5 reveals the case study of Weimar and its particularity.

Chapter 6 introduces the locations in which the analyses were done and describes to which extent are both Non-Physical factors and Physical factors of social cohesion interrelated.

Chapter 7 concludes the research making use of the findings and the relation with literature available as well as putting into the table the urban planning role in this problematic. The chapter 7 will on one side conclude the topic and on the other side make recommendations for further research.

03/

Literature review

A relation between cities and inclusion of newcomers has been briefly identified in the past sections. In addition, inconsistencies or lack of systematically approach from urban planning policies towards matters of inclusion has been already revealed as a problematic. The following section will depict the concept of social cohesion, literature available concerning cities and social behaviors, city and migration and city and social cohesion to conclude at the end with the identification of non-physical factors and physical factors that concern socially cohesive behaviors.

3.1.Social cohesion: a definition

Social cohesion have won uninterrupted renown among social researchers. Many times social cohesion is seen as a ***'Hybrid concept'*** (Bernard, 2000), which is not easy to define at once. Even though the meaning of this term has evolved over the time and there is a constant effort to define it, it still has a variety of meanings. Due to the difficulty on developing a consesus of its definition, the term has been critically labeled as ***'quasi-concept'*** or ***'concept of convenience'*** which *'is flexible enough to follow the meanderings and necessities of political actions from day to day'* (Bernard, 2000, p.2-3).

For further analysis, measurement and development of policy recommendations, it is of main importance to choose which concept of social cohesion is choosen for this study. The follow literature review will analyze and compare how this concept is taken according to different authors. A conclusion on this chapter will depict the concept of social cohesion that the present research will be based on.

The origin of the term 'Social Cohesion' is attributed to Emile Durkheim, considered as a father of modern sociology. The concept has endure iver the

time until contemporary sociology with authors like Berger (1998) where social cohesion is usually understood among a broader framework that considers *'social integration, stability and disintegration'* (Chan, To, & Chan, 2006, p.275). Chan, To, & Chan (2006, p.286-287) affirm that scientists and researchers have given up on the 'ambition' of arriving to a consensual definition of the concept and therefore they take a ***'pluralistic approach'***. Moreover they say that the essence of this pluralism *'lies in it's acceptance of multiple possibilities in defining social cohesion'*.

Among this discussion, is meaningful considering the argument of Jenson (1998), she says there is no unique form of defining social cohesion, therefore the meaning of the concept will depend on what do we want to analyze, more specifically on which *'problem is being addressed'* and *'who is speaking'* (Jenson, 1998, p.17).

Emile Durkheim, considers social cohesion as an '**ordering feature** of a society'. In 1998 Social cohesion is understood as **"a process"**, **"a definition of who is in the community",** and in fact a recognition of who is part of it, and social cohesion relies on **"shared values"**. (Jenson, Canadian Policy Research Networks, & Family Network, 1998, p.4). Meanwhile Regina Berger Schmidt (2000) refers to McCracken (1998), and states 'social cohesion is viewed as a **characteristic** of a society dealing with the connections and relations between societal units such as individuals, groups, associations, as well as territorial units. Jenson (1998) considers that social cohesion is an interdependence between the members of a society, shared loyalties and solidarity.

Jenson argues that for Europe's perspective Social cohesion is not immersed on the context of a *'traditional form of social integration'* and that social cohesion is rather a concept for **'***an open and multicultural society'* (Jenson, 2010, p.5). Is for this reason that already in 2001, authors start to take some precautions and avoiding suggestions that have to do with 'homogeneity' or 'consensus of shared values' (Jenson, 2010, p.5).

Cooper, Fone, & Chiaradia (2014) define social cohesion as *'a collective characteristic measured by the levels of trust, reciprocity, and formation of strong social bonds within communities'*. The definition is for us enough to have a clear initial concept which will be unpacked further.

The concept of social cohesion offers a comprehensive and multifaceted definition. The challenge of many authors was how to actually organize the

concept in order to make it measurable and concretely observable. Multiple variables need to be taken into account, therefore further research has been developed with the objective of unpacking the social cohesion concept. The tables in the following page shows which dimensions of society concern social cohesion according to different authors reviewed by this paper.

While each author has their own definition and explanation of the dimensions of social cohesion, results are similar. Remarkable work has been done by Bertelsmann Stifftung Foundation (Schiefer, van der Noll, Delhey, & Boehnke, 2012) which reviews all the relevant literature available, finds definitions from different authors and classified them in six relevant topics. Their findings show that there are six groups of definitions, each of them emphasizes a different topic as follows:

A first group focuses on ***'Social relationships'*** between groups or members of groups. A second group is based on 'cooperativeness, solidarity and social responsibility', summarized as the ***'Orientation towards common good'*** group; Third group accentuates importance of ***'Shared values'***, concept that is contested by many authors, and we will later explain in more detail. Further studies find the key of social cohesion on feelings of belonging and identification with the society, this ones named as the ***'Connectedness'*** group. Other authors frequently highlight distribution of resources as an important aspect understanding that there are some economic conditions which are more favorable for allowing social cohesion than others, for this reason they relate social inclusion to social cohesion -and in fact issues like distribution of income, employment, poverty, life chances, etc.- Schiefer et al. (2012) describe them as the ***'Equality/Inequality'*** group. At last, definitions which rely on welfare and quality of life also are included as the ***'Objective and subjective quality of life'***. Figure 6 shows each topic and their reference authors respectively.

As shown in the graphic (Figure 6) Schiefer et al. classifies social cohesion under three aspects: Shared values, orientation towards common goods and connected belong to the 'Ideational aspects'; consequently, social relationships pertain to the 'Relational aspects'; and finally Equality/Inequality and Quality of life are under the 'Distributive aspects' of social cohesion.

The explanation of Bertelsman Stifftung is extensive enough as for a greater sociological analysis. Our study highlights the meaningful insight of Schiefer et al. (2012) and finds their definition accurate for the purpose of our analysis due to the identification of key aspects a cohesive society

should meet, with a main focus on the stregthening of social bonds.

Schiefer et al. (2012, p.21) maintain that Social Cohesion has both characters: Relational and Ideational. Their definition, already acknowledge by them with strong similarities to the approach of Chan et al. (2006) and Delhey (2004), is the following:

'Cohesion is a descriptive attribute of a collective and expresses the quality of social cooperation. A cohesive society is characterized by close social relationships, intensive emotional connectedness, and a pronounced orientation towards the common good. We define cohesion as a graduated phenomenon, which means that societies may exhibit greater or lesser degrees of cohesion. This degree of cohesion is expressed in the attitudes and the behavior of the members and social groups within the society. Its character is both ideational and relational.'

(Schiefer, van der Noll, Delhey, & Boehnke, 2012, p.21)

The definition of Bertelsmann Stifftung limited itself by selecting only three of the six aspects identified in relevant literature. Compelling arguments are there for it. On one side, they see Distributive aspects as ***'determinants'*** or ***'consequences'*** rather than components of social cohesion, in a sense that these aspects can provide (or not) of facilitators for a cohesive behavior. Moreover, shared values are also distinguished from cohesion.

The ambiguous preset of 'shared values' dimension is contested by others authors for two reasons, one is that it remains unclear which values should be the ones shared (Jenson, 1998). Additionally, considering that our study focuses on the multicultural society, which values are considered to be shared? for instance, cultural ones can not be consensual. In light of this, 'homogeneous values' are clearly obsolete in heterogeneous societies (Wenzel, 2001 cited in Schiefer et. al, 2012, p.22).

Furthermore the 'consensus' of shared values can be dangerous, in the sense that strong shared values can also lead to extremism. Forrest & Kearns (2001), underlines that strongly cohesive neighborhoods could create rivalry with one another, and this would only contribute to a divided and fragmented city. The only way of looking at it, is as agreed values related to the fight for common objectives and goals (Forrest & Kearns, 2001), or values

Author/s	SC dimension	SC sub-dimension
Jenson (1998)		Affiliation/Isolation Insertion/Exclusion Participation/Passivity Acceptance/Rejection Legitimacy/Illegitimacy
Berger Schmidtt (2000)	First societal goal dimension: reduction of disparities and social exclusion.	Regional disparities Equal opportunities (between gender, different social strata and gaps) Social exclusion
	Second societal goal dimension: strengthening of social capital of a society	Availability of social relationships Social and political activities engagement Quality of societal institutions
Forrest and Kearns (2001)	Common values and a civic culture Social order and social control Social solidarity and reductions in wealth disparities Social networks and social capital	Common values and a civic culture Social order and social control Social solidarity and reductions in wealth disparities Social networks and social capital Place attachment and identity
Chan, To & Chan (2006)	Horizontal dimension (Cohesion within civil society) Subjective Component (People state of mind)	General trust with fellow citizens. Willigness to cooperate and help

Table 1. Literature review on social cohesion. Dimensions and sub-dimensions of social cohesion according to different authors. Own table part 1.

Author/s	SC dimension	SC sub-dimension
Chan, To & Chan (2006)	Horizontal dimension (cohesion within civil society) Objective Component (Behavioral manifestations)	Social participation and vibrancy of civil society Voluntarism and donations Presence or absence of mahor inter-group alliances or cleavages.
	Vertical dimension (State-citizen cohesion) Subjective component (People state of mind)	Trust in public figures Confidence in political and other major social institutions
	Vertical dimension (State-citizen cohesion) Objective component (Behavioral manifestations)	Political participation (e.g. voting, political parties, etc)
Dempsey (2009)		Social interaction Social network Sense of Community Participation Perceived Safety Feeling of belonging
Schiefer, van der Noll, Delhey, & Boehnke (2012)	Social relationships	Social networking Participation Trust
	Connectedness	Acceptance of diversity Feeling of belonging Identification
	Orientation towards common good	Social responsibility Solidarity Recognition of local order and social rules Anomie

Table 2. Literature review on social cohesion. Dimensions and sub-dimensions of social cohesion according to different authors. Own table part 2.

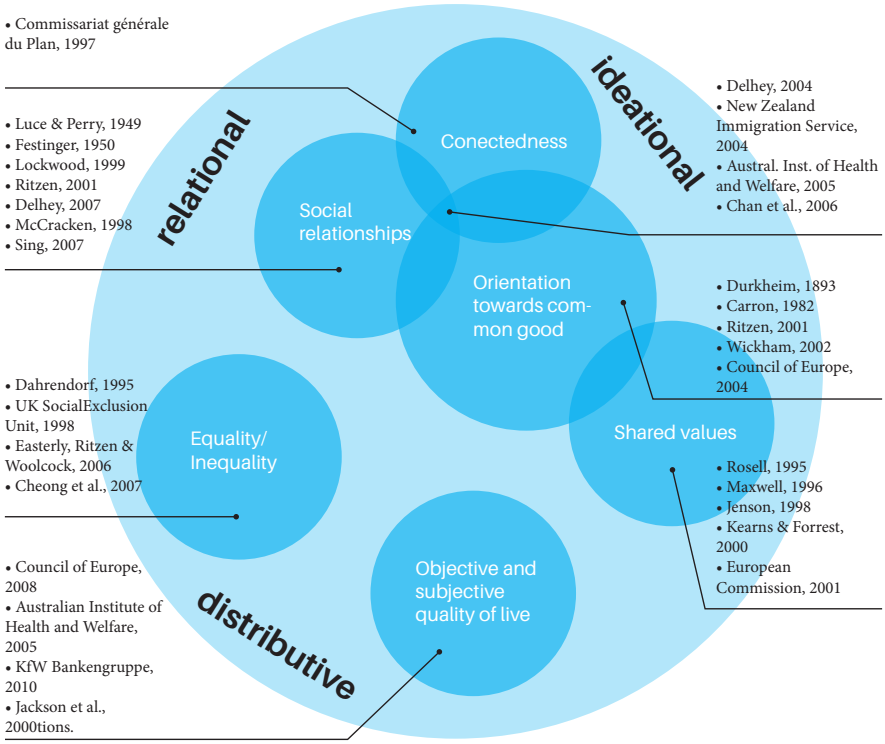

Figure 5. 'Definitions of social cohesion: aspects, areas of overlap, and selected authors' (Adapted from Schiefer, van der Noll, Delhey, & Boehnke, 2012, p.17).

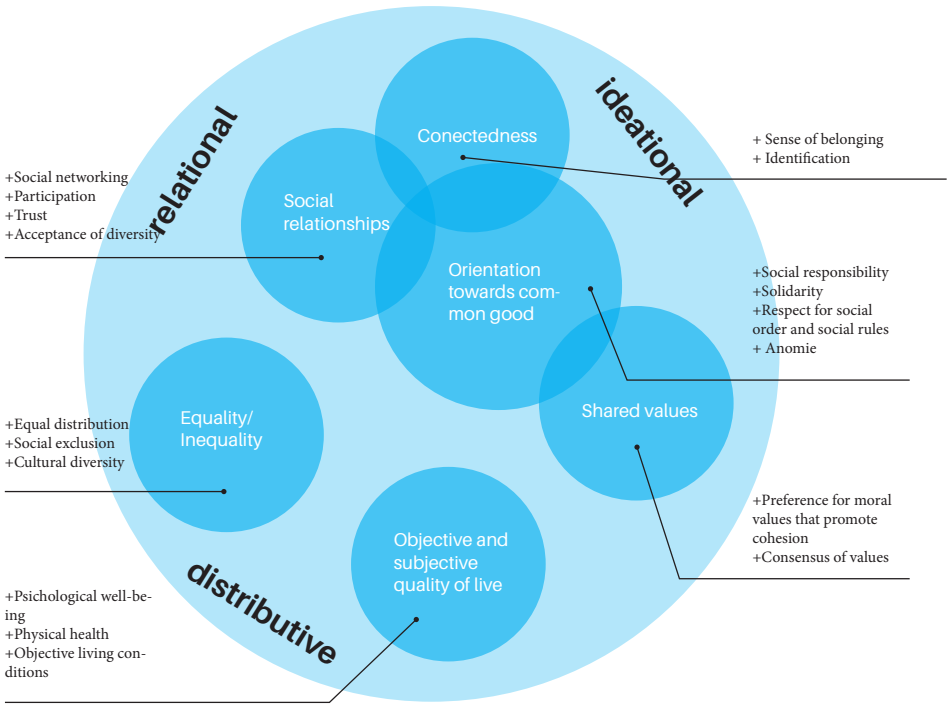

Figure 6. 'Aspects and dimensions of social cohesion'. Adapted from Schiefer et al. (2012, p.20)

that promote cohesion and acceptance of minorities (Schiefer, 2012). However, this remains to date unclear and limited among academic research.

The resulting components of social cohesion are those regarding social relationships, connectedness and orientation towards common good. The following sub-dimensions are considered under the concept of Schiefer et al. (2012) (See Figure 7):

Social relationships

1.Social networking
2.Participation
3.Trust
4.Acceptance of diversity

Connectedness

5.Feeling of belonging
6.Identification

Orientation towards common good

7.Social responsibility
8.Solidarity
9.Recognition of the social order and social rules

To conclude this section, we recognize the work of Schiefer et al. (2012) as the leading one for ***non-physical factors*** of social cohesion.

Additionally other conclusions can be drawn. First, we can distinguish two aspects : on one side aspects which create favorable conditions for allowing social cohesion; on the other side social cohesive behaviors (Spoonley, 2005). Secondly, a society can show higher or lesser degrees of cohesion but that doesn't mean this status is permanent. A society can become also more cohesive or less cohesive, the degree of cohesion can change. Social cohesion is for this reason considered as a "state of affairs" (Chan et al., 2006). The fact of understanding social cohesion as a process allows for the thought of alternatives in order to enhance this process of development, to encourage higher levels of social cohesion through planned strategies.

As this sub-section revealed a clear concept of social cohesion and unpacked according to literature review, the next section offers implications of the city in migration issues in order to recognize available literature in our topic of research.

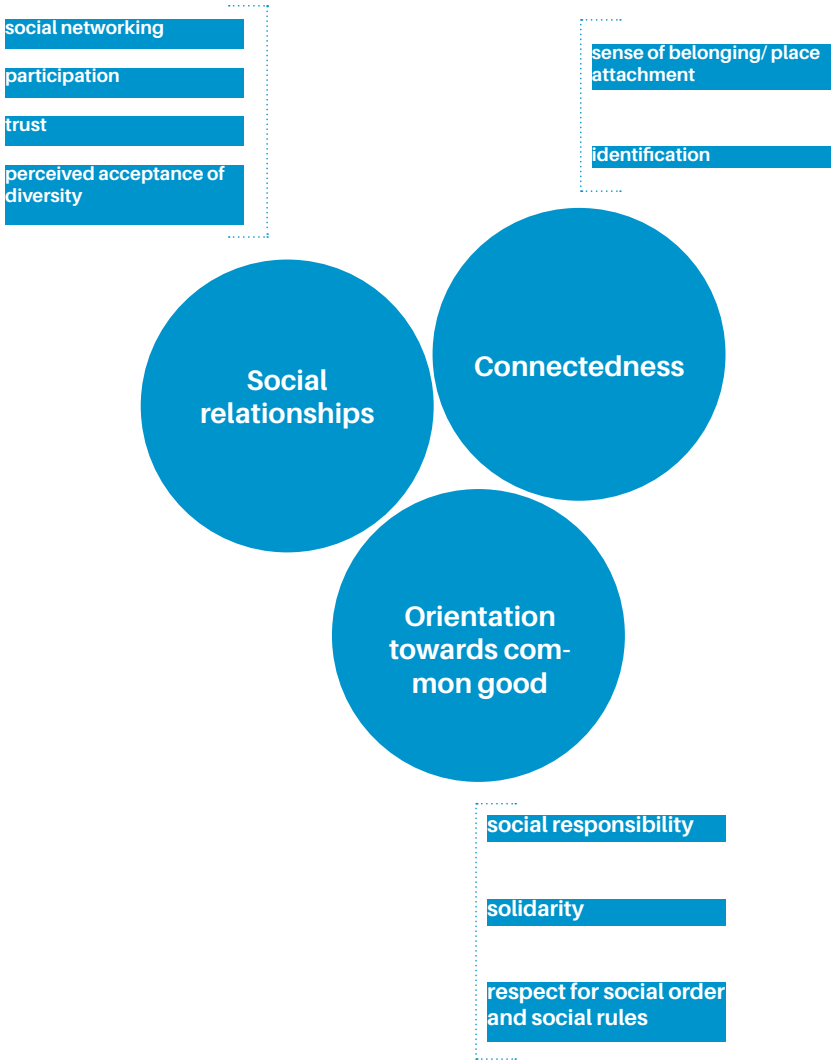

Figure 7. 'Core aspects and dimensions of social cohesion' . Adapted from Schiefer et al. (2012, p.24)

3.2.Cities & Migration

The literature linking migration and cities is still narrow, lacking of precise terminology as well as having knowledge gaps. The role of the city in the context of the European migration crisis is still a challenge in academic research.

The city is a critical part of migrants integration process since is the container (organism) that holds the overall activities migrants do. Cities are the places where refugees interact with the hosting community and society and, however indirect it is, to the state of the host country affirms Taran, Neves de Lima, & Kadysheva (2016). In line with this, Taran et. al (2016) argues:

'Cities represent political and spatial scales for re-imagining political communities and experimenting with alternatives models of governance'.

In other words, cities represent the political and spatial terrain for the integration process of migrants. Is for this reason that urban governance is considered capable encouraging an urban development on the basis of cultural diversity, social cohesion and human wights (UNESCO & UN-Habitat, 2010)

"In the long run, policy makers will have to explain to their people that they cannot have economic prosperity, a high level of social security and a population in which pensioners place a growing burden on the economically active. Europe's labor force must grow, which is just one reason why Europeans should stop treating migrants as a threat and start viewing them as an opportunity." (Park, 2015)

As cities and migration reveal an interconnection in terms of the cities as the meeting place and encounters for facilitating social processes, the following section reveal the influence of the city in collective goals according to relevant authors.

3.3.The city as a matter of qualities

Urban spaces are crucial encounters for social interaction. The space configuration has the capability to gather people together and provide conditions for human interaction, as well as the capability to create calm places, dynamic places, boring or active places. The space configuration is a powerful tool as we are talking about the environment where people develop themselves integrally from birth until the last days of their life. Is for this reason, that the physical perception of a surrounding is assumed by Lynch (1960) as a 'two-way process', where the observer and the environment are the actors. Lynch affirms that 'a same daily action can take new meanings if carried out in a more vivid setting'(Lynch, 1960, p.5). A vivid setting in spatial configurations depends on many attributes of the urban space which are called among urban planners and researchers, 'qualities' of the urban space.

Livability is considered as one of the main requirements a city should meet. Jacobs & Appleyard (1987) identify in their *'Design Manifesto'* certain qualities the urban environments should serve to the individuals, as well as to the collective. They mention '*livability'* as the first requirement. Following livability, they recognize identity and control, access to opportunity, imagination and joy, authenticity and meaning, open communities and public life, self-reliance, and justice (Jacobs & Appleyard, 1987, p.115).

Livability means according to Jacobs & Appleyard (1987) that everyone is able to live in 'relative comfort' meaning that the majority of the citizens count on a city where they can do hassle-free their daily activities -bring up their children, have privacy, sleep, eat, relax and rest. Identity and control refers to having the feeling that at least one part of the built environment belongs to the citizen individually or as a collective, regarding ownership. In what collective actions is concerned, participation in the community, involvement and freedom of expression should be encouraged by the built environment (Jacobs & Appleyard, 1987). This is what they called ***'higher social goals'*** of the city (See Figure 8). A city is responsible for the community and public life of it which should enhance participation and be open to all members of the community.

It is argued that the variety of activities and actors available in the city are the ones which reveal the catalogue of opportunities a city offers to strengthening social sustainability (Gehl, 2010). The fact that everybody regarding age, ethnic background, income, status, religion meet every day in the city space as their daily environment is considered a significant quality (Gehl, 2010, p.28). Gehl emphasizes the city as a social encounter.

"Social sustainability, security, confidence, democracy and freedom of speech are key concepts for describing societal perspectives tied to the city as meeting place" (Gehl. 2010, p.28).

**Note: Social sustainability is a wide-range and broad concept which overlaps with many other concepts, such as social cohesion, social capital, and others. However, generally speaking social sustainability comprehend social equity (equal access to opportunities) and social cohesion. There has been very little done in order to define the concept of social sustainability. In turn, European policies have focused on the concepts of social cohesion and sustainable communities (Dempsey, Bramley, Power, & Brown, 2009). The first of this concepts will be extensively explained in the following chapters of the present research.*

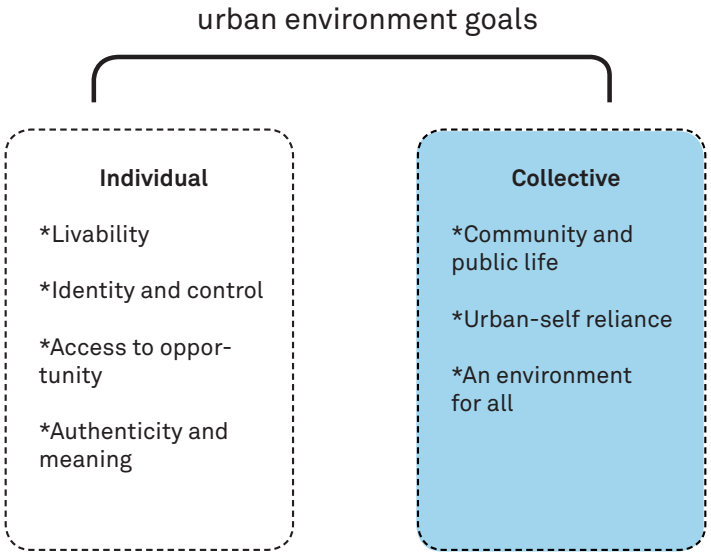

Figure 8. Individual and Collective urban environment goals according to Jacobs & Appleyard (1987)

Within the effort of defining urban social sustainability Dempsey, Bramley, Power, & Brown (2009) refer to Non-Physical factors and Physical factors categories which are taken for this research. The authors include in Non-physical factors the sociological concept of social cohesion and within Physical factors urbanity, attractive public realm, decent housing, local environment (quality and amenity), accessibility (to employment, facilities, green space), sustainable urban design, neighborhood and walkable neighborhood as represented in Table 1. However, further research of Nicola Dempsey described in the following section 3.3. accurately defines those physical factors which are directly related to the concept of social cohesion.

Non-physical factors	Predominantly physical factors
• Education and training • Social justice: inter- and intra-generational • Participation and local democracy • Health, quality of life and well-being • Social inclusion (and eradication of social exclusion) • Social capital • Community • Safety • Mixed tenure • Fair distribution of income • Social order • Social cohesion • Community cohesion (i.e. cohesion between and among different groups) • Social networks • Social interaction • Sense of community and belonging • Employment • Residential stability (vs turnover) • Active community organizations • Cultural traditions	• Urbanity • Attractive public realm • Decent housing • Local environmental quality and amenity • Accessibility (e.g. to local services and facilities/employment/ green space) • Sustainable urban design • Neighbourhood • Walkable neighbourhood: pedestrian friendly

Table 3. 'Urban social sustainability: contributory factors as identified in the review of literature (in no particular order) Sources include: Chan and Lee, 2008; Meegan and Mitchel, 2001; Turkington and Sangster, 2006; Jacobs, 1999; Bramley et al., 2009; Yiftachel and Hedgcock, 1993; Urban Task Force, 1999; Hopwood et al., 2005; Littig and Griessler, 2005; Burton, 2000a. (From Dempsey, Bramley, Power, & Brown, 2009)

The urban environment meets individual and collective goals that concern every inhabitant who lives in it. Research demonstrates that spaces do take the responsibility for greatly influence social behaviors and it is for this reason authors like Gehl, Jacobs, Appleyard, among others, have listed some requirements a city should meet in order to strengthen positive outcomes of social interactions within the urban space. Spatial configurations can contribute to better living conditions and encourage inhabitants for further social processes.

Our study focus its attention on the collective goals of the city which contribute to a community and public life, urban-self reliance and the creation of an environment for all in a context of migration.

This sub-chapter reveals the influence of spatial configurations in social behaviors, and the fact of looking at qualities that the city should provide in order to facilitate social behaviors. The next sub-chapter aims to understand to what specifically do we call qualities of urban space and which of them are related to social processes as social cohesion in order to identify ***Physical factors*** of social cohesion.

3.4.Cities & Social cohesion

In the last section we mentioned the goals of urban space considered by many well-known authors. There is a long repertoire on urban research that affirms the importance of the quality of the built environment in order to create 'cities for people'(Gehl, 2010) and how urban space can benefit or obstruct social interaction.

Rapid urbanization along with industrialization during 19th and 20th century were the driving force for architecture and urban planning to stand up for the creation of livable environments for people. Coincidentally, sociologists of this period were concerned with the 'new social order' where the 'traditional ties of community' were getting replaced by 'anonymity, individualism and competition' (Forrest & Kearns, 2001). The concern was about getting adapted to a 'new way of life'. For instance, as an urban response example, the garden city concept is developed as a clean, healthy and safe thirst of revenge against the unhealthy living conditions in the 19th century. Known as *'environmental determinism',* this ideas from the 19th and also 20th century were looking at cities as the solution not only for the quality of living environments but also of health and social problems. The belief was that cities not only shape but also **determine** their social life. (Dempsey, 2009)

Taylor (1998) argues that environmental determinism has been widely criticized and rejected under the basis of taking for granted that the physical environment alone determines the social environment without taking into consideration non-physical factors -such as income, social relationships, ethnic background, culture or religion- (cited in Dempsey 2009, p.318).

However, in this line, Dempsey (2009) affirms that no researcher would be able to deny, even when small, the influence environment has on social cohesion. Previously, Forrest and Kearns (2001) resembles this position and inquires about the role of the residential neighborhood in social cohesion revealing that social cohesion is about 'getting at the more mundane level of everyday life'. They argue that the neighborhood is important for 'shaping social identities and life-chances'.

In *'Mapping Value in the Built Environment'* the authors investigated the *'Potential Value of Good Public Space to the Public'*(Mulgan, Potts, Audsley, Carmona, de Magalhães, Sieh & Sharp, 2006). Interesting findings of this research are the identification of both collective and individual benefits spaces can cause. They argue that the extent to which these benefits are enjoyed by the public are in function to how often people meet there.

The following table developed by Mulgan et al. (2006) shows a list of the public benefits in both, individuals and communities.

	Type of Benefit for the Public
Individual	• wellbeing from spaces to unwind in
	• wellbeing from urban greenery
	• wellbeing from buildings that stimulate
	• wellbeing from places where people can watch the World go by
	• wellbeing from places/spaces that encourage walking

Table 4.'Individual and Collective Benefits for the Public from Good Public Spaces' (Mulgan et al.,

	(links)
	• wellbeing from being safe – and feeling safe
	• civic pride from great developments
Collective	• social capital (mutual trust, sense of obligation of community, shared norms and values) is great certain development types that foster fr meetings.
	• community cohesion – places where ethnical culturally diverse groups can co-exist peacefully.
	• social inclusion – places where often-excluded can be welcomed by the mainstream.

Table 5. 'Individual and Collective Benefits for the Public from Good Public Spaces' (Mulgan et al., 2006, p.27)

As shown, Mulgan et al. (2006) mention the benefit of space in terms of creating places 'where ethnically and culturally diverse groups can **co-exist** peacefully', among social capital and social inclusion.

A recent review on literature argues that high-quality public space has a fundamental impact on how users perceive, behave and socialize in public space (Carmona, de Magalhães, Hammond, Blum, & Yang, 2004), while enhancing feelings of safety, sense of community and mutual trust among users, in addition to enhance loyalty to shared norms and values (Dempsey, 2009).

Previous work has been limited to address the space and its influence in social behavior in general, whereas to date the influence of space on social cohesion remains very little. Because of this, Dempsey (2009) remains in this topic crucial for our research. Initially, she remarks the lack of a clear definition of what specifically defines quality in the built environment. In fact, her research is very much about identifying the elements that constitute a 'good quality space'. In order to do so, she selected each feature of quality considered representative and valid in literature.

The features of quality of urban environment detected by Dempsey (2008) as the one that can influence social cohesion and are related to good quality spaces are: *Density, Mix of land uses, Accessibility, Connectedness, Legibility, Attractiveness, Legibility, Inclusiveness, Maintenance, Extent of natural surveillance and Character* (See Table 5).

Additionally, the quality features are identified according to the relevance in each particular scales. The scales considered, as already recognized before by other authors like Forrest and Kearns (2001), are *street and neighborhood level*.

Feature of quality	Nature of indicator(s)	Scale of indicators	Number of indicators
Density			
Gross	People and households per hectare	Neighbourhood	3
Net	People and households per hectare in built-up/ residential area	Neighbourhood	2
Household	People per household	Neighbourhood	1
Street	Residential intensity of streets	Street	1
Mixed land uses			
Mix of uses	Number of services; ratio of residential to non-residential land	Neighbourhood	5
Overall spread and provision of services	Mix and spread of services	Neighbourhood	1
Accessibility			
Access to green space	Amount of green space	Neighbourhood	2
Overall spread of bus stops	Number and spread of bus stops	Neighbourhood	2
Bus service frequency	Number of buses per hr during weekday	Neighbourhood	1
Connectedness & permeability			
Degree of connectedness	Number of junctions per hectare and per street	Neighbourhood & street	2
Block size	Average distance between junctions per street	Street	1
Legibility			
Landmarks	Number of landmarks	Street	1
Nodes	Number of nodes	Street	1
Node rating	Rating of nodes	Street	1
Attractiveness			
Perception of attractiveness	Respondents' opinions on attractiveness of neighbourhood	Household	1
Extent of greenery	Amount of open space and number of trees per case study	Neighbourhood & street	3
Inclusiveness			
Pavement/street	Average width of pavement; instances of ramps/ dropped kerbs	Street	3
Seating	Number of primary and secondary seating and spread	Neighbourhood & street	4
Bus shelters	Instances of shelters at bus stops	Street	1
Toilets	Number of public toilets per neighbourhood	Neighbourhood	1
Maintenance			
Pavement state	Assessment of pavement condition per street	Street	1
Level of litter	Assessment of amount of litter per street	Street	1
Homes & gardens	Number of homes and gardens below average state per street	Street	1

Table 6. 'Indicators developed to measure features of quality of the built environment' (Dempsey, 2008)

Moreover, the research of Nicola Dempsey, evaluates one side quality of space according to the features of quality she has identified and, on the other side, social cohesion dimensions (See Table 6), aiming to define the relationship between urban environment quality and social cohesion dimensions through quantitative and qualitative methods.

Dimension of social cohesion	Summary of indicator(s)	Number of indicators
Social interaction:		
Positive interaction	Interaction with neighbours	4
Negative interaction	Non-interaction with neighbours	2
Social networks:		
Socialising in the neighbourhood	Socialising with neighbours	1
Network of friends	See friends/ friends in neighbourhood	2
A sense of community:		
Feelings towards neighbourhood	Pride in neighbourhood	1
Social order in neighbourhood	General relationships between neighbours	5
Participation in organised activities:		
Active participation	Participation in activities in neighbourhood	6
Trust and reciprocity:		
Mutual trust among neighbours	Extent of reciprocal relationships	3
Feelings of safety:		
Perceptions of safety	Respondents' opinions on feelings of safety in the neighbourhood	1
Perceptions of crime	Respondents' opinions on level of crime in the neighbourhood	1
Sense of place attachment:		
Feelings of attachment to neighbourhood	Level of attachment to neighbourhood	3

Table 7. 'Indicators measuring dimensions of social cohesion' (Dempsey, 2008)

Her findings interpret relationship between features of space and its users. For this reason, the work of Nicola Dempsey is one of the most resounding sources for this research.

Dempsey (2008) recognizes that many of the features of urban environment analyzed had an impact over the half of social cohesion dimensions. The attributes which are more impacted according to her findings are: residents perceptions of quality of the neighborhood, level of maintenance, extent of natural surveillance, character and attractiveness of the neighborhood.

However, it is mentioned in Dempsey's (2008) research that it is imprecise to which extent do each urban quality affect each dimension of social cohesion. In line with this, it is affirmed that no feature of quality alter fully social cohesion dimensions but rather ' a mixture' of quality features is what at the end makes an influence on social cohesion (Dempsey, 2008). The findings resulted from Dempsey (2008) are represented in Table 7.

The results from Dempsey (2008) are relevant for our study, however it is meaningful to highlight that the target groups assessed on Dempsey work

Feature of quality of the built environment	Social interaction	Social networks	Sense of community	Participation in organised activities	Trust and reciprocity	Feelings of safety	Sense of place attachment
High residential density	Neg (--)				Neg (---)		
Mixed land uses						Pos (--)	
Accessibility	Pos (--)						
Connectedness and perm'y							
Legibility	Neg (---)						
Attractiveness			Pos (++)			Pos (--)	Pos (++)
Inclusiveness				Pos (---)*	Pos (---)		
Maintenance	Pos (--)		Pos (-)		Pos (-)	Pos (--)	Pos (-)
Extent of natural surveillance	Pos (--)		Pos (-)		Pos (--)		Pos (---)
Character		Pos (---)	Pos (++)				Pos (++)
Perceived quality (acc. to residents)	Pos (-)	Pos (-)	Pos (+++)		Pos (+)	Pos (+++)	Pos (+++)

*Sports groups only.

Table 3. Significant associations between features of quality of the built environment and dimensions of social cohesion. (Association strength: (---) very weak through to (+++) fairly strong. No very strong associations were found.)

Table 8. 'Significant associations between features of quality of the built environment and dimensions of social cohesion.' (Dempsey, 2008, p.110)

are not the same as this research. In fact, Dempsey's work is focused in settled neighborhoods and the local community living there, in disregard of the focus on migration issues. We find this relevant because many experiences and standards of what is quality of an urban space, and how society works in terms of cohesion might in-defectively differ among diverse cultural backgrounds. Nevertheless this main research on social cohesion and urban quality remains crucial for our study and contributes to identify the ***physical factors*** (qualities of urban space) we will evaluate in relation to ***non-Physical*** factors of social cohesion.

3.5.Conclusion

The last two sections offered relevant literature that allowed us to define ***physical*** and ***non-Physical factors*** for evaluating social cohesion. In order to have a clear view, the following graphic represents the sociological dimensions and the urban qualities that this research takes into account for evaluation of social cohesion in built environment context.

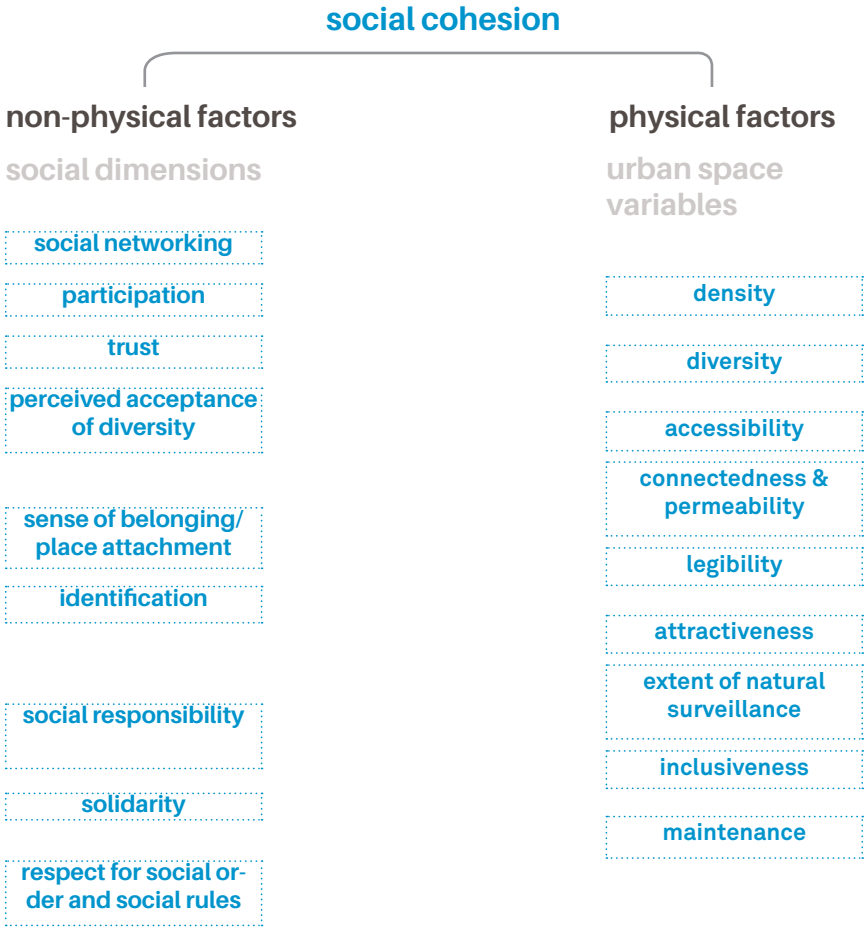

Figure 9. Non-Physical factors and Physical factors that concern social cohesion based on literature. Own diagram.

3.6.Non-physical factors of social cohesion

3.6.1. Social relationships

Social relationships sub-dimensions are considered by Schiefer et al. (2012) as part of what they call the 'Relational dimension'. Relational dimensions are closely linked to the concept of social capital. The Social relationships dimension encompasses the following sub-dimensions: Social networking, Participation, Trust and Perceived acceptance of diversity.

3.6.1.1. Social networking

Cohesion refers invariably to social interactions. Social networking refers to both quantity and quality of social relationships. By quality is meant the fluidity of social contact, which involves the availability of a social network in which a certain sense of confidence is present described as 'close relationships'. Network of relationships can be seen in both individual and collective level. In the social networking dimension we look at it from an individual perspective, where the potential benefits that a person delineates from formal or informal ties with others are highlighted (Burt, 1992). Some indicators of social networking are relations to relatives and relation to neighbors, for instance the existence of close relatives, existence of at least one close friend take part (Berger-Schmitt, 2000).

3.6.1.2. Participation

Participation can be seen from a collective perspective of social relationships, which enable collective actions and improve social outcomes (Freel, 2000; Nahapiet & Ghoshal, 1998). Participation is considered for Berger-Schmitt (2000) as 'Social and Political activities and engagement' and they are grouped under the second societal goal dimension of social cohesion called : ***'Strengthening social capital'***. However, participation is agreed to be part of social cohesion by many other auhors like Chan et al. (2006), Chiesi (2004), Council of Europe (2004), Easterly et al. (2006), Rajulton, Ravanera & Beaujot (2007), Ritzen (2001), among others. It is usually described in both levels, 'intermediary associations' (Berger-Schmitt,

2000) such as clubs, organizations, political parties, and 'macro-level of societal institutions' (Berger-Schmitt, 2000) concerning civic participation -like involvement voting for elections-. The main aspect of participation refers to the engagement with other social network circles, that in fact increases one's social network and contributes to the feeling of belonging to the society because somehow it is related to the level of acceptance of one in new communities within the society. In this context participation is fruitful for both, the new comer and the welcoming community to stronger cohesion and be reunited with common objectives. The result is a 'shared cohesive value' , a shared value resultant from cohesion. Indicators that reveal this aspect can be the membership to political party, or to an organization and the participation in political election, or have political interest (Berger-Schmitt, 2000, p.13).

3.6.1. 3. Trust

Many research contributions point out the important role of trust as one of the key determinants of social capital (Morrone, Tontoranelli, & Ranuzzi, 2009, p.5), for instance Berger-Schmitt (2000) considers Trust as an aspect of the quality of relationships included among the second goal dimension of social cohesion aforementioned as 'Strengthening social capital'. Most of the definitions of trust rely on individual expectation, and most important confidence that ***'others will act as they expect'*** (Morrone et al., 2009, p.8). Fukuyama (1995, as cited in Morrone et al., 2009), adds a more detailed conception of trust introducing it as the expectation that arises within a community when other people behave in a predictable, honest and co-operative way. Some indicators of this dimension are general trust in people, trust in political institutions, or what is more addressed in social cohesion is trust among neighbors, considering the neighborhood as the local environment where 'sources of meaning and social recognition' (Forrest & Kearns, 2001) are built.

3.6.1. 4.Perceived acceptance of diversity

Immigration and the evident multicultural society have led to the need of contemplating rather 'acceptance and construction of different approaches' towards cultural diversity than homogeneous or consensus of values (Schiefer, van der Noll, Delhey, & Boehnke, 2012). Perceived acceptance

of diversity is in relation with tolerance, cultural diversity and the construction of an harmonious society beyond cultural differences. Perceived acceptance of diversity is based on respect and elimination of any kind of discrimination or disregard related to age, cultural, ethnic, religious or gender background of individuals within a society.

3.6.2. Connectedness

3.6.2.1.Sense of belonging / Place attachment

Place attachment and sense of belonging remain crucial to cohesive societies. Strong place attachment is considered 'an integral part in the lives of human beings' (Seamon & Sowers, 2008). Relph (1976) considered a pionner 'humanistic geographer' advocated to *'place and placelessness theories'* has a very insightful contribution explaining what 'insideness' is. Relph argues (as cited in Seamon & Sowers, 2008, p.3) *'If a person feels inside a place, he or she is **here** rather than there, **safe** rather than threatened, **enclosed** rather than exposed, **at ease** rather than stressed'*. Moreover he argues that the deeper a person feels inside a place, the stronger his/her identity to that place.

The counterpart of insideness is outsideness where a human feels a kind of separation between he/she and the world. While insideness can be according to Relph characterized by the experience lived when being at home in one's own community, outsideness is that one experienced from newcomers to a new place, away from their birth place, feeling sort of homesickers.

Important is how the sense of belonging affects the individuals behaviors in other aspects, for instance enhancement of integration process, mental well-being, distress, less social vulnerability, among others.

Relph (1976) argues that individuals can either develop a sense of place 'unself-consciously or deliberately', for instance a regular used neighborhood can just create an authentic image as well-known as a landmark in the city. Moreover, he affirms that 'to be inside a place is to belong to it and to identify with it', which according to Dempsey et al. (2008) this can be about the physical environment as much as about the people inhabiting it.

Furthermore, a positive sense of attachment is related with the 'enjoyment' people have respecting their neighborhood (Nash and Christie, 2003), and we would add respecting to their daily life. Forrest & Kearns (2001) agree on the fact that the form of the built environment and inhabitants place attachment is something shared by the residents, which collectively creates their own order, their essence (peculiarity) compared to other places (Relph, 1976, p. 2).

'The difference between a house and a home is the difference between a place to stay and a place to live. A home is a place of safety, security and stability, the lack of which was the main reason refugees left their country of origin'
(Dutch Refugee Council/ECRE 2001: 5)

3.6.2.2.Identification

As mentioned by Chan et al. (2006), social cohesion refers invariably to social interactions within groups or a certain delimited area, for what is essential a minimum level of identification with either the area or the group. By identifying ourselves with a group or an area, remain intrinsically shared values, norms, objectives or perspectives of life that allow for feeling safe and encourage self-esteem of the individual which as a consequence, it facilitates the disposition to social networking and participation (Forrest & Kearns, 2001).

3.6.3. Orientation towards common good

Orientation towards common, is related to reciprocity feelings among society members.

3.6.3.1.Social responsibility

Social responsibility is related to a degree of social commitment and willingness to help others or place the 'common good above one's personal interests' (Schiefer et al., 2012, p.19)

3.6.3.2.Solidarity

Solidarity is considered as both relational and ideational dimensions of social cohesion. As ideational dimension is considered solidarity as a value, and in relational terms as 'mutually supportive behavior' (Schiefer et al., 2012, p.19).Solidarity is also related with social responsibility and willingness to help. It is mostly characterized by membership in volunteer associations, donations, etc.

3.6.3.3.Respect for social order and social rules

A minimum level of legitimacy of social order and social control from respective institutions. The recognition of social norms is considered essential for cohesive society, while is ensuring feelings of safety on the individual (Schiefer et al., 2012, p.19; Forrest & Kearns, 2001).

3.7.Physical Factors that concern social cohesion

'Of particular interest is the extent to which factors in the built environment facilitate, or impede, the development of social bonds.'

(Cooper, Fone, & Chiaradia, 2014)

3.7.1.Density

Density is commonly mentioned as one of the features of the qualities of the city. Gehl affirms that city life is a matter of both quantity and quality, therefore density alone does not produce any life in the streets (2010). Under this basis, it is argued the need of not only high density but a *'better density'* (Gehl, 2010, p.69). Under this basis, quantitatively should invite more people to come and qualitatively should invite people to stay for longer periods of time (Gehl, 2010). In addition, Dempsey et al. (2010) affirms the relation of density with other attributes of urban form for instance land use and access to facilities also influence the quality of the density offered in a certain place. In fact, according to density it is measured the feasibility of public transport infrastructure and other services or the other way around, according to what is available is also the density it should be given to a certain place, unless we consider an upgrading of the general infrastructure existing in a location. Moreover, density is also linked by Dempsey et al. (2010) to non-physical factors like the configuration of the social environment and the interaction within residential neighbors.

There are many ways to measure and express density according to the field of study. Density is 'a term that represents the relationship between a given physical area and the number of people who inhabit that area' (Berghauser Pont & Haupt, 2009, p.390). Usually, density is expressed as ratio of population or dwelling units in the numerator, to a given area units as denominator (Berghauser Pont & Haupt, 2009). For instance persons and households per hectare, persons per household, dwellings per hectare , population per square meter can be some examples. Nevertheless, there is no consensus on how to measure density at international level or even at metropolitan scale. The differences that exist between countries can be identified as follows: firstly, the numerators and denominators vary according to different countries, secondly there are different units used - acres, meter, hectare, square mile, square kilometer; and third, the definition of net density adopted by

different countries differ from each other (M. Berghauser Pont & Haupt, 2010; Churchman, 1999).

The problematic on how density is measured is the fact that using units per area does not give valuable information about how the space is actually configured. Indeed the relationship between density and building type is not being revealed by this method.

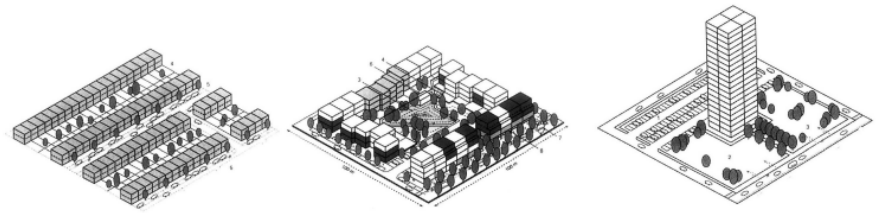

Figure 10. 'Three areas with 75 dwelling per hectare' (Fernandez Per & Mozas, 2004, p.206-207)

A remarkable work in measuring density is the one made by Berghauser Pont & Haupt (2009) by developing the Space-mate/Spacematrix. They argue that density measures contain valuable information concerning space properties. The Space-mate/Space-matrix uses the following items for its measurement and representation (Berghauser Pont & Haupt, 2009):

*Floor Space Index (FSI) which expresses the built intensity of an area and is calculated by dividing gross floor area by plan area;

*Gross Space Index (GSI) also named as coverage, which demonstrates the relationship between built and non-built space;

*OSR or spaciousness, is a measure of the amount of non-built space at ground level per square meter of gross floor area.

There are identified 8 different clusters of building typologies according to the values in the Space-mate: Low-rise point type; low-rise strip type; hybrid low-rise strip/block type; low-rise block type; mid-rise strip type; hybrid mid-rise strip/block type; mid-rise block type; hybrid high-rise point/strip type (See Figure 11).

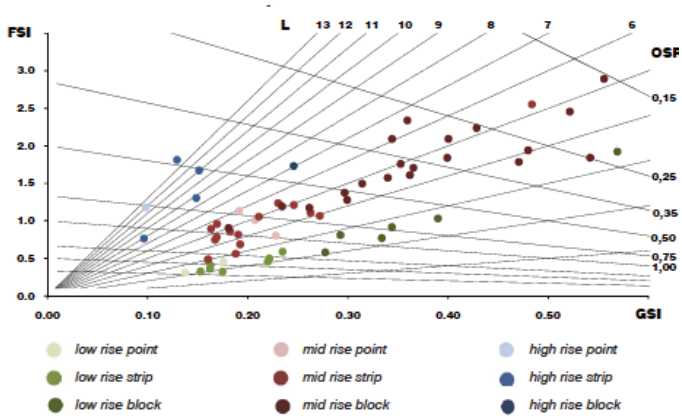

Figure 11. 'Samples from Amsterdam, Berlin and Barcelona in the Space-mate diagram on the scale of the fabric' (Berghauser Pont & Haupt, 2009).

3.7.2. Mix Land uses

Mix of Land use is regularly known as an aspect of quality of spaces. Mainly because the intermittently appearance of public services and facilities create more livable facades while encouraging more pedestrian movement and people influx. Along with this, mix land uses create dynamic spaces which indeed get higher chances of becoming economic and social attractors.

For this reasons, land use patterns are argued to be key contributors of the efficiency of a city, promotion of sustainable development, as well as influencer of urban travel patterns and quality of life (J.Jacobs, 1961; Mashhoodi & Berghauser Pont, 2011; Sayyar & Marcus, 2011; Dempsey et al., 2010; van den Hoek, 2008; Dempsey et al., 2010). In this context, one of the main aspects is the availability of facilities at the neighborhood level.

The availability of certain services is related to the possibility of having access to them which in fact pertain to aspects of social equity. Equitable societies and environments is where no body is excluded from fully participating in society economically, socially and politically.

An active frontage with a variety of uses contributes to our walk through the street making our walk pleasant or unpleasant, and indeed encouraging to repeat the path or not (Gehl, 2010).

In order to identify an appropriate measurement for it, a definition of mix uses itself is required. Jane Jacobs (1961), argues that a mix-use urbanity within public realm is produced through a fine-grained mix of uses.

In terms of scale it is argued that the level of mix uses depend on each perceived scale, for instance if a district is considered mix-used, it does not ensure that there is also a mix-used neighborhood, block or street. Because of this, according to the study a decision about the scale to measure should be taken (Van Den Hoek, 2008).

One of the most accepted definitions measuring mix of land uses is the MXI or Mix Use Index developed by Van Den Hoek (2008). As first instance, this method considers important to identify the relevant uses and the way their combinations are revealed in mixes and mix typologies. For this purpose they look firstly at : mixable and non mixable function. Table 8 shows mixable and non-mixable programs according to Van den Hoek (2008).

For the conception of the MXI Van Den Hoek (2008) explains that in order to contribute to other well known indexes such as FSI, OSR or GSI which are conceived in terms of floor space, the MXI also follows the expression in floor space. The MXI reduces all aspects of land use mix to the proportion of residential versus non-residential functions. According to the MXI the residential floor space is expressed as a percentage of the total amount of floor space in a delimited area. In fact, in a project with MXI=100, there is only residential use and in a project with MXI=0 there is no residential use. Mono-functional areas will be either 100 or 0, while for example city centers like Barcelona or Amsterdam are result on 50 revealing almost equal distribution between housing and non-housing (Van Den Hoek, 2008)

3.7.3.Accessibility

Accessibility is another quality of the urban space. Access to public transport as well as to facilities are relevant to the level of inclusion a space and its inhabitants have in relation to the rest of the city and to their local level.

1. Non Housing	Energy production	"Unmixable"
	Waste management	"Unmixable"
	Industrial plant production	"Unmixable"
	Harbour	"Unmixable"
	Airport	"Unmixable"
	Distribution	"Unmixable"
	Oil refinery	"Unmixable"
	Etc.	"Unmixable"
2. Non Housing	Offices	"Mixable"
	Arts n Crafts	"Mixable"
	Retail	"Mixable"
	Restaurants	"Mixable"
	Bars	"Mixable"
	Hotel	"Mixable"
	Leisure	"Mixable"
	Care	"Mixable"
	Culture	"Mixable"
	Media	"Mixable"
	Religion	"Mixable"
	Education	"Mixable"
	Sports	"Mixable"
	Etc.	"Mixable"
3. Housing	Apartments	"Mixable"
	Row houses	"Mixable"
	Detached houses	"Mixable"
	Villas	"Mixable"
	Flats	"Mixable"
	Ftc.	"Mixable"

Table 9. '"Mixable" and "Unmixable" urban functions' (Van Den Hoek, 2008, p.8).

MXI value	0	50	100
Meaning	No housing present	50/50 balance housing non housing	100 % residential use
District type	Single use.	Mixed Use	Single use
Examples	Office park Factory Complex Harbor district Airport Shopping center	City Center Semi Central	Newtown The projects Suburbia

Table 10. 'Meaning of the MXI' (Van Den Hoek, 2008, p.10).

Hansen (1959) affirms the potential accessibility has for providing opportunities of interaction. An accessible neighborhood is where one can reach facilities and transport services easily but also reasonable in terms of cost and time (Dempsey, 2008).

Accessibility is indeed closely linked to land use and layout (Dempsey et al., 2010). Exist many definitions of accessibility, which vary at some degree (Hansen, 1959; Bhat, Handy, Kockelman, Mahmassani, Chen, & Weston, 2000; Geurs and van Eck, 2001; Geurs and van Wee, 2004; Bertolini, LeClercq and Kapoen, 2005). Scheurer & Curtis (2007) explain that while the concept of accessibility has been developed in parallel with the concept of mobility, accessibility measurements are capable of evaluating transport public infrastructure and **land use patterns** as a '*further layer of analysis',* in contrast to mobility which focus on public transport infrastructure itself. In fact, accessibility measurements also consider urban form and spatial distribution. In this context, this study considers appropriate the definition that Bhat et al. (2000):

'Accessibility is a measure of the ease of an individual to purse and activity of a desired type, at a desired location, by a desired mode, and at a desired time.'

Handy (1993), argues that at least two measurements are required to define accessibility in cities and reveal the community structure, this are accessibility within the community or *'local accessibility'*, and accessibility to regional centers of community activity, or *'regional accessibility'*. In order to differentiate local from regional accessibility, Handy (1993), explains local accessibility depends on distance to local centers of activity, while regional is based on the availability of good transportation connection to central business regions or big agglomerations within a certain area. Handy (1993) reveals the implications of shopping distances on accessibility. As a result, the research evidences that both higher levels of local and regional accessibility are related with less total shopping travel. Furthermore, Handy points out that by measuring local and regional accessibility of a community, we are able to identify the 'character of the community' and the 'quality of links between the community'(1993, p.5).

Among the different methods of measuring accessibility *-spatial separation measures, contour measures, gravity measures, competition measures, time-space measures, utility measures and network measures-* identified by Scheurer & Curtis (2007), our study will also use network measurements

developed by Bill Hillier (Space Syntax methodology).

Space syntax considers the city as a group of buildings held together by a *'network of spaces flowing in-between the blocks'*. The network connects streets which form the final structure of it, the network structure is the result of the shortest path from all origins to all destinations (Al_Sayed, Hillier, Lida, & Penn, 2014). This methodology argues that the network has a certain geometry and a certain topology (pattern of connections).

Space syntax interpret spatial structures either with convex or axial maps in order to understand the social logic behind space, for instance tendency to movement or occupation. Convex maps will not be explained in detail in this paper since is not directly used for the purpose of this research.

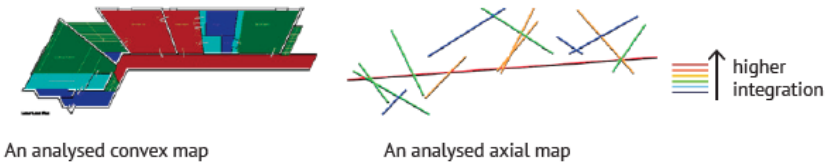

Figure 12. 'Convex and axial map representations' (Al_Sayed, Hillier, Lida, & Penn, 2014, p.11).

In axial representations the spaces are reduced to the *'longest accessible lines that cover all the convex spaces in a map'* (Hillier and Hanson, 1984). An example of how is one space represented by axial lines is the graphic below (Figure 13).

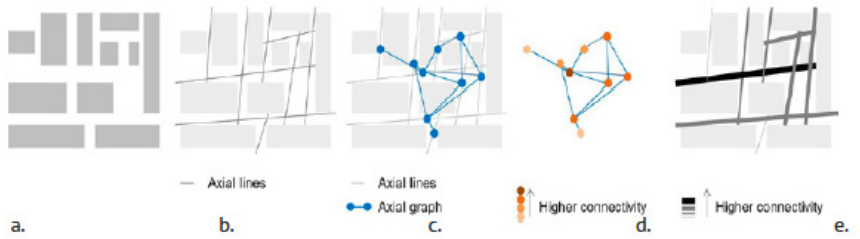

Figure 13. 'Axial representations of Space Syntax' (Al_Sayed, Hillier, Lida, & Penn, 2014, p.12).

The urban space (a) is represented by a set of axial lines(b), Axial lines are represented by a Graph (Figure c), then the graph is used to calculate a set of syntactical measurements for each axial line (Hillier & Hanson, 1984) which result in values for each line, in this case connectivity values for each

line is highlighted, the vertex which have more connections to their immediate neighbors have higher connectivity, this values will be represented in the axial map revealing the hierarchy of connectivity levels (d).

Axial maps are syntatic representations since they provide structural information of streets, for instance, line lengths, intelligibility and synergy among others.

Within the syntactic measurements offered by space syntax are Connectivity, Integration, Control and Choice. This paper founds appropriate to take into consideration two measurements: Choice and Integration at a global scale for defining the accessibility level.

As defined by Al_Sayed, Hillier, Lida, & Penn (2014, p.15) the concepts are:

> *'**Choice** measures movement flows **through** spaces. Spaces that record high global choice are located on the shortest paths from all origins to all destinations. Choice is a powerful measure at forecasting pedestrian and vehicular movement potentials. It is usually applied to axial analysis rather than convex analysis, because it is descriptive of movement rather than occupation.'*

> *'**Integration** ... The global measure shows how deep or shallow a space is in relation to all other spaces. Using integration, spaces are ranked from the most integrated to the most segregated...'*

As a conclusion, for the purpose of this research, local accessibility will be considered by calculating the distance to the closest shop, while regional accessibility will take into account the access to public transport at the local scale, considering the availability of it or not. Furthermore network measurements will be also taken into account, evaluating Choice (R=n), and Integration (R=n) respectively.

3.7.4.Connectedness & Permeability

A well-connected and permeable built environment, both identified as important qualities of the urban layout and considered to influence pedestrian movement as well as the way different spaces are connected (Dempsey et al., 2010). The influence of urban layout on navigation tasks has been extensively researched. Previous studies on this topic have made emphasis on how the design of the built space affects walkability (Silavi, Hakimpour, Claramunt, & Nourian, 2017). Connectedness and permeability play a relevant role in relation with how walkable an area is. More permeable areas will provide more movement opportunities, this fact is related by some authors to a sense of enclosure in a given environment (Arthur E Stamps, 2005 ; Carmona, Tiesdell, Heath, & Oc, 2010; Silavi et al., 2017). Moreover sense of enclosure is considered to make people feel safe (Ewing & Clemente, 2013).

Bentley, Alcock, Murrain, McGlynn, & Smith (1985) define the concept of 'responsive environments' via seven levels among the ones permeability and legibility appear listed. Legibility itself will be addressed below on this paper. Concerning permeability, Bentley et al. (1985, p.10) affirm *'only places which are accessible to people can offer them choice'*, later on they affirm that the quality of permeability is the number of alternative ways through an environment. In addition, permeability is considered as an attribute which connotes the 'ability to sense or move through a given environment' (Stamps, 2013 cited in Silavi et al., 2017, p.1). This mostly refers to the concept of Bentley et al. (1985, p.12), where they agree it exist a physical permeability which offers different alternative routes, but also a visible permeability which allows people who are not 'locals' to realize about their opportunities of movement.

Concerning measurement of permeability, Bentley et al. (1985) suggests three design directions which can reach positive outcomes in city layouts and for instance on physical and visual permeability. These include: small blocks, avoid segregated paths and hierarchical layouts.

The way the public spaces are divided in blocks by network paths and shapes is what actually influences permeability. Because of this, Bentley et al. (1985) highlights the importance of small blocks. Those places with smaller blocks give more choice of routes, are easier to go through, and enhance walkability which indeed bring a more lively environment, while

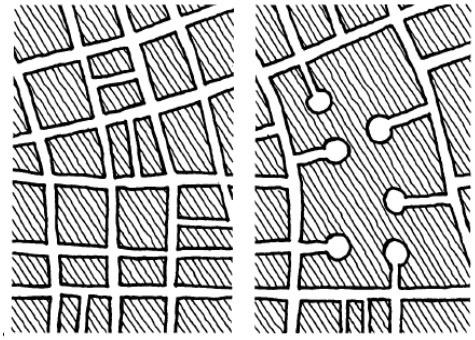

Figure 14. Permable and not permeable spaces (Bentley et al., 1985, p.10).

impermeable areas will be characterized with large urban blocks. As a matter of example, Bentley et al. (1985) uses figure 15 (See Figure 15 in previous page), explaining that while the left figure gives 3 routes possible to go from A to B, the figure on the right offers 9 different alternatives.)

Concerning avoiding hierarchical layouts, they argue that the hierarchy in street networks create a ' world of cul-de sac, dead ends and little choice of routes', in fact they decrease permeability.

Furthermore, it is argued that segregating users of public space into different categories like pedestrian users/vehicle users into differentiated routes for each of them, effectively reduces permeability. Within this context the authors of 'responsive environments'' agree that there are ways to help motorists to *'live together'* (Bentley et al., 1985). Figure 17 (See next page)

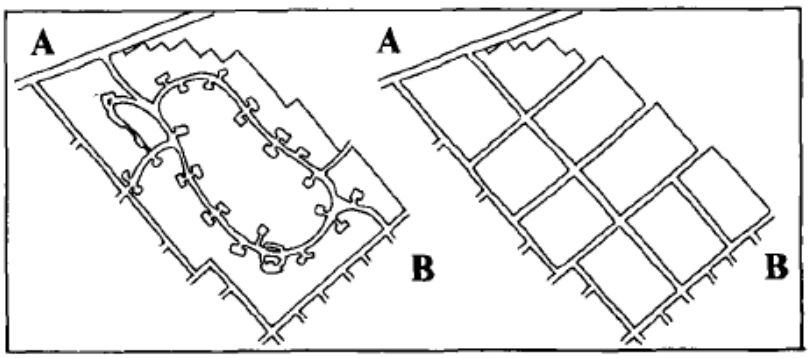

Figure 15. Permable and not permeable spaces, difference providing routes alternatives (Bentley et al., 1985, p.12).

graphically explains the problematics of segregating routes.

As a matter of reference for the purpose of this research, Nicola Dempsey author of *'Are good-quality environments socially cohesive?'* (2009), measures the degree of Permeability with block size analyses, measuring the average distance between junctions per street at a street level (See Table 4)*'Indicators developed to measure features of quality of the built environment'*, Dempsey, 2009).

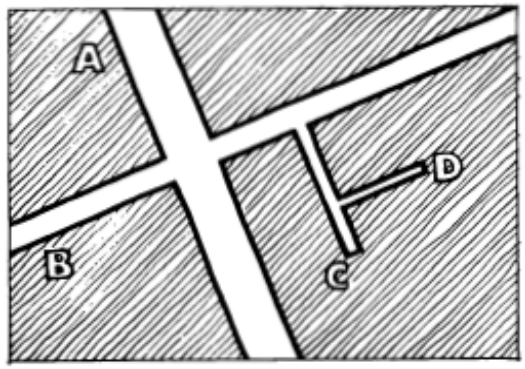

Figure 16. Hierarchical routes decreasing permeability (Bentley et al., 1985, p.13).

We can understand that permeable areas facilitate feelings of safety as well as safety itself. In line with this, Jan Gehl affirms *'if we reinforce city life so that more people walk and spend time in common space, in almost every situation both real and perceived safety will increase' (2010).*

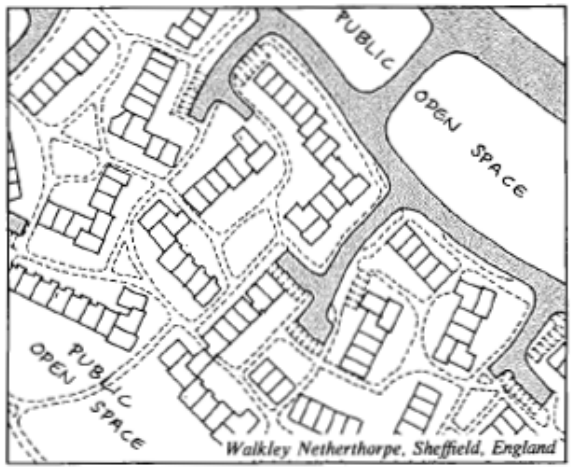

Figure 17. Segregating paths decreasing permeability (Bentley et al., 1985, p.13).

Figure 18. Responsiveness (Bentley et al., 1985, p.9).

It is argued that connectedness and permeability can determine the nature and extent of routes between and through spaces, which in fact have an impact on the degree of livability and efficiency of a space (Cowan, 1997).

Urban networks can be measured for their complexity of structure, specifically in terms of density, resilience, and connectedness (Boeing, 2018). For this purpose, it is important to understand that a network comprises a set of elements which are called nodes, and the connection between them called edges. Nodes represent intersections and dead-ends and edges represent the street segments that link them (Boeing, 2018).

As explained before in our literature review, in the past years many efforts have been done in order to develop measures of urban space which can explain social behaviors, in this context, Space syntax is a well known and respected theory. With this method it is possible to measure connectivity degree among others like Integration, Control, Choice, and later the correlation of some values for new measurements like Intelligibility or Synergy (Al_Sayed, Hillier, Lida, & Penn, 2014). In terms of measurement, Space Syntax methodology measures connectivity by the number of immediate neighbors that are directly connected to a space. (Al_Sayed et al., 2014). Concerning the methodology itself, it has been before explained (See Figure 13).

In line with space syntax methodology, it is argued that 'Synergy' and 'Intelligibility' measurements developed with space syntax reveal permeabili-

ty of urban layouts. 'Synergy' represents relationship between smaller radii of Integration (for instance, integration HH R3) and larger radii (integration HH Rn). The result express relation between individual parts of the system and the system as a whole (Al_Sayed, Hillier, Lida, & Penn, 2014). 'Intelligibility' is accurately explained in the following section of 'Legibility'. Synergy as well as Intelligibility are represented graphically by scattergrams and giving as a result a R^2 value or correlation value.

Other example of permeability and connectedness measures is revealed by Dempsey (2009) in her study relating social cohesion and urban qualities, she measures connectedness by the number of junctions per hectare and per street at a neighborhood level and street level. (See Table 5).

3.7.5.Legibility

Legibility has been considered as 'one of the main desirable qualities of navigation in urban qualities' (Lynch, 1960). Within relevant literature on legibility, Kevin Lynch is the pioneer with his book 'The image of the city' (1960). Lynch (1960) affirms that a clear image allows one to move easily and quickly. Legibility is described as *'the ease to which parts can be recognized and organized into a coherent pattern'* (Lynch, 1960, p.3). Bentley et al. (1985, p.42) conceive legibility as the quality which makes the city ***'graspable'***.

Moreover, Lynch sustains that legibility contributes to safer spaces and argues that legibility plays also a social role through heightening potential and magnitude of human experience. Additionally, it exist a degree of emotional satisfaction which can be related to conceptual organization or framework for communication in the space according to Lynch (1960).

As permeability, legibility is also considered one of the eight qualities related to responsive environments (Bentley et al., 1985). Bentley et al. (1985) point out that even though the goal of legibility is that people can make clear and accurate images of the city or place, is rather the user than the designer who creates the image, whereas the designer in essence, arranges the layout. In other words, the accurate image of the space is that one which is built on the perception of the user according to his/her experience of it.

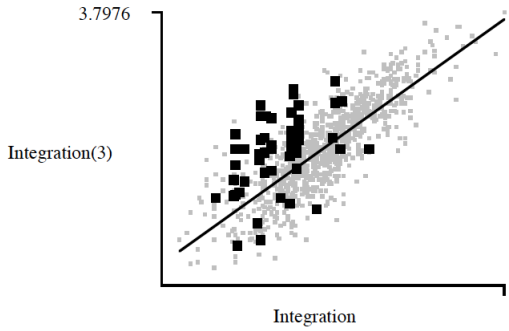

Figure 19. High synergy measurements (correlation Integration Radii 3 and Integration Radii n) in King's Cross, London, UK. (Hillier, 2007, p.133)

Lynch (1960) defines the key attributes of legibility on the following attributes: nodes, edges, paths, districts and landmarks.

> ***Nodes** refers to 'focal places'. For instance a round abouts is exemplified by Bentley et al. as a node.
> ***Edges** indicate linear elements that are not used as paths, they break in continuity Examples of them are: rivers, rail-way viaducts, elevated motorways.
> ***Paths** considered as the most important elements of the city, they are 'channels of movement', streets, alleys, railways, motorways.
> ***Landmarks** external points of references. For exampple: A sculpture, an imponent building, a visual and social reference.
> ***Districts** all the aforementioned elements organized together with common characteristics comprise a district.

Previous research suggests that space syntax can provide computational measurement to represent legibility in terms of quantity using the measure of *'Intelligibility'* (Long & Baran, 2012; Silavi et al, 2017). Findings on previous research affirm that urban professionals (designers and policy makers)could use space syntax in order to have a better understanding of intelligibility and manipulate it for enhancing legibility (Long & Baran, 2012).

"*Intelligibility is the capacity of a space to give clues to the understanding of the system as a whole"* (Long & Baran, 2012).

The intelligibility concept of Space Syntax resembles Lynch's conception of legibility (Long & Baran, 2012, p.621). Intelligibility in space syntax context is described as the correlation coefficient between connectivity and global integration which helps identifying *'how easy it is for one in a local position to comprehend the global structure'* (Al_Sayed et al., 2014, p.15).

Connectivity and Integration syntatic measurements have been already described in this paper in what accessibility and connectedness measurements are concerned. Unlike connectivity which is a static *local* measure, Integration is considered a static *global* measure which represents the average depth* of a space to all other spaces in a system (Klarqvist, 2015). Integration represents how easy it is to reach a specific line of the axial map considering it from all the other axial lines within a system. In this context Long & Baran, (2012) explain, for a given line, integration is computed in terms of how accessible it is from all other lines (called Global integration), or measured in terms of a given number of lines (local integration with different radii R=200m, R=400m, R=800m, etc.)

Legibility represents the correlation (R^2) between connectivity and global integration values (R=n). The link between these two variables allows for indicating the extent to which connectivity is a good guide for global integration. The higher the R^2 value, the higher the intelligibility value of an urban layout (Long & Baran, 2012).

As a representation tool, intelligibility is represented by Hillier (2007) using scatter-grams where points located on the vertical axis reveal connectivity, and on horizontal axis integration (See Figure 20). To read intelligibility degree we can observe the scatter-grams and identified if the located points tend to form a straight line increasing at 45° from bottom left to top right, then this means a positive almost perfect correlation, in fact a perfectly intelligible system (Hillier, 2007).

*(****Depth*** *between two spaces is defined as the least number of syntactic steps in a graph that are needed to reach one from the other (Klarqvist, 2015)).*

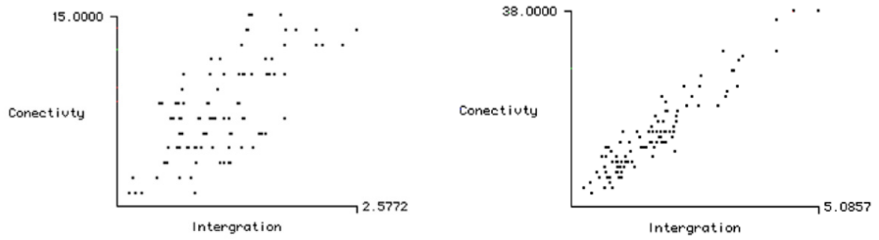

Figure 20. Low and high intelligibility measurements in an imaginary street system (Hillier, 2007, p.95)

3.7.6. Attractiveness

The indicators frequently related to 'Attractiveness' are difficult to assess, as indicators might relate to ornamentation, street furniture and street art.

The quality of attractiveness is that one which might affect people's awareness of choices available in space, which indeed refers to visual appropriateness(Bentley, Alcock, Murrain, McGlynn, & Smith, 1985). It is for this reasons that 'Attractiveness' is related to some extent to ones degree of place attachment and sense of belonging.

Trees and extent of greenery are attributes often referred to when describing the attractiveness of a place (Howard, 1898; Llewelyn-Davies, 2000; ODPM, 2002; Dempsey, 2009). Dempsey (2008) proposes the following indicators for its measurement: measurement of trees and extent of greenery, in addition, she considers perception of attractiveness of the residents as a valuable rate. Within this method, urban features like ornamentation, graffiti, and street art are discriminated from the quantitative approach. However, many other authors do take this features as relevant for their evaluation, like the case of Ewing & Clemente (2013) when quantifying 'complexity' within the city, which has very much to do with the attractiveness of it, but rather partially, not in every aspect.

3.7.7. Extent of natural surveillance

The extent of natural surveillance refers to what Gehl (2010) describes as 'where the city and the building meet': *The edges*. The edges of the city can be characterized by its frontages. According to Gehl, the edges of the city have a major responsibility concerning human interaction (2010). For this reason, he mentions some actions edges should allow in order to fulfill their function: chatting by, entering and leaving, walking alongside, standing alongside, taking a break by, standing in doorways, shopping next to, interacting with, looking at displays with, siting on and looking in and out of. Edges are considered on one side as an essential contribution to spatial experience, and on the other side to the 'awareness of individual space of place' (Gehl, 2010, p.75). Considering the 'eyes' overlooking streets, active frontages are many times also related to feelings of comfort and safety (Dempsey et al., 2009).

Gehl (2010) defines active, friendly, mixture, boring and inactive frontages by observing the following attributes of edges: size of units, number of doors, variation in function, number of blind units and level of details and materials.

Under an extensive study of each attribute and its effects on social behavior, Gehl (2010) develops the following index for defining the character of frontages:

Active
a. Small Units
b. Many Doors (15-20 doors per 100m)
c. Large Variation in function
d. No Blind units
e. Good Details and materials

Friendly
a. Relatively small units
b.10-14 Doors per 100m
c. Some variation in function
d. Few blind and passive units
e. Many details

Mixture
a. Large and small units
b. 6-9 Doors per 100m

c. Modest Variation in funtion
d. Some blind and passive units
e. Few Details

Boring
a. Large units
b. 2-5 Doors per 100m
c. Almost no variation in funtion
d. Many blind or uninteresting units
e. Few or no details

Inactive
a. Large units
b. 0-2 Doors per 100m
c. No visible variation in funtion
d.Blind or uninteresting units
e. Uniform facades - No details

3.7.8.Inclusiveness

Inclusiveness refers to make spaces comfortable and accessible for everyone regarding age, gender, ethnic group, etc. Inclusiveness in essence aims for comfort in pedestrian facilities. Inclusiveness and maintenance are greatly interrelated, these two aspects of urban space facilitate and allow for good walkability experiences.

In an effort for measuring pedestrian conditions in public space, pavement state, seating possibilities, bus shelters and toilettes are considered elements that concern the inclusiveness of a space by Dempsey (2008).

3.7.9.Maintenance

A well maintained place, wherever it is reveals that somebody cares about it. To some extent it reveals if public governances do their job and can affect the degree to which people trust on public institutions. It is argued that the decision of staying or moving out of a neighborhood might be related to perceived qualities and maintenance of the built environment, among other like good accessibility and availability of services and facilities. Moreover, sense of place is also related to levels of maintenance.

A poor downgraded space with high levels of litter and vandalism is less susceptible of residents feeling safe there, which in turn can undermine social interaction and community participation levels (Dempsey et al., 2009). It is argued that the idea of nobody caring of a place, is an open door for 'anti-social' and even 'criminal' behaviors (Wilson and Kelling, 1982, cited by Nash and Christie, 2003, p. 47).

The indicators of Maintenance revealed by Dempsey (2008, p.108) are: Assessment of pavement condition per street, Assessment of amount of litter per street and Number of homes and gardens below average state per street.

3.8. Measurement scales: The neighborhood scale

Because of the multi-dimensional character of social cohesion, it is generally taken as a concept that can be measured on a micro-meso-macro level according to different indicators. However, our scale of research delineates the importance perceived social cohesion among newcomers within their new community. In this context, the neighborhood scale has been widely researched and validated as the place where cohesion happens. As already argued, 'the local scale is the newcomers place for arriving and live' (Werner, Haase, Rink, Rottwinkel, & Schmidt, 2018, p.117).This is considered by Dempsey et al. (2008) as part of the sustainability of communities, which allows for organizing themselves as a society, and manifest themselves as local community.

The relation between neighborhood scale and social cohesion has a longer repertoire, mostly addressed by Chicago sociologists, concerned about how to adapt to new ways of life and wondering how important are local identities, as well as what is the role of the residential neighborhood in social cohesion, question that remains contemporary to Forrest & Kearns (2001) in the paper 'Social cohesion, Social capital and the Neighborhood'.

Forrest and Kearns (2001, p.2127) argues that social cohesion is about getting at the more mundane level of everyday life, and the neighborhood is the place where mundane routines are likely to happen. Moreover Dempsey (2008), explains that social cohesion and inclusion are related to preponderate social order in the neighborhood.

In conclusion, perceived social cohesion can be observed at a neighborhood level which will inevitably involve also the street level or micro scale. Because of this, our study focuses on meso and microscale of measurement. A mesoscale which considers the neighborhood, and a micro-scale considering the pedestrian level scale.

Defining the neighborhood has been considered a challenge for empirical research (Jenks & Dempsey, 2007). Nevertheless, 'neighborhood' is defined in its both characters: as a district, merely a 'physical construct that describes the place where people live', and as a social construct which it has to do with the identity constructed between people living there and their social order (Briggs, 1997; Galster, 2001). However, it wouldn't be meaningful to take into consideration district boundaries for instance, when a person lives at the edge of a district. A great extent of experiments have been conducted in order to define a clear spatial definition of neighborhood and conclusions reveal some flexibility.

Neighborhood can differ according to the purpose of the research, moreover what is a neighborhood and how it is identified also varies from person to person (Jenks & Dempsey, 2007). It is argued that 'neighborhood is what the inhabitants think it is' (Jenks & Dempsey, 2007; US Commission on Neighborhood States cited in Hallman, 1984, p.16). Because of this, our research considers the immediate walkable surrounding as the radio which is likely to be considered the 'known' local area, and where each person can identify their immediate neighbors (at street level).

In theory, one good analysis radii is the average one which a person would walk in a limited city portion. According to space syntax methodology, an average walking distance in cities is between 600 and 800 meters, which represent 10 minutes walk (Al_Sayed, K; Turner, A.; Hillier B.; Iida, S.; Penn, 2013). This research has considered appropriate to take a walkable radio of 800m from a person's location as his/her neighborhood.

Further details for measurement scale have been considered under the literature review of Edwing and Handy (2009), Harvey (2004) and Turón (2017). Taking into consideration that not every quality is measured at the same scale we can cluster the urban attributes selected to evaluate in this paper per scale of analysis according to literature. The next methodology chapter will identify each scale of measurement per urban attribute.

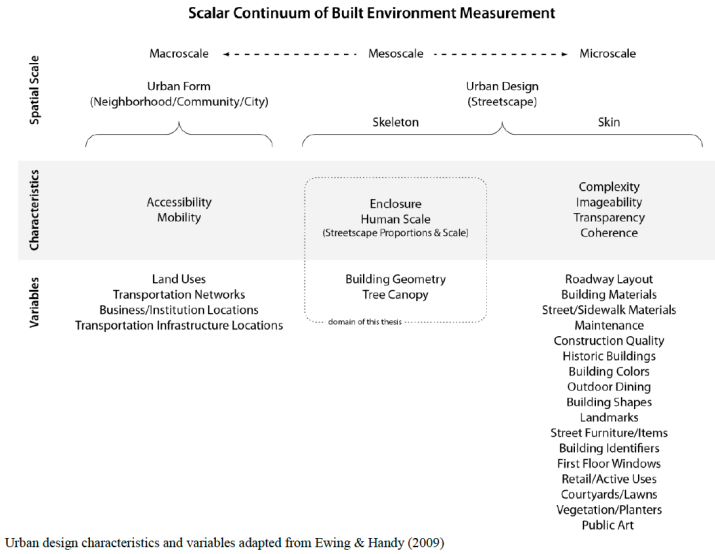

Figure 21. 'Scalar Continuum of Built Environment Measurement'. Adapted from Ewing & Handy, 2009; Harvey 2004)

04/

Research design & Methods

4.1. Introduction

The purpose of this research is to answer the following questions:

What urban qualities (physical factors) influence social cohesion dimensions (non-physical factors)?

How are the non-physical factors of social cohesion interrelated with the Physical ones, and to which extent?

Our aim is to relate 'non-physical' factors of social cohesion and 'physical' factors of it, in order to find any kind of correlation than can be valuable concerning fostering social cohesion through urban environment in the multicultural era.

Non-Physical factors, which are the sociological dimensions of social cohesion, greatly emphasize the newcomers perception of social cohesion within their local community, call it their neighborhood. Nonetheless, this research inquires to which extent are they really connected to the neighborhood, and to which extent are they able to experience stronger relation to other places rather than the neighborhood.

4.2. Research methodology

For this study are needed: persons with forced migration background, and the location where they live. The individual, is the one who will provide information about the non-physical factors of social cohesion through participation in a voluntary questionnaire. Their location, will be identified through a map included in the questionnaire as well. The location is analyzed in all the physical factors already defined, at the proposed scales. The non-physical factors give a 'rate' of how cohesive they perceive their environment.

Our quantitative approach practically relates identical issues as Dempsey (2008), but the operationalization is different. In our approach, the main goal was to have access to interview people with forced migration background who live in different neighborhood/areas within the same city in order to compare results according to the qualities of their location and find

similarities or discrepancies between them.

For the interpretation of social data (retrieved from questionnaires) basic statistics, such as descriptive statistics revealing frequencies and cross-tabs was used.

In order to relate the social data with urban factors the 'correlation coefficient' developed by Karl Pearson in 1896 is used. The correlation coefficient is a numerical measure of a correlation, that means statistical relationship between two variables. The variables which are correlated are represented in two columns of ' a given set of observations', or two components of 'multivariate random variable' with a known distribution ("Correlation coefficient - Wikipedia," n.d.). The correlation coefficient estimate any value in the interval from +1 to -1, including the end values +1 and -1 (Ratner, 2009). The interpretation of correlation values can be as follows:

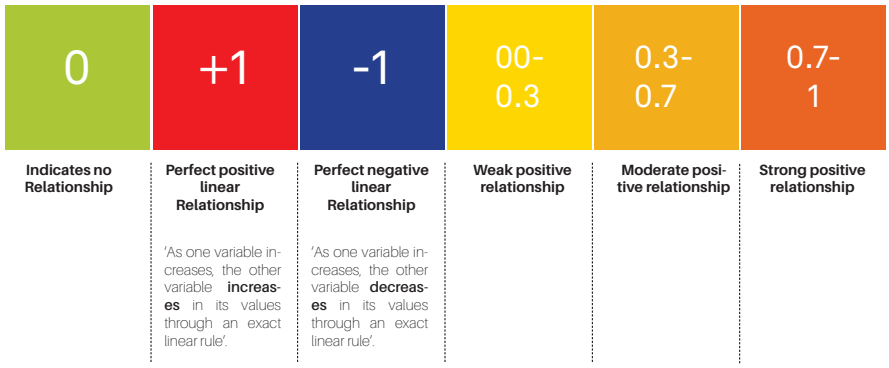

Figure 22. Interpretation of the correlation coefficient according to Ratner (2009). Own graphic.

The correlation coefficient is represented through heat-maps developed in Grasshopper with the tool ***'DeCodingspaces toolbox'*** (developed by Abdumalik Abdulmawla, Martin Bielik, Martin Dennemark, Ekaterina Fuchkina, Yufan Miao, Katja Knecht, Dr. Reinhard König, Dr. Sven Schneider, Ondřej Veselý and Peter Bus). The tool of decoding spaces toolbox offer statistical functions which work in parallel with the free statistical software R. In fact, heat-maps were resolved in R.

Interviews were held approaching the target group in different manners considering making the best effort in order to make participants feel safe

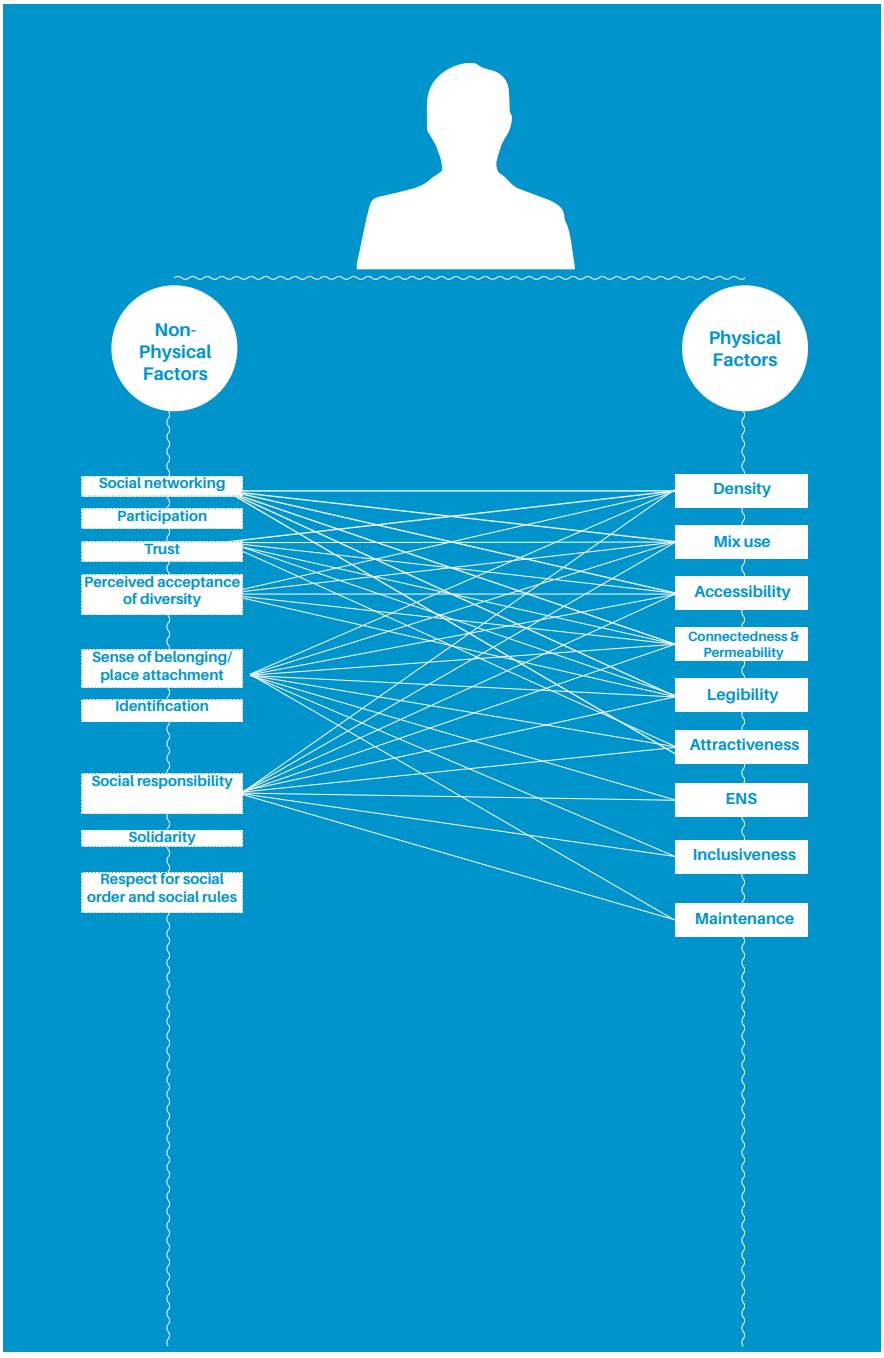

Figure 23. Goal of the research. Interrelation among physical and non-physical factors of social cohesion.

about the context where they were at the moment of interviewing. This last information is for this paper relevant, taking into consideration that many new comers due to different kind of harassments experienced are more susceptible of fear, and less willing to trust when inquired concerning topics like the one this research examines.

For the reasons explained above, it was decided that the approach to the target group would be either from an institution, or from people who refugees already knew (colleagues from university or school, friends, relatives, for example) rather than making a public survey in the street. With this purpose, two main significant institutions contributed to the feasibility of this study. These were AWO (Fachdienst für Migration und Integration Weimar) and Caritas (Caritashaus St. Hedwig), both of them opened their doors to allow us to interview refugees who in the case of AWO rely on this institution for assistance in different issues related to their daily life in Germany, and Caritas makes a great job on integration activities for refugees

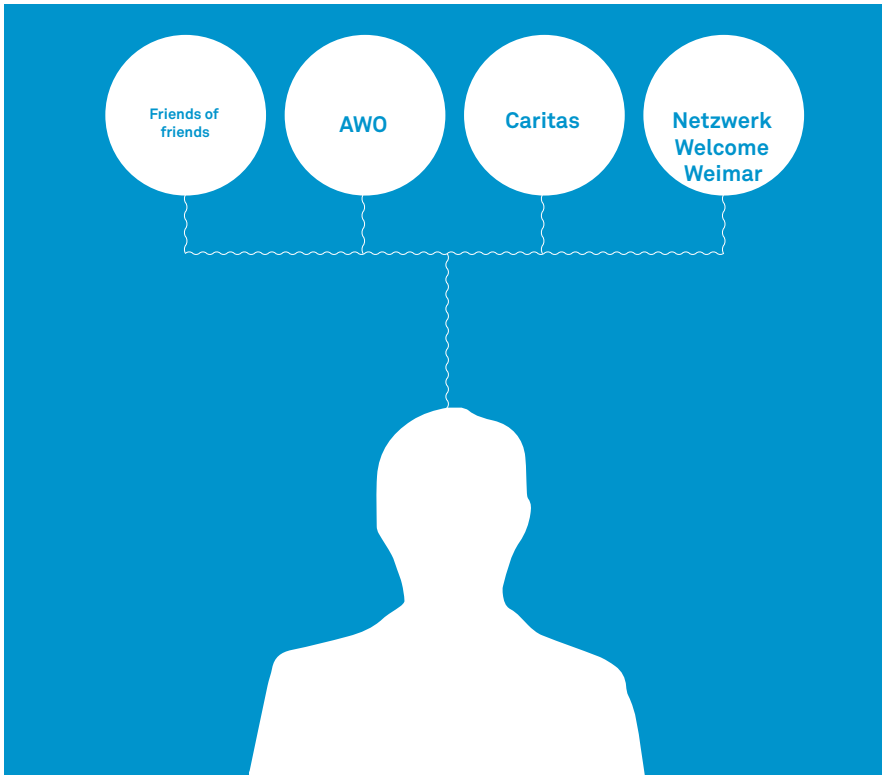

Figure 24. Approach to the target group.

like the Caritas Internacional Cafe. Additionally, AWO had the interview available in their institution for those refugees who wanted to participate in the times the author of this paper was not able to assist.

Possible difficulties in fieldwork were anticipated in order to overcome them through different resources. The difficulties, solutions and some limitations of this research are expressed in the graphic below.

Figure 25. Possible problems at fieldwork, previous analysis to fieldwork.

4.2.1.Quantifying 'non-physical factors' of social cohesion

Non-physical factors of social cohesion have been delineated and evaluated through a questionnaire. The design of this questionnaire was adapted from literature, based on questions widely used for achieving social cohesion measurements (in fact references from it are briefly summarized in the following sentence). European Social Survey (2010) main referencer of Bertelsmann Stifftung research on social cohesion which includes contributions from Noelle-Neumann & Köcher (2002), Gensicke & Geiss, 2009, has delineated the concept of a cohesive society accepted by this examination paper, and also identified useful questions to measure social cohesion. Holdsworth, L. & Hartmann, Y. (2009) referencer of social cohesion index in Australia and focused on community cohesion. Chan, To, & Chan (2006), drafts examples of questions which should be essential for the recognition of socially cohesive behaviors based on his two-by-two framework measuring cohesion among it's horizontal and vertical dimensions of cohesion within a civic society and a state-citizen cohesion.

Even though literature available was a reference guide, the phrasing of each question and the respective answers were designed for this research. Moreover, students from Bauhaus-University with Arabic background assisted on the translation of questionnaires to Arabic, while a German student did it to German. Additionally, one interpreter with Arabic background attended the interviews in order to solve misunderstandings due to language barrier, or explaining details of the questionnaire if necessary. With those refugees who were able to speak German, the author of this study was able to communicate to them or asked for external assistance of social workers. To English speakers, no language barrier was identified.

While fifteen (15) samples of survey were expected, twenty-six (26) persons were successfully reached, 17 of those provided voluntarily their location for the evaluation of urban qualities of their surrounding, the rest decided to keep it anonymous and without spatial location available.

While dimensions of social cohesion were assessed with the questionnaire, general information was also collected concerning age range, time living in the city, status and level of German language. Information about age allow to observe how different is the perception according to the age in terms of

social cohesion, for instance retired people might have different type of relationships and relation to the place, than a student at the university. Time living in the city can be compared in order to see how the perception of cohesion increase or decrease over the time, in fact many cultural shocks can be overcome within a time frame that allows for processing them. The fluidity to which newcomers speak the local language can delineate a huge difference in the way the person perceive its context, the independence and unobstructed vision for further personal progress within the new context. The graphics available from next page explain how each dimension of social cohesion is assessed by questions (Figure 26, 27, 28 and 29). For the full questionnaire image please see the Appendix.

It is necessary to mention that the present questionnaire and research does not evaluate adherence to social order and social rules due to the complexity of this dimension. However indicators that reveal good relationship among neighbors or high rate of participation in activities, as well as feeling part of the community can individually assume a minimum of loyalty to local social norms.

Many questions have used Likert (1932) scale in order to simplify answers and gather a variety of responses, others look for specific information for example use of space, location factors, participation in activities. Likert scale is the most greatly known approach to scaling the responses of surveys invented by Rensis Likert. In our case we've approached the questionnaire with a 5 scale responses, for instance strongly agree (1), agree (2), neutral (3), disagree (4), strongly disagree (5).

The three dimensions of social cohesion -Social relationships, Connectedness and Orientation towards common good- were evaluated and gave a 'social cohesion rate' for each person who participated. Those answers which contribute positively to a socially cohesive society are highlighted bold in the graphics above. Those questions indicating location factors were rated according to positive interaction in the neighborhood, in fact those answers depicting frequency of activities within the neighborhood were getting higher rates. Nonetheless percentage of uses independently of neighborhood frequency are also available. Those dimensions evaluated depending on 'within the neighborhood', and 'outside their neighborhood' are abbreviated as ***IN*** and ***ON*** respectively.

Non-physical dimension of social cohesion	Question	Possible answer
Social relationships	Do you have people who would help me without any difficulty in matters like household work, financial problems, or emotional problems? If yes, where? *If people count with a support network to rely on, they are able to feel safer and more empowered. A support network reveals a non-superficial social connection but rather an important social bonds and the satisfied expectation that help will be provided if needed. This question add a location value, are this people located in their own local community or not? This question has as secondary objective to validate the meaning of the neighborhood in social relations. Is social cohesive behavior limited to relationships within out local area?*	In my house **In my neighbourhood** In the city In the country Not here
	If yes, how many? _____ *As already mentioned in social cohesion social relationships are evaluated in quality and quantity in order to observe the size of the social network.*	
	How often do you meet friends, relatives or colleagues socially? *The frequency of social contact contributes the sense of belonging to a common network and its proximity.*	**Very frequently** Frequently Occassionaly Rarely Never
	Where do you usually spend social time? *Where do people spend time with others will reveal in which enviroments they feel comfortable. The place people choose as meeting place can highlight the importance of streets for social interaction.*	*outside the neighbourhood* (on)/ **within my neighbourhood (in)** People's home ☐ in ☐ on Community buildings ☐ in ☐ on Parks/squares ☐ in ☐ on **Streets/sidewalks** ☐ in ☐ on Other _____ ☐ in ☐ on

Figure 26. Questionnaire explanation part 1.

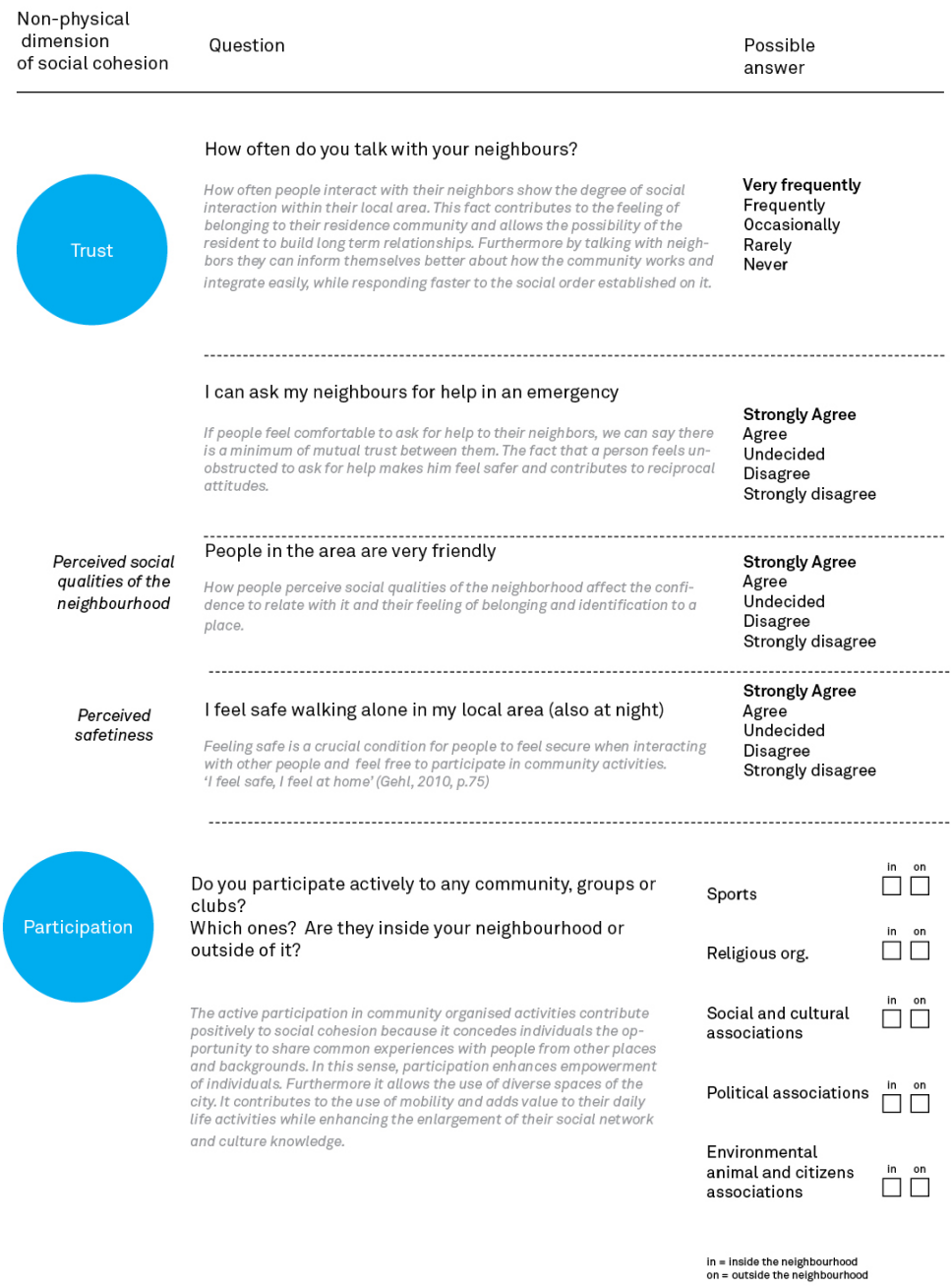

Figure 27. Questionnaire explanation part 2.

Non-physical dimension of social cohesion	Question	Possible answer
Acceptance of diversity	Have you experienced discrimination because of your skin colour, ethnic group, religion or language? *How have people experience the reaction from natives may affect their social development and make integration process longer due to the fact they might not feel safe in every situation. Are discrimination rates related to the decayment of the urban qualities for instance Accessibility, Extent of natural surveillance, Maintenance and Inclusiveness might be interesting to observe.*	Always Very Often Sometimes Rarely **Never**
	For which reason/s? (Can be more than one) *Is the discrimination they've experiences for reasons they might be able to change in time: for example the language barrier? or it's only about xenophobia and racism?.*	Skin colour Ethnic group Religion Language Gender
	Your local area is a place where people from different national or ethnic groups get on well together *If the place where they live is a place where they feel secure being from other country, religion, ethnic group and speaking other languages, they feel independent and confident to relate with other people. High accesible places, active or friendly frontages, well maintained areas with a certain degree of density can be seen as diversity-prone areas.*	**Strongly Agree** Agree Undecided Disagree Strongly disagree
Sense of belonging & Identification	I feel I really belong to the following groups: Place of Birth, Neighborhood, City (Weimar), Region (Thuringia), Country (Germany), Continent (Europe), World. *If people feel more connected to their countries than to their own neighborhood or city, it shows that they have not been able to develop still a positive feeling about the place where they live. A positive sense of place attachment to their neighborhood*	**Strongly Agree** Agree Neutral Disagree Strongly disagree
	I feel I'm part of the community *Feeling part of the community contributes to the well-being of the individual, individually and collectively, strengthening confidence and enhancing commitment.*	**Strongly Agree** Agree Neutral Disagree Strongly disagree
	Are you satisfied with living in this neighbourhood? *Satisfaction with the neighborhood reveals how the neighborhood responds to its inhabitants, moreover it contributes to the sense of belonging to a place and might be descriptive of the presence of 'character' or not of the neighborhood.*	**Very frequently** Frequently Occasionally Rarely Never
	How would you rate the quality of your neighborhood? *How the neighborhood is rated by the residents allows for a degree of satisfaction and identification with the place.*	**Excellent** Good Neutral Poor Very Poor

Figure 28. Questionnaire explanation part 3.

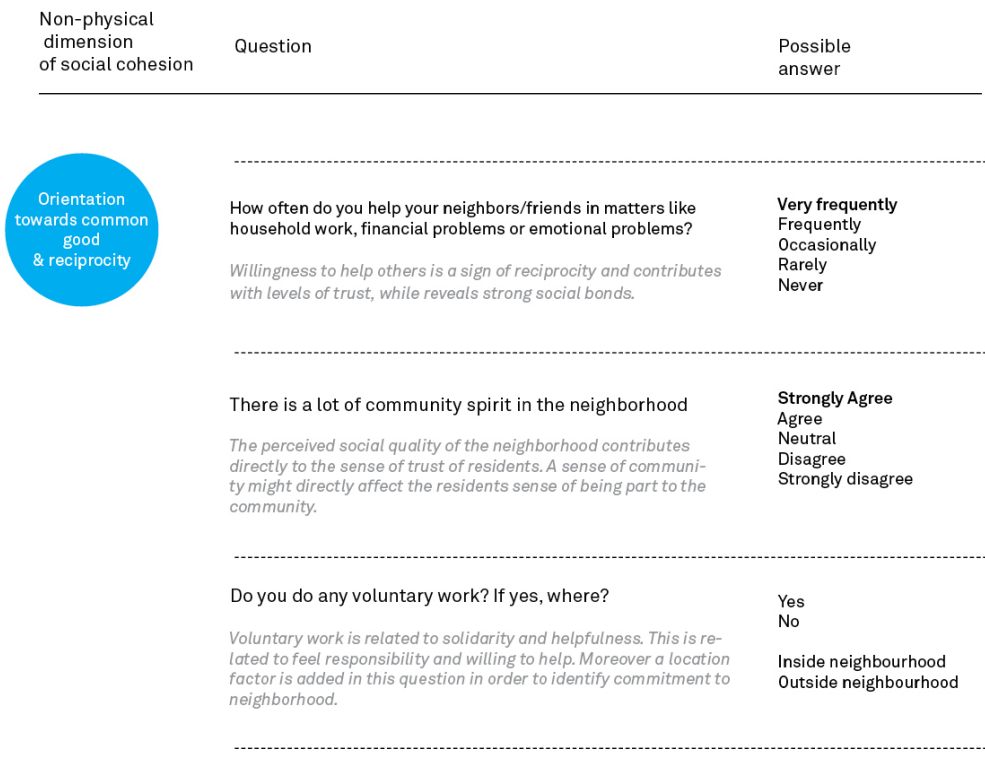

Figure 29. Questionnaire explanation part 4.

4.2. 2. Quantifying 'Physical factors' of social cohesion (urban qualities)

From the physical factors identified in literature review it is important to mention that this research will disregard the quantification of the urban quality called 'character'. In return, the present research examines degree of satisfaction of neighborhood and rating quality of the neighborhood as an important source of identification and sense of place.

Concerning the physical factors of social cohesion, the scales this research explores are mainly *the neighborhood* and *the street*. The urban qualities related to the neighborhood/community/city are the followings: Density, Diversity, Accessibility, Connectedness & Permeability and Legibility (as considered by Harvey, 2004). These attributes considered with lesser or greater variety of the meanings of each of them, are described by other authors as the 'Non-perceivable' variables of urban space, which require larger scales of analysis. On the other side, Attractiveness, Extent of natural surveillance, Inclusiveness, Maintenance, belong to micro-scale analysis which refers to the pedestrian level where we are able to observe and measure the qualities of each attribute. While our relevant scale of research is the neighborhood, qualities like accessibility need an even larger scale of research, for instance access to the city and to the whole city is important. In fact our recommendation of analysis scales and methodologies are represented in the following Figure 30.

Urban qualities will be measured each with its correspondent methodology. Our methodologies differ in some extent to what is proposed by Dempsey (2008), while in some cases we've approached the measurements under her guideline. Generally speaking the urban qualities identified follow the literature from Dempsey (2008), however for the purpose of this research the urban quality 'Character' has not been taken into account and we've rather focused on how neighbors perceive their local area and how do they rate it.

Density is measured with the Space-mate developed by Berghauser & Haupt (2010). In order to do so, data concerning building heights , parcels and plots has been obtained from the geoportal of Thuringia available under the following link https://www.geoportal-th.de/Geoinformationen%20Web/index.html. Geodata was visualized using QGIS Software and processed with a normal spreadsheet for each of the participants who share their location. FSI (Floor Space Index) and GSI (Ground coverage) are calculated for each case within the 800m radius considered as their local area.

Mix of Land uses takes the MXI Index, already explained in the literature review section.

Figure 30. Physical factors related to social cohesion, methodology measurements and scales of research.


Attractiveness
Extent of greenery
Number of buildings / 100m
Number of building colors / 100m
Extent of natural surveillance (active frontage)
Size of Units
Doors per 100m
Variation in funtion
Number of Blind units per 100
Level of Details and materials
Inclusiveness
Average width of pavement, instances of ramps/dropped kerbs
Number of seating posibilities
Instances of bus shelters at bus stops
Public toilettes
Macro-scale [city]
Meso-scale [neighborhood]
Micro-scale [street]

05/

Preliminary suppositions & implications

The research of Dempsey (2008) provide significant contributions in what social cohesion and urban qualities are concerned. Concerning the present research expectations, there is one empirical evidence that reveals that urban qualities do not affect directly social cohesion dimensions but rather the combination of them.

However, this has been assumed in a general framework, whereas the present research aims to depict a final detailed list of implications of urban qualities on social cohesion dimensions. Even though the assumption is that no **direct** relation can be found, or at least this is what is already evidenced in previous research, this research aims to reveal tendencies of behavior of urban qualities in social cohesion specially in a context of people with forced migration background, where challenges of multiculturalism and diverse patterns of culture meet together in the city space.

The challenge is to depict congruence of patterns with existing research and discrepancies that can allow for more inquires.

06/

Case study:
Weimar, between multiculturalism and conservatism.

Thuringia is perceived as a hot-spot of right-wing extremism where many right-wing actions have taken place. Mainly big city of Erfurt and small villages are hot centers for racist and xenophobic demonstrations, attacks and harassments. Among the cities Thuringia embraces, Weimar is quite particular. The presence of an internationally well-known university -Bauhaus University- allows for more internationalization. However, the conservative part of the city remains untouchable. One can find people speaking every language in the street, but at the same time the situation varies according to the location. University campus and some parts of the city articulate multiculturalism in a very positive way, whereas daily life activities that concern involvement in other areas of what city governance is concerned reveal many times other panorama. In fact, this is the challenge of changing the status from 'guest' to 'citizen', the involvement of newcomers in every little mundane daily activities of the welcoming community.

The contrast between multiculturalism peacefully articulated and conservatism calls for our special attention. It remains crucial that the presence of an active multicultural community enhance for more positive outcomes, however it can not be ensured. In fact, results reveal quite contrasting experiences, from no perception of outsiderness to people embedded with fear.

The following section will reveal this contrasting and meaningful insights from our questionnaire participants. Further on, correlation between physical and non-physical factors will be depicted to finalize in a conclusion and further recommendations for this research.

07/1

Results: General facts

7.1. Analysis of general facts

7.1.1. The participants: who, how old, since when, where and communication levels.

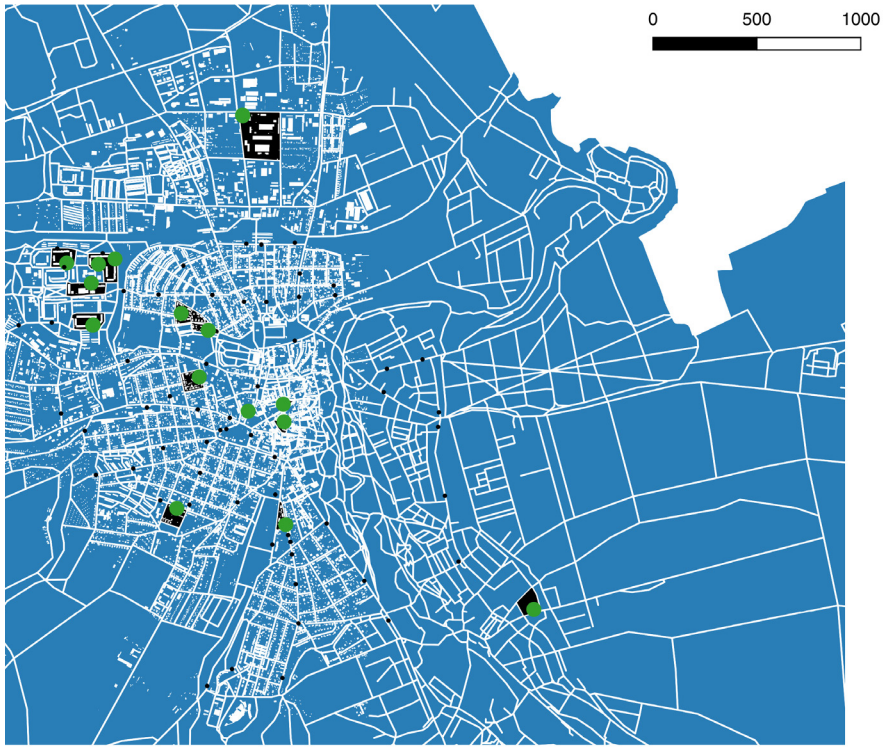

Figure 31. Location of the seventeen persons who participated in the questionnaire and expressed their location within the city of Weimar. Green dots reveal locations, Black areas are the blocks involves in the analysis.

Twenty-three persons with different characteristics were interviewed. From those, only seventeen shared the location where they live. However, even though the location is not available, data concerning the perception of social cohesion is available. Furthermore, relations between people who didn't share their spatial location and social data can be related and assume the reason why they were not willing to give this information.

Location

Value Label	*Value*	*Frequency*	*Percent*	*Valid Percent*	*Cum Percent*
No Location	.00	6	26.09	26.09	26.09
Weimar West	1.00	8	34.78	34.78	60.87
Altstadt	2.00	3	13.04	13.04	73.91
Bahnhofs-und Schlachthofviertel	3.00	1	4.35	4.35	78.26
Asbachviertel/Siedlung Heimfried	4.00	2	8.70	8.70	86.96
Schönblick	5.00	1	4.35	4.35	91.30
Westvorstadt 2 / Thomas-Müntzer-Straße	8.00	1	4.35	4.35	95.65
Ehringsdorf	9.00	1	4.35	4.35	100.00
	Total	23	100.0	100.0	

Figure 32. Participants location according to questionnaires.

Most of the participants live in Weimar West (35%, representing 8 from 17), a second major group lives in Weimar Altstadt (13%, representing 3 from 17), a third group in Asbachviertel/Siedlung Heimfield or Weimar Nordvorstadt (9%, representing 2% from 17). The rest of participants belong to Bahnhofs-und Schlachthofviertel, Schönblick, Westvorstadt 2 / Thomas-Münzter-Strasse and Ehringsdorf (See Figure 32). In terms of percentage, a 26% of participants did not share their location. Most of are participants are positioned on the first and second age range considered as from 18-24 (35%), and 25-39 (35%) years respectively. The lowest age-rage identified is the fourth one representing people over 60 years with only 9% of participants.

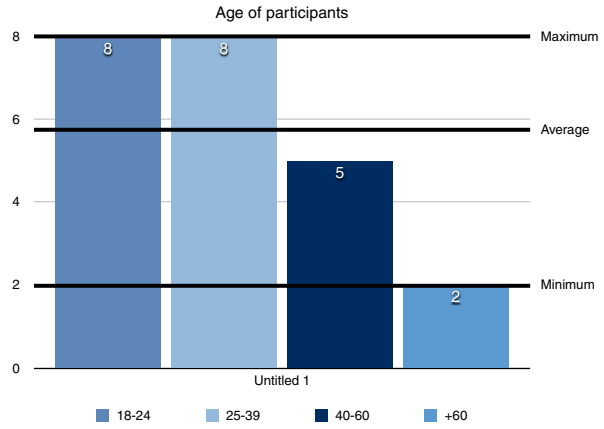

Figure 33. Age of participants.

Most of the participants are living in Weimar for more than three years, a second major group have been living here since between one and three years. The majority of interviewed people, 52% more specifically, declare they have a 'Medium' level of German language, while a second group

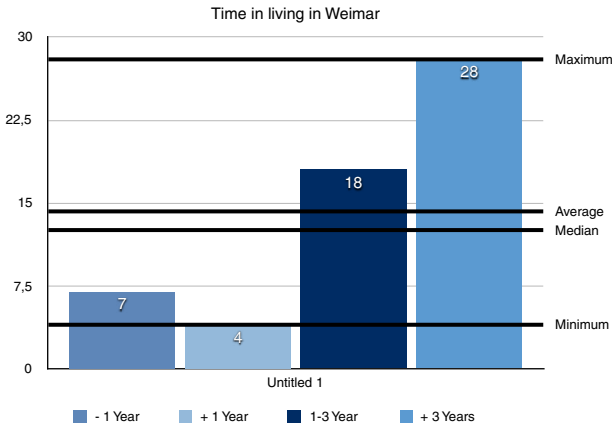

Figure 34. Time living in Weimar.

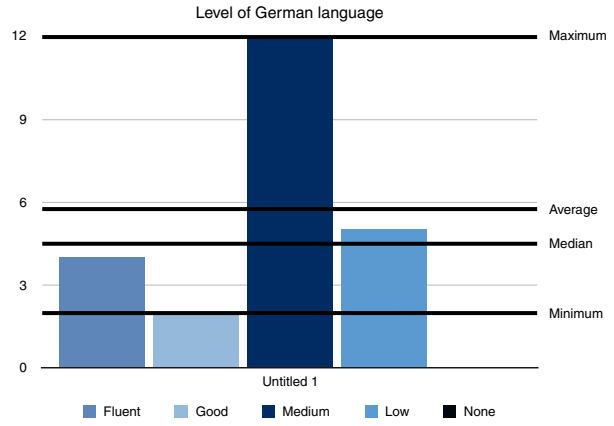

Figure 35. Level of German language.

categorizes themselves as having a low level of German language (22%), and a third and fourth group considers either fluent (17%) or good (9%) at German speaking language respectively. 58% is not either student, or employee, but rather another status. Concerning this fact, we can assume some of them wait for clarifying their situation (asylum procedure) in order to work, or they look for a job. A second group studies (38%), and the rest 4% works.

Concerning the level of German language and the relationship between ages and time living in Weimar, it is possible to say that lower age ranges have better conditions in front of the language and that people living longer in the country, show higher degrees of language knowledge.

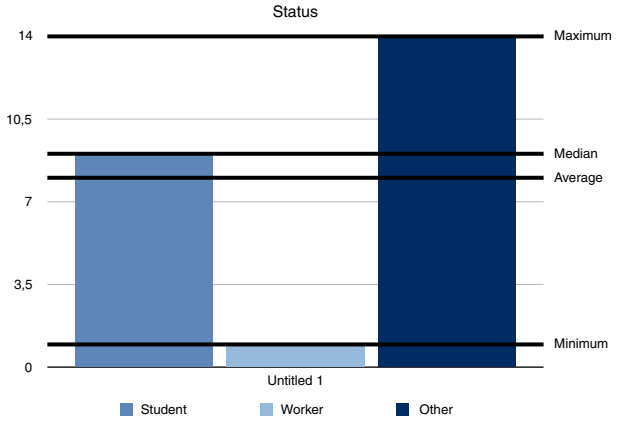

Figure 36. Status of participants.

Age_range * German_level [count, row %, column %, total %].

Age_range	*German_level* Low	Medium	Good	Fluent	Total
18-24	2.00	4.00	.00	3.00	9.00
	22.22%	44.44%	.00%	33.33%	100.00%
	40.00%	33.33%	.00%	75.00%	39.13%
	8.70%	17.39%	.00%	13.04%	39.13%
25-39	1.00	5.00	1.00	1.00	8.00
	12.50%	62.50%	12.50%	12.50%	100.00%
	20.00%	41.67%	50.00%	25.00%	34.78%
	4.35%	21.74%	4.35%	4.35%	34.78%
40-60	2.00	3.00	.00	.00	5.00
	40.00%	60.00%	.00%	.00%	100.00%
	40.00%	25.00%	.00%	.00%	21.74%
	8.70%	13.04%	.00%	.00%	21.74%
+60	.00	.00	1.00	.00	1.00
	.00%	.00%	100.00%	.00%	100.00%
	.00%	.00%	50.00%	.00%	4.35%
	.00%	.00%	4.35%	.00%	4.35%
Total	5.00	12.00	2.00	4.00	23.00
	21.74%	52.17%	8.70%	17.39%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%
	21.74%	52.17%	8.70%	17.39%	100.00%

Table 11. Crosstabs Age range/ German level .

Time_inWeimar * German_level [count, row %, column %, total %].

Time_inWeimar	*German_level* Low	Medium	Good	Fluent	Total
-1	3.00	3.00	1.00	.00	7.00
	42.86%	42.86%	14.29%	.00%	100.00%
	75.00%	25.00%	50.00%	.00%	31.82%
	13.64%	13.64%	4.55%	.00%	31.82%
+1	.00	2.00	.00	.00	2.00
	.00%	100.00%	.00%	.00%	100.00%
	.00%	16.67%	.00%	.00%	9.09%
	.00%	9.09%	.00%	.00%	9.09%
1-3	1.00	4.00	.00	1.00	6.00
	16.67%	66.67%	.00%	16.67%	100.00%
	25.00%	33.33%	.00%	25.00%	27.27%
	4.55%	18.18%	.00%	4.55%	27.27%
+3	.00	3.00	1.00	3.00	7.00
	.00%	42.86%	14.29%	42.86%	100.00%
	.00%	25.00%	50.00%	75.00%	31.82%
	.00%	13.64%	4.55%	13.64%	31.82%
Total	4.00	12.00	2.00	4.00	22.00
	18.18%	54.55%	9.09%	18.18%	100.00%
	100.00%	100.00%	100.00%	100.00%	100.00%
	18.18%	54.55%	9.09%	18.18%	100.00%

Table 12. Crosstabs Time in Weimar / German level .

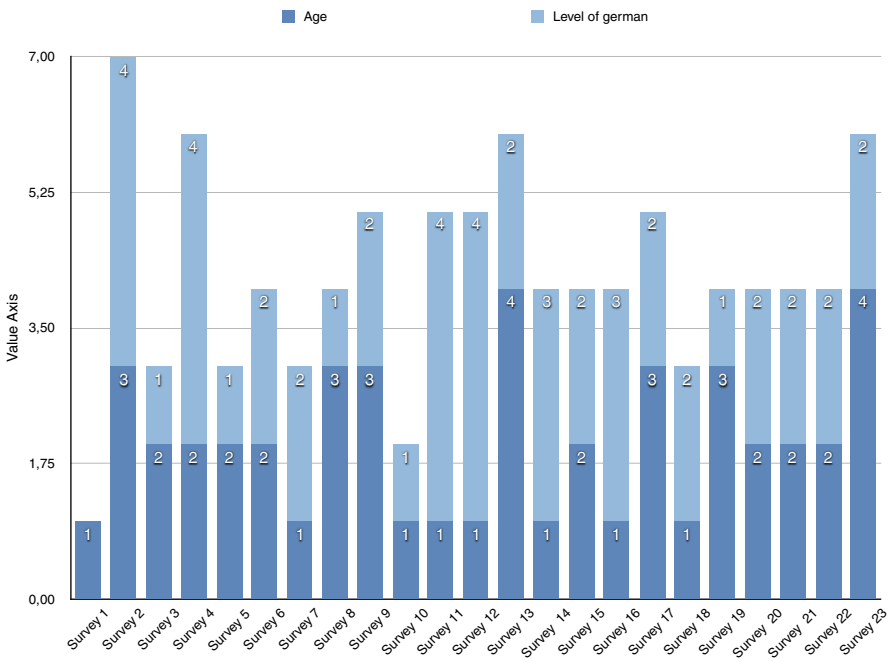

Figure 37. Age range and German level per Survey. (Age range values are 1=18-24; 2= 25-39; 3= 40-60; 4= +60)

7.1.1.1. Brief location description

As the participants location within the city have been revealed, results important to have an overview of each location for better comprehension of the context. This section offers a summarized of the main characteristics that represent each of the participants location (when available).

Weimar West is well-known for its high levels of unemployment, aging population, many conflicts between foreigners and neo-Nazis and a very decayed image. The efforts for integrating this part of the city to the beautiful city of Weimar dates from already quite long. The efforts are based on social programs but the image still quite poor. The major concern are kids and pre - adolescents, which have enhanced kids and young programs and new spaces as the 'Kramixxo Weimar West'. As explained by Nathalie Mohadjer in her 'Weimar Paradies' photographic report, kids meet rather in public spaces than in houses ("WEIMAR PARADIES - Nathalie Mohad-

jer," 2006), this can be related to the poor comfortability rate they have at home, not only because of the facilities they count on, but because of family contexts. So the meeting places can be behind the supermarket, in front of a high-rise building with no identity, or others. In the attempt to create a working-class area in the periphery of the city, barely connected, the segregation is evident. Within this context, Weimar-West offers considerably low-cost apartments, which at the time of starting from 0 after the Refugee camp, might be a relevant issue.

Alstadt is exactly the opposite to Weimar West. Altstadt is the city center of Weimar, characterized by its small streets, with small size units, mostly with many details, dynamic, surrounded by many shops and Coffee shops, it also offers access to green spaces, very well-maintained and pedestrian friendly (there is almost no access of cars within the city center). The most of the residential buildings correspond to historical buildings, renovated with very high standard. Moreover, the closeness to the theater and the extensive cultural offers makes it attractive for any age.

Asbachviertel/Siedlung Heimfield is mostly a residential area, characterized by its calm and peaceful environment. Buildings typical of the 1920's and 30's. The area offers multi-familiar houses as well as single-family houses of one and two stories. The presence of Weimarhallen-Park plays a vital role in the area and offers an urban lung amidst urbanization. Other small green spaces are also available. The good accessibility to shopping centers is a plus in the area. Moreover the distance to the city center is not relevant, mostly accessible for everyone to reach it by foot or bike (Tourismusservice, 2006-2019).

Nordvorstadt / Bahnhofs-und Schlachthofviertel, Mainly a residential area of Weimar, proximity to facilities and to train station are an advantage. Nevertheless it is necessary to say that the nord area of weimar is perceived and lived quite segregated from the city center in a great extent because of the big gap caused by the biggest shopping center in Weimar known today as 'Weimar Atrium'. However, nordvorstadt offers gastronomy, education facilities and medical centers.

Schönblick, Cooperative buildings from the 70's characterize this area. The proximity to Westvorstadt and the facilities offered there make less noticeable that Schönblick remains a medium-rise building area with apart-

ment blocks. Nevertheless the area keeps green spaces very well and that's a plus. The youngest area of Schönblick is completely car-free.

Westvorstadt 2 / Thomas-Münzter-Strasse this area is considered one of the most attractive as a residential place. A very young environment that fusions young families, students and other more established families, with characteristic Coffee shops, trendy bakeries and alternative places. Moreover also playgrounds for kids are available. The area offers a very attractive architecture of multi-story individual buildings and also closed building complexes built around the 1900. Well maintained, proximity to city center and shopping areas, good transport links and educational facilities make this place preferred for many people (Tourismusservice, 2006-2019).

Oberweimar / Ehringsdorf is located above the Park on the Ilm, the main green space in Weimar. The distance to the city center is considerable and might be one disadvantage. However, the environment is pleasant. Ehringsdorf offers a medium scale area, with good neighborhoods which has grown over the time. The area was renovated in 1990 and nowadays offers single family houses and apartment blocks, also educational facilities, medical centers and some shops are present.

7.1.2. Analysis of non-physical factors individually.

The analysis of non-physical factors of social cohesion are based on the results from the questionnaires. In this context the expected positive answers that reveal a social cohesive behavior within the neighborhood of the participants has been highlighted in the following graphics with yellow. The following part of the thesis will describe the highest tendencies of each dimension evaluated, be it positive or negative. In the following section, the rates social cohesion of each dimension will be shown and the results for each participant of social cohesion revealed.

Social relationships dimensions

Social relationship dimensions concern social networking or social relationships, trust, participation and acceptance of diversity.

Concerning social networking, most of the participants agree on the fact that they frequently meet either with friends, relatives or colleagues socially, moreover the most of the people consider that there is at least one person they trust within the city context. Secondary, many participants trust in people that live in their homes, can be relatives or roommates.

In response to 'Trust' questions, over 39% of people reported that they barely talk with their neighbors, one of the crucial encounters of social cohesion within the local area. Noteworthy is that even though the majority almost does not talk frequently with neighbors, most of respondents confirmed they would either Agree (35%) or Strongly agree (26%) on the sentence ' I feel I can ask for help to my neighbors in a difficult situation'.

When participants were asked about friendliness of the people in their area, most answers vary between Agree with a 43%, and almost half percentage from it being neutral (26%) about it (Figure 38). In relation to feelings of safety in their local area over the 70% of interviewed people very between strongly agree (39%) of feeling very safe or agreeing on it (35%). Nevertheless only a 9% is neutral to it and a 17% disagree on it. Interesting is to refine this answer considering the location of people who don't feel safe.

For this purpose, a Box Plot Graphic (Figure 39) was created considering as numerical data how strongly agree people on the sentence ' I feel very safe in my local area (Also at night)', and as categorical data the locations (when they were available). The graphic was done with the people who gave the information of their location, the rest data was undermined. The result is that people who openly shared their location answer either neutral, agree or strongly agree. Thereby people who are feeling unsafe did not trust on sharing the place where they live.

The following graphic (Figure 40) show the correlation between feelings of safety and discrimination experiences. The discrimination frequency was rated as follows: Very frequently =0; Frequently=0; Occasionally (1); Rarely (2) ; Never (3), considering if they contribute to social cohesion levels or not, occasionally and rarely were rated higher considering the perception of the people about it. Occasionally or rarely give minor importance to it.

	Questions	Answers			
SOCIAL RELATIONSHIPS	How often do you meet friends, relatives or colleagues socially?	Very frequently	5	39,13043	39 %
		Frequently	4	17,39130	17 %
		Occasionally	3	34,78260	35 %
		Rarely	2	8,695652	9 %
		Never	1	0	0 %
	Do you have people who would help you without any difficulty in matters like household work, financial problems or emotional problems? If yes Where?	In my house	5	30,43478	30 %
		In my Neighbourhood	4	8,695652	9 %
		In the City	3	43,47826	43 %
		In the country	2	17,39130	17 %
		Not here	0	13,04347	13 %
				0	
	If yes how many?			0	
				0	
				0	
TRUST	How often do you talk with your neighbours?	Very frequently	5	26,08695	26 %
		Frequently	4	8,695652	9 %
		Occasionally	3	13,04347	13 %
		Rarely	2	39,13043	39 %
		Never	1	13,04347	13 %
	I feel I can ask my neighbours for help in an emergency	Strongly Agree	5	26,08695	26 %
		Agree	4	34,78260	35 %
		Neutral	3	26,08695	26 %
		Disagree	2	13,04347	13 %
		Strongly disagree	1	0	0 %
	People in the area are very friendly	Strongly Agree	5	17,39130	18 %
		Agree	4	43,47826	43 %
		Neutral	3	26,08695	26 %
		Disagree	2	13,04347	13 %
		Strongly disagree	1	0	0 %
	I feel very safe walking alone around my neighbourhood	Strongly Agree	5	39,13043	39 %
		Agree	4	34,78260	35 %
		Neutral	3	8,695652	9 %
		Disagree	2	17,39130	17 %
		Strongly disagree	1	0	0 %

Figure 38. 'Social relationships' dimensions of social cohesion results.

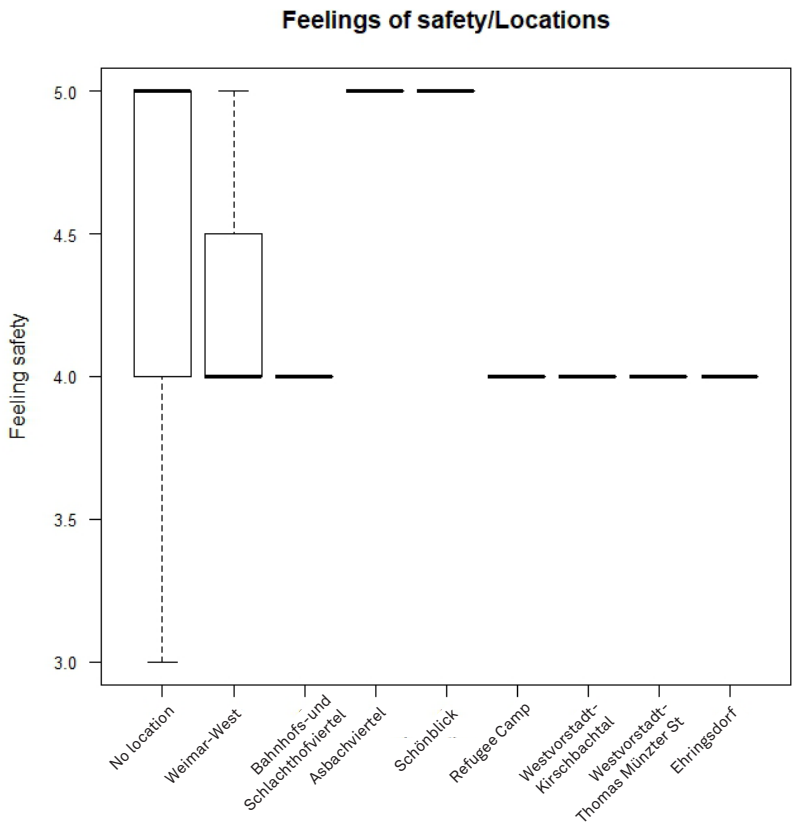

Figure 39. Box plot feelings of safety and given locations.

The figure 40 clearly shows how lesser degrees of safety feelings appear on people who have been frequently discriminated. Whereas people who never were discriminated show the highest degree of safety feelings. Moreover it gives an indicator of lesser degrees of general trust, for instance they did not share their location and might affect the freedom with which their questionnaires were answered. However, these facts are merely authors assumptions according to data collected and background information of the topic in essence.

The following topic is participation. Over the 78% of all participants affirm they participate in at least one community, group or club. Moreover 56% participate in more than one association. The following categories were considered: Sport, Social and cultural associations, religious group, politi-

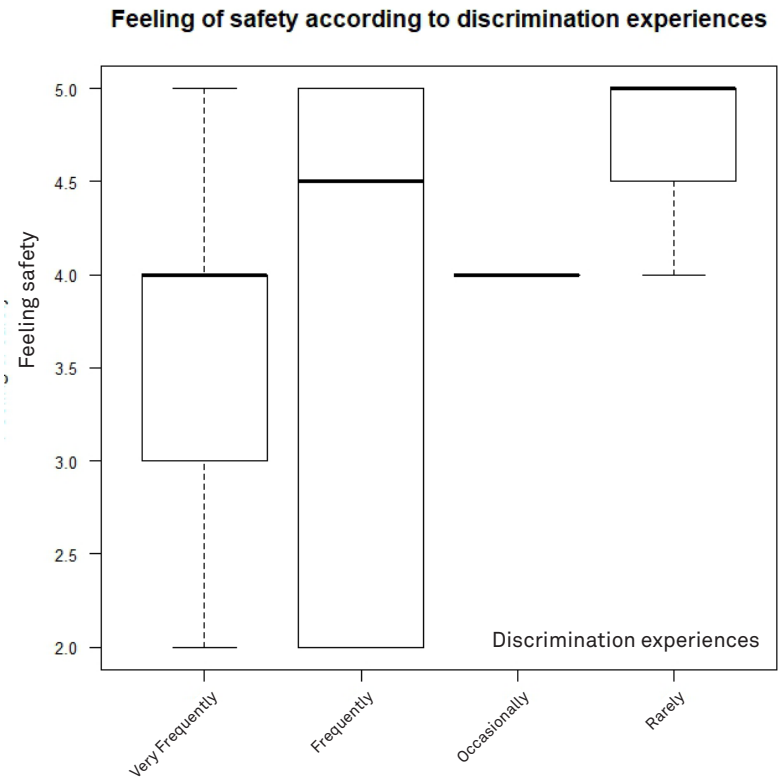

Figure 40. Box plot feelings of safety and discrimination experiences.

cal associations, environmental, animal and citizens associations, or others. A second objective in this question was to identified if the associations in which they participate are part of the neighborhood life or they rather do it somewhere else. 'Sport', 'Social and cultural associations' and 'Religious group' are underlined under the neighborhood context. Despite this, 'Political associations', 'Environmental, animal and citizens associations' and 'others' are highlighted outside the neighborhood.

Concerning major indexes of participation 'Social and cultural associations' seems to be the most selected with 43% of participation rate among all the interviewed individuals. In second place sport clubs with 39%, thirdly religious groups with 22% and with lesser percentages 'Environmental associations', 'Political associations', and 'Others' in that order.

As the last topic of the social relationships dimension, concerning 'Acceptance of diversity' people rather agree than strongly agree on the fact that their local area is a place where cultural and ethnic differences get along together. In contrast, only 9% dissent to it. Concerning discrimination experiences, the panorama is as follows: in first place, 39% considers that has been occasionally discriminated, whereas 26% considers that it has been frequently, and only 22% of respondents never felt discrimination, meaning that over the 70% of respondents have perceived at least once any kind of discrimination. The following part explains the findings on 'Belonging and Identification' dimension. At first, it is worth noting that even though over 60% of participants feel satisfied with their neighborhood only a 35% agree on feeling part of the community. Most of participants are neutral to this question and 9% directly does not feel part of the community. Survey shows that most people choose other people's home within their neighborhood as a meeting place rather than public spaces.

However, interesting findings in this area can be shown. In order to test whether the location where people spend social time shows a relation to the way people feel in the community, further analysis was done. While people who spend social time in *people's home inside their neighborhood (IN)* feel less part of the community, those who spend social time in *people's home outside the neighborhood* show that their community feeling vary between strong and very strong. Those who strongly agree on feeling part of the community are those who do not choose *people's home* as the place where they spend social time. In contrast, participants who spend social time in *community buildings*, depicted the highest feeling of community showed in our results. Similar comments can be done concerning people who socialize in *parks and squares*. Most of these individuals either are neutral to their feelings as a community member, or agree and strongly agree on this fact. Some of the participants who preferred parks and squares as a social encounter also have answered they don't feel part of the community. Unlike, all those who strongly agree on being a member of the community, selected *parks and squares outside their neighborhood* as desired location for social interaction.

As shown in Figure 48, moderate positive correlations are shown concerning people choosing *people's home outside their neighborhood* as their socializing space and how high they rate the quality of the neighborhood (R^2 0.4). The same happens with the degree of satisfaction with their neighborhood (R^2 0.39). Weak positive relationship is shown among people using streets and sidewalks as social places and their satisfaction with the neigh-

borhood. Unexpectedly a weak negative correlation is shown between people choosing *streets and sidewalks* as social place within their neighborhood and their satisfaction with the neighborhood itself. In fact, this is saying they as one variable shows higher degrees, the other one behaves inverted (Figure 48).

Curiously, the fact that people consider themselves satisfied with neighborhood, does not always mean that the area shows excellent quality for them. Considering these two aspects a correlation of R^2 0.29 is depicted (Figure 48).

PARTICIPATION	Do you participate actively to any community, groups or clubs? Which ones?	Sport (in*)	2	39,13043	39 %
		Sport (on*)	2	21,73913(	22 %
		Social and cultural associations (in*)	2	43,47826(	43 %
		Social and cultural associations (on*)	2	21,73913(	22 %
		Religious group (in*)	2	21,73913(	22 %
		Religious group (on*)	2	13,04347	13 %
		Political associations (in*)	2	4,3478260	4 %
		Political associations (on*)	2	8,6956521	9 %
		Environmental, animal and citizens associations (in*)	2	4,3478260	4 %
		Environmental, animal and citizens associations (on*)	2	13,04347	13 %
		Other (in)	2	8,6956521	9 %
		Other (on)	2	13,04347	13 %
ACCEPTANCE OF DIVERSITY	My local area is a place where people from different national or ethnical groups get on well together	Strongly Agree	5	30,43478	30 %
		Agree	4	34,78260	35 %
		Neutral	3	17,39130	17 %
		Disagree	2	4,3478260	4 %
		Strongly disagree	1	8,6956521	9 %
	Have you experience discrimination because of your skin color, ethnic origin, rilion, language or gender?	Very frequently	0	4,3478260	4 %
		Frequently	0	26,08695	26 %
		Occasionally	1	39,13043	39 %
		Rarely	2	8,6956521	9 %
		Never	3	21,73913(	22 %
SOCIAL RELATIONSHIPS RATE					

Figure 41. 'Social relationships' dimensions of social cohesion results.

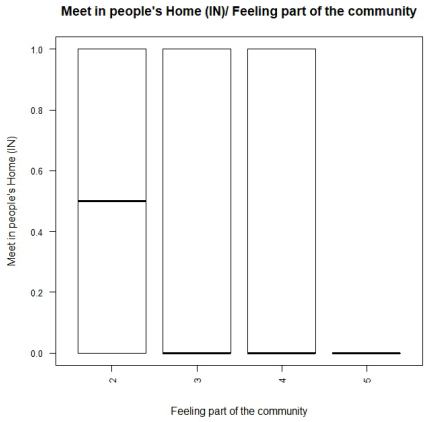

Figure 42. Box-plot Homes (IN) as meeting place and feeling part of the community

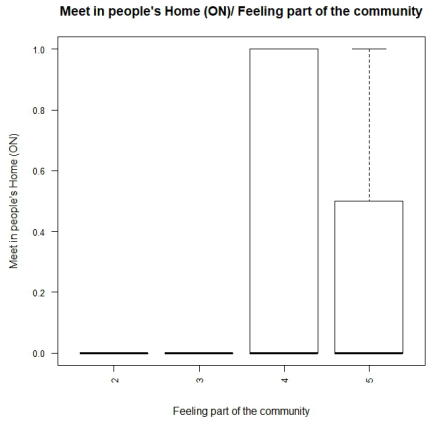

Figure 43. Box-plot Homes (ON) as meeting place and feeling part of the community

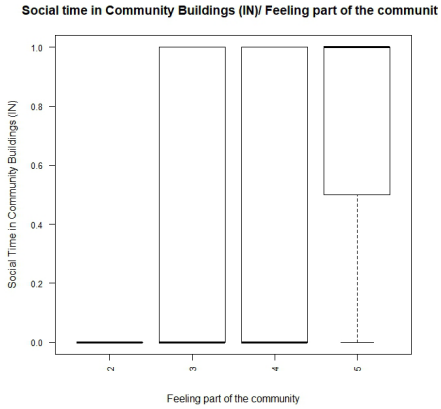

Figure 44. Box-plot Community buildings (IN) as meeting place and feeling part of the community

BELONGING & IDENTIFICATION					
	I feel like I'm part of the community	Strongly Agree	5	13,043478	13 %
		Agree	4	34,782608	35 %
		Neutral	3	43,478260	43 %
		Disagree	2	8,6956521	9 %
		Strongly disagree	1	0	
	How satisfied are you with your neighborhood	Very satisfied	5	21,739130	22 %
		Satisfied	4	60,869565	61 %
		Neither satisfied not dissatisfied	3	4,3478260	4 %
		Dissatisfied	2	8,6956521	9 %
		Very Dissatisfied	1	4,3478260	4 %
	How would you rate the quality of your neighborhood?	Very good	5	21,739130	22 %
		Good	4	30,434782	30 %
		Acceptable	3	30,434782	30 %
		Poor	2	4,3478260	4 %
		Very poor	1	8,6956521	9 %
	Where do you usually spend social time?	People's Home (in*)	2	69,565217	70 %
		People's Home (on*)	1	21,739130	22 %
		Community Building (in*)	3	34,782608	35 %
		Community Building (on*)	2	17,391304	18 %
		Parks / Square (in*)	4	30,434782	30 %
		Parks / Square (on*)	3	34,782608	35 %
		Streets / sidewalks (in*)	5	17,391304	17 %
		Streets / sidewalks (on*)	4	26,086956	26 %
		Other (in*)	2	21,739130	22 %
		Other (on*)	1	30,434782	30 %
	Where do you usually spend free time?	People's Home (in*)	2	47,826086	48 %
		People's Home (on*)	1	30,434782	30 %
		Community Building (in*)	3	21,739130	22 %
		Community Building (on*)	2	21,739130	22 %
		Parks / Square (in*)	4	26,086956	26 %
		Parks / Square	3	43,478260	43 %

Figure 45. Results of 'Belonging and Identification' dimensions.

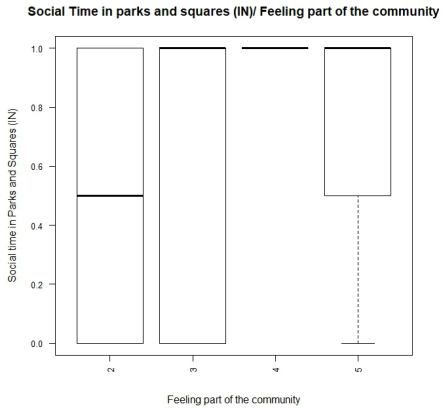

Figure 46. Social time in park and squares (IN) related to feeling part of the community.

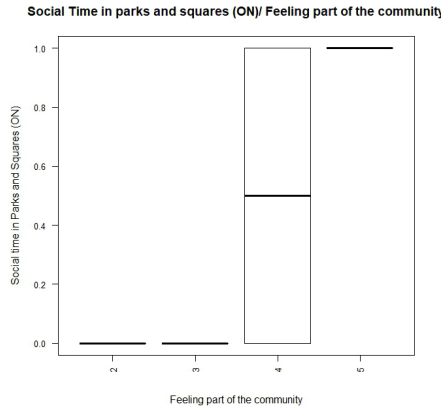

Figure 47. Social time in park and squares (ON) related to feeling part of the community.

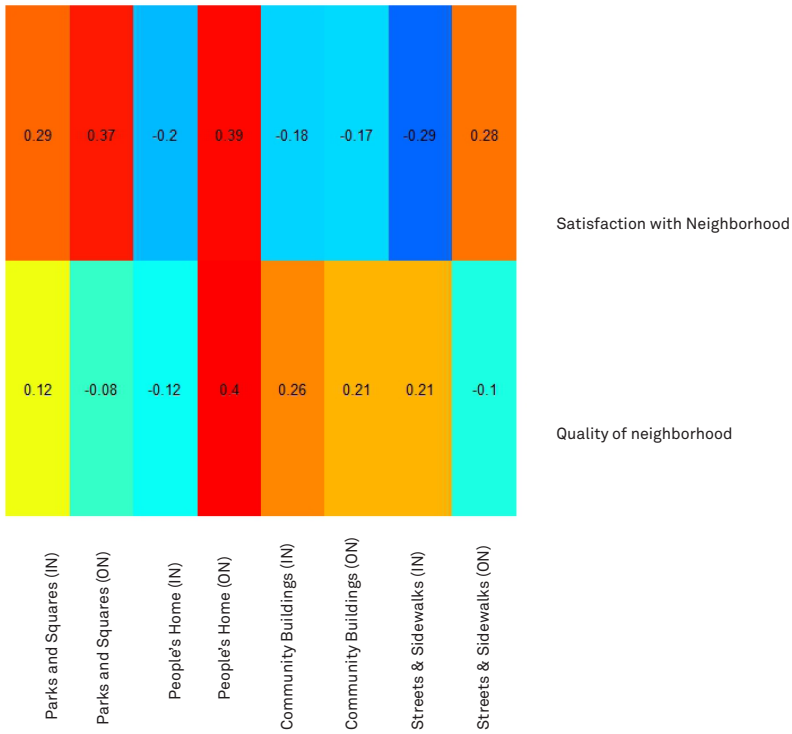

Figure 48. Heatmap social time meeting places / Satisfaction with Neighborhood and Quality of Neighborhood

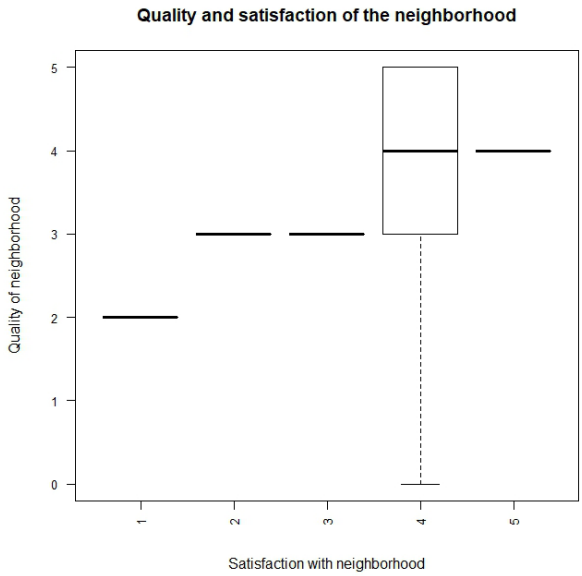

Figure 49. Box-plot Quality of neighborhood and Satisfaction with Neighborhood.

Interestingly, reciprocal attitudes can be observed concerning how they feel in relation with their home country, the world and in their new location. In general these relations are applied to all the locations evaluated under the sentence *'I feel I belong to...'*. In most of the cases, those who show higher feeling of belonging to their country, so do they in relation with the rest geographical locations and vice-versa However this does not apply to all participants.

The following descriptions depict reciprocal attitudes under the *'Reciprocity and Orientation towards common good dimension'*. General speaking, reciprocal attitudes have not shown a strength among participants. Indeed people affirm they help other people in important issues rather occasionally (43%) that frequently (26%) or very frequently (9%). Findings also demonstrate how low is the rate of participation in voluntary activities with a 22% among 23 participants. Nonetheless, those who participate do it mostly (80%)within the neighborhood, which reveals a good asset.

	Streets / sidewalks (in*)	5	21,739130	22 %
	Streets / sidewalks (on*)	4	17,391304	17 %
	Other (in*)	2	21,739130	22 %
	Other (on*)	1	17,391304	18 %
I feel I really belong to the following groups			0	
Place of birth	Strongly Agree	5	36,260869	34 %
	Agree	4	72,565217	69 %
	Neutral	3	2721,7391	26 %
	Disagree	2	0 %	0 %
	Strongly disagree	1	908,69565	9 %
Neighbourhood	Strongly Agree	5	8,6956521	9 %
	Agree	4	26,086956	26 %
	Neutral	3	21,739130	22 %
	Disagree	2	13,043478	13 %
	Strongly disagree	1	8,6956521	9 %
City (Weimar)	Strongly Agree	4	26,086956	26 %
	Agree	3	17,391304	17 %
	Neutral	2	26,086956	26 %
	Disagree	1	4,3478260	4 %
	Strongly disagree	1	8,6956521	9 %
Region (Thuringuia)	Strongly Agree	3	17,391304	17 %
	Agree	2	13,043478	13 %
	Neutral	1	26,086956	26 %
	Disagree	1	13,043478	13 %
	Strongly disagree	1	8,6956521	9 %
Country (Germany)	Strongly Agree	2	26,086956	26 %
	Agree	1	21,739130	22 %
	Neutral	1	21,739130	22 %
	Disagree	1	8,6956521	9 %
	Strongly disagree	1	4,3478260	4 %
World	Strongly Agree	5	40,826086	39 %
	Agree	4	17,391304	17 %
	Neutral	3	8,6956521	9 %
	Disagree	2	4,3478260	4 %
	Strongly disagree	1		
BELONGING & IDENTIFICATION RATE				

Figure 50. 'Reciprocity and Orientation towards common good' results.

RECIPROCITY & ORIENTATION TOWARDS ...	How often do you help your neighbours/friends in matters like household work, financial problems or emotional problems?	Very frequently	5	8,6956521	9 %
		Frequently	4	26,086956	26 %
		Occasionally	3	43,478260	43 %
		Rarely	2	17,391304	17 %
		Never	1	4,3478260	4 %
	Do you do any voluntary work?	Yes	2	21,739130	22 %
		No	0	78,260869	78 %
	Where?	Inside the neighborhood	3	80	80 %
		Outside the neighborhood	2	40	20 %
	There is a lot of community spirit in the neighbourhood	Strongly Agree	5	4,3478260	4 %
		Agree	4	34,782608	35 %
		Neutral	3	39,130434	39 %
		Disagree	2	13,043478	13 %
		Strongly disagree	1	4,3478260	4 %
RECIPROCITY & ORIENTATION TOWARDS COMMON GOOD					

Figure 51. 'Reciprocity and Orientation towards common good' results.

Moreover, people shows neutrality concerning the presence of a strong community spirit (39%), a second group have a better feeling about it (35% agreement).

This section attempted to give an overview of the results obtained from our questionnaire. Many interesting findings have been revealed, specially revealing background information of participants that give a better understanding of why do they perceive social cohesion dimensions as they do.
In order to conclude, the following section shows the correlation among all non-physical dimensions of social cohesion.

7.1.3. Does any correlation among non-physical factors of social cohesion exist?

In good agreement with previous theories relating social cohesion and the neighborhood (Forrest & Kearns, 2001; Dempsey, 2009), a positive correlation between frequency people talking with their neighbors and how safe their feel in their surrounding is proofed with an R^2 value of 0.50. As expected, people who perceived their local area inhabitants more friendly, also interact more with them and have a moderate positive correlation of 0.39. This set of results offer compelling evidence for keep on supporting the idea that integration as well as social cohesion is a ***two-way process***, where creating favorable conditions from both sides is essential. A positive correlation between discrimination rates and frequency talking with neigh-

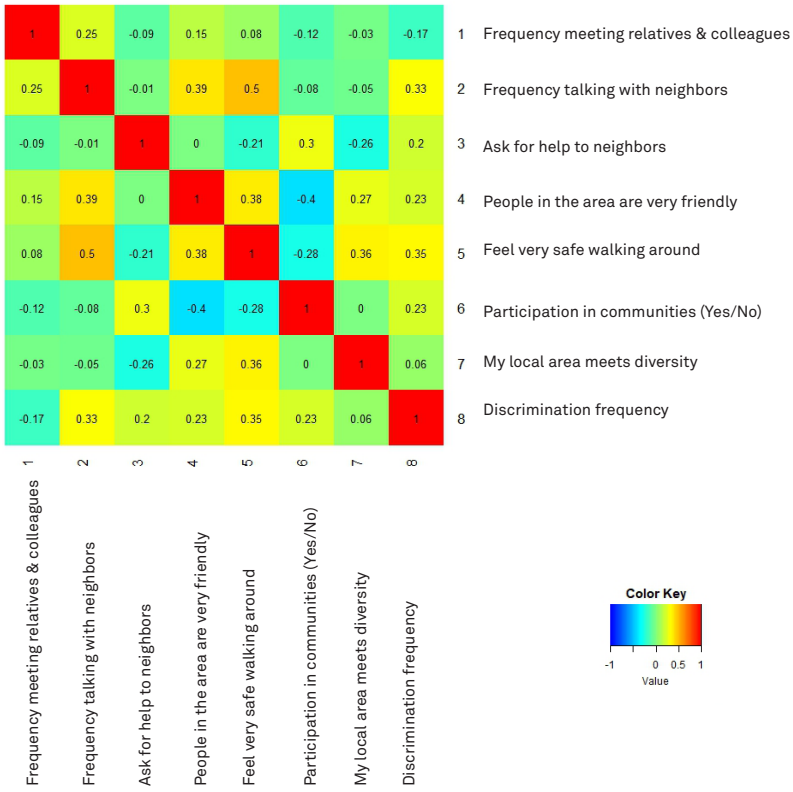

Figure 52. Heatmap showing correlations between 'Social relationships'/'Social Relationships' dimensions.

bors is also assumable. For this point, is necessary to consider that *discrimination number* was rated as high for those people who never experienced discrimination for the purpose of creating a social cohesion index. In fact low numbers (1-0) show occasional and frequent/very frequent experiences of discrimination accordingly, and 3 reveals not even one discrimination experience. This demonstrates once again the influence and danger of discrimination attacks for a harmonious integration process of new comers understanding the social and economic vulnerability they go through (See Riederer, 2017).

At the end, another positive correlation shows how feeling safe correspond at some degree to areas that are considered that meet diversity effortless (R^2 0.36).

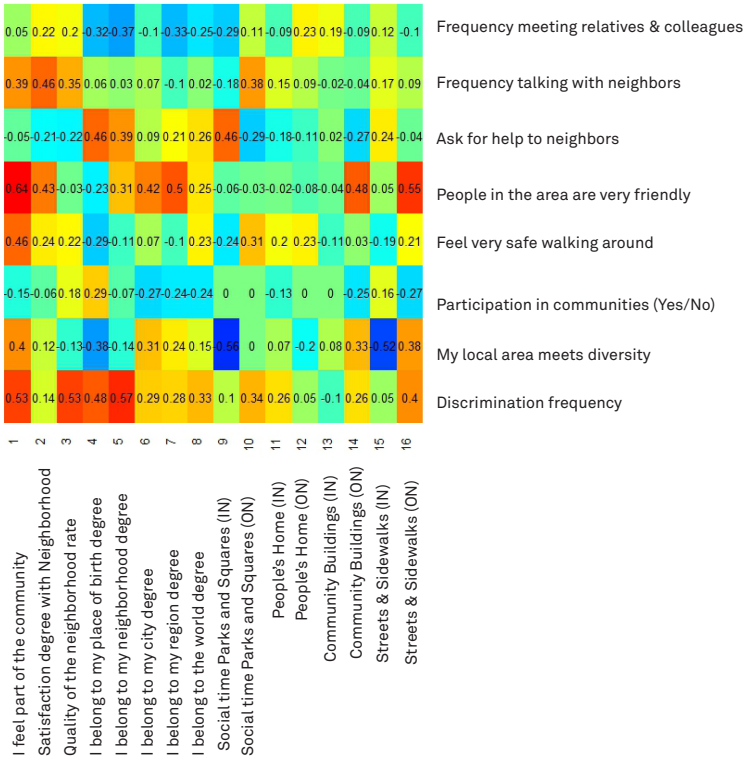

Figure 53. Heatmap showing correlations between 'Social relationships'/'Belonging and Identification' dimensions.

‘Social relationships’ and ‘Belonging and Identification’ dimensions show the following positive relations. As people have less frequency degree of meeting relatives, colleagues or friends, their belonging feeling to the neighborhood also decreases highlighting a correlation value of -0.37. This behavior is repeated in greater and lesser degrees among the belonging feelings to different geographical areas, for instance belonging to place of birth -0.32, to the city of Weimar -0.1, to the Thuringian region -0.33, to the world -0.25.

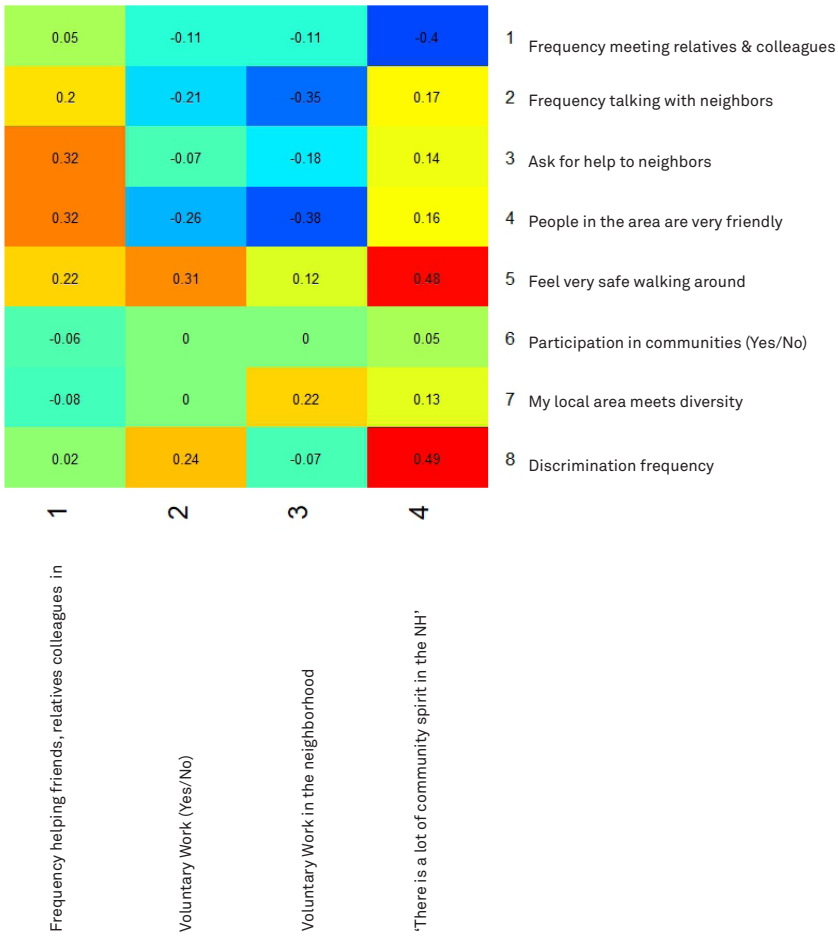

Figure 54. Heatmap showing correlations between ‘Social relationships’/’Orientation towards common good’ dimensions.

Further on this topic, the relation between how friendly people in the local area is and how strong people feel as member of the community depicts the highest correlation value. Another high correlation shows that the lesser the people are discriminated, the higher identified with their neighborhood or inverted.

Orientation towards common good and social relationships show the most visible relations between the perception of a great *community spirit* in front of *discrimination rates* (0.49) and *feeling safety* in their local area (0.48). A reciprocal relation is evidenced between people who are more willing to help others in sensible issues like household problems, emotional conflicts or economic emergencies and trust in neighbors for help (0.32). The same correlation value applies for relating this issue with people who consider locals very friendly.

Belonging dimensions correlated among them show mostly the relation between levels of belonging among the different geographical locations. However, this has been mentioned before. Interesting findings relating the preferred areas for spending social time and how connected to the city express a positive relation between people spending social time in streets and sidewalks outside their neighborhood and feeling a great sense of belonging to the city (0.63), to the region (0.73) and to the world (0.61).

Moreover people who choose streets and sidewalks (ON) are also more sensitive to choose Community buildings (0.81) as preferred location. Contrary to this, people choosing people's home (ON) as socializing space show no correlation to public buildings but rather to streets and sidewalks inside their NH (0.39).

The dimensions of *'Orientation towards common good'* do not show significant correlations among them. Concerning Belonging/Orientation towards common good is worth noting the relation between people who help others in matters like household problems, economic conflicts or emotional problems and the belonging feeling to the community showing a R^2 0.38.

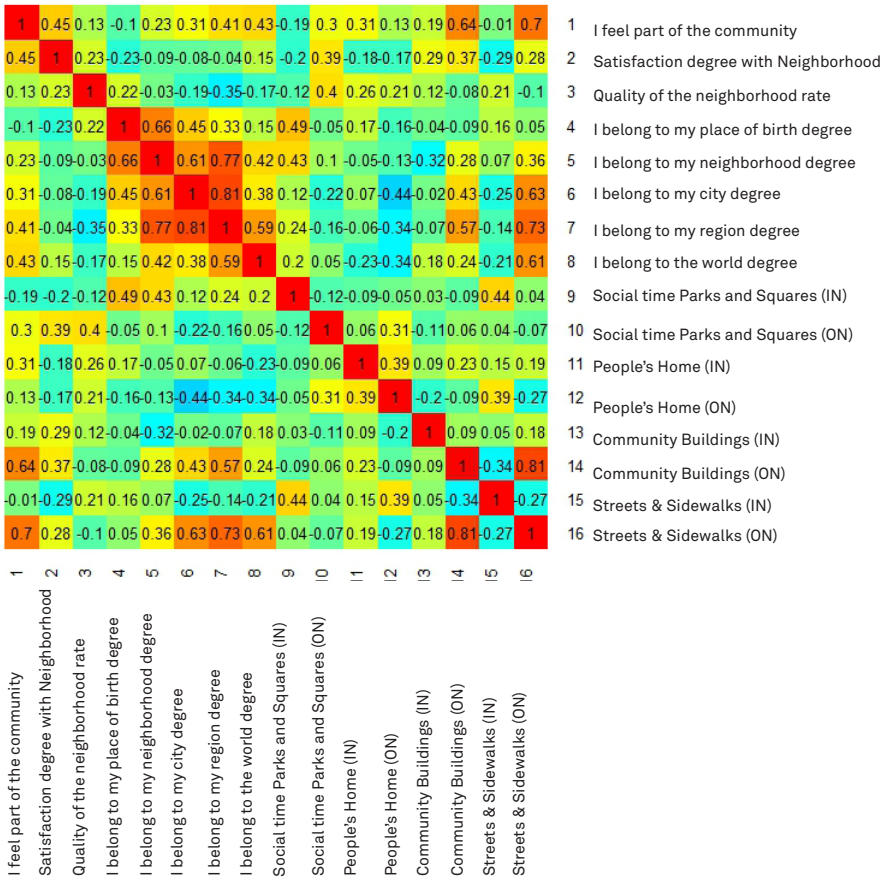

Figure 55. Heatmap showing correlations between 'Belonging and Identification'/'Belonging and Identification' dimensions.

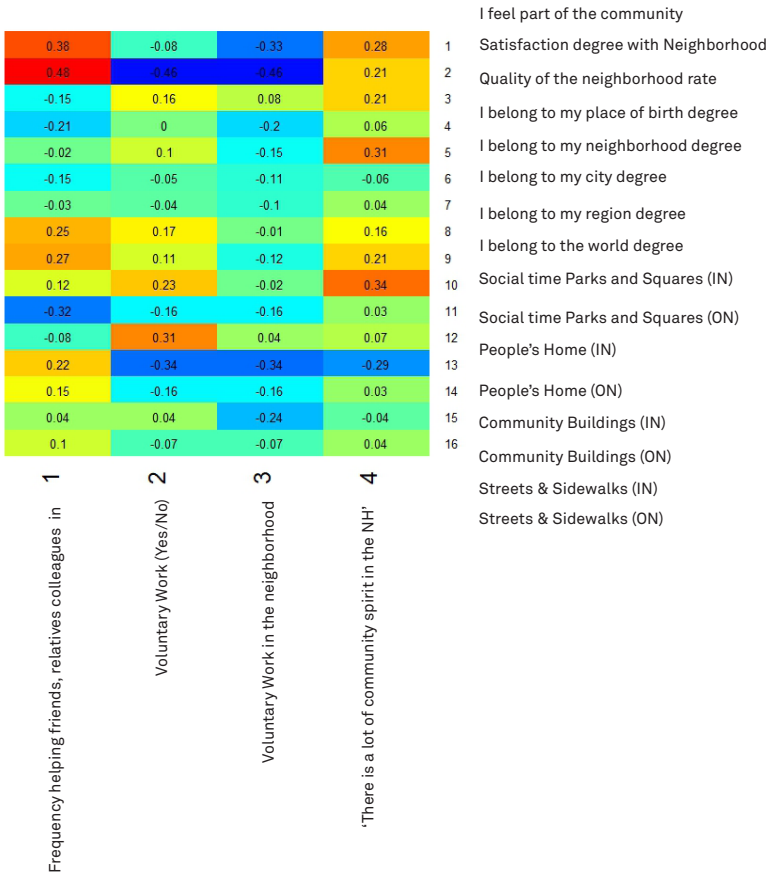

Figure 56. Heatmap showing correlations between 'Belonging and Identification'/'Orientation towards common good' dimensions.

07/2

Results: physical and non-physical factors interrelatedness

7.2. Relation between non-physical factors and physical factors of social cohesion.

7.2.1.Introduction

Our research questions were formulated as follows:

What urban qualities (physical factors) influence social cohesion dimensions(non-physical factors)?

How are the non-physical factors of social cohesion interrelated with the physical ones, and to which extent?

In our attempt to answer them, this research has gone through relevant literature that revealed those urban qualities that could influence socially cohesive behaviors. However, the influence of it has not been yet evaluated in a context of people with forced migration background.

While Dempsey (2009) has already argued that it is not accurate to suggest that built environment has an impact on social cohesion, it is not worthless to consider that social behaviors can be strongly affected by the perception residents have of their built environment (Dempsey, 2008). This fact can be easily identified in our previous chapter. Our attempt is to highlight the features of built environment which have a positive relation to social cohesive attitudes and define to which extent. Variables of the urban space measured have been: Density, Land Use, Accessibility, Connectedness and Permeability, Legibility, Attractiveness, Inclusiveness, Maintenance and Extent of Natural surveillance. Considering our main goal, these measurements have not been normalized to one measure for each attribute but we have rather unpacked each attribute and related to Non-Physical factors individually in an attempt to find more detailed answers. Therefore the measurements that will be detailed in this section are:

For density:

- FSI,
- GSI,
- Density value FSI*GSI

For land use:

- MXI Index

For accessibility:

- Distance to public transport
- Distance to Facilities (Supermarket)
- Integration (R=n)
- Choice (R=n)

For connectedness and permeability:

- Connectivity average (from the neighborhood, radii of 800m)
- Connectivity value individual street
- Choice (street value)
- Choice (average neighborhood value r=800)
- Synergy value
- Block size analysis value

For attractiveness:

- Extent of greenery
- Number of buildings
- Number of building colors

For Legibility:

- Intelligibility

For Extent of natural surveillance:

- Size of units
- Doors p/100m
- Windows p/100m
- Number of blind units
- Level of details and materials

For inclusiveness:

- Average width of pavement
- Instances of ramps
- Instances of dropped kerbs
- Seating possibilities

- Bus shelters
- Public toilettes

For Maintenance:

- Assessment of pavement
- Assessment of street
- Furniture condition

The following table shows the results of all analyses for each interview participant who conceded us their spatial location. Score values for each urban quality were not used for the correlations, since no normalized values were used, but the original value. However score values served as a reference guide for the author.

For further details of urban features measurement, please See Appendix and CD submitted with this Master Thesis.

	Urban qualities	Maxim 0,2	Medium 0,15	Low 0,10	V Low 0,05	S1	S2	S3	S4	S5	S6	S7	S9
1	**Density**												
	FSI	<1,5	1,00<X<1,50	0,50<X<1,00	0,00<X<0,50	1,22	0,84	6,25	5,25	2,48	0,084	2,64	1,84
	GSI	< 0,50	0,25 < X<0,50	0,125 < X< 0,25	0,00<X<0,012	0,61	0,42	1,25	1,05	0,82	0,42	1,32	0,61
	DENSITY	+FSI +GSI	-FSI -GSI	+FSI -GSI	+GSI - fsi	0,7442	0,3528	5	5,5125	2,0336	0,03528	3,4848	1,1224
						0,74	0,3528	5	5,51	2,03	0,03528	3,4848	1,1224
2	**Land use**												
		50			100	75	77	71	73	69	78	71	74
3	**Accessibility**												
	Distance to P. Transport	x<=200	201<x<600	601<x<800	x>800	42	116	100	140	50	116	79	42
	Distance to Facilities super	x<=200	201<x<600	601<x<800	x>800	100	389	50	90	325	389	177	100
	Integration (R=n) value					912	1082	1099	839	947	1082	1080	911,92
	Choice (R=n) Global measurement					35	269534	30437	0	221846	269534	1995770	35
4	**Connectedness & Permeability**												
	Connectivity average (neighborhood)	X>10	6<X<9	3<X<5	X<2	3	3,04	3,47	3,49	3,44	3,06	3,64	3,52
	Connectivity Street (neighborhood)	X>10	6<X<9	3<X<5	X<2	4	8	4	1	13	8	10	8
	Choice street (in relation to the neighborhood)					30	8393	2956	0	7808	8142	27482	3345
	Choice neighbourhood average					2486	935	5104	2799	1387	926	3723	2060
	Legibility _ Intelligibility					0,1988	0,2629	0.1959	0.1851	0.3884	0,2624	0,2197	0,1349
	Permeability synergy					0,54	0,67	0,42	0,45	0,79	0,67	0,52	0,22
	Block size analysis	x<400	401<x<800	801<x<1200	x>1201	2	1,5	2	2	2	1,5	2	2
5	**Attractiveness/Legibility**												
	Extent of greenery Trees	X>16	16>X>12	12>X>5	X<5	10	8	16	6	0	8	22	10
	Number of buildings	X<14	14>X>10	15>X>22	X>22	4	3	22	8	5	3	8	4
	Number of building colors	X<12	12>X>8	8>X>4	X<3	3	4	5	5	2-3	4	7	3
6	**Legibility _ Intelligibility**					0,1988	0,2629	0.1959	0.1851	0.3884	0,2624	0,2197	0,1349
7	**Extent of natural surveillance**												
	Size of units	small units (4)	Relatively small units	Small and Large units	Large Units (1)	1	1	3	3	1	1	3	4
	Doors p/100m	X<15	14>X>10	10>X>5	X<5	3	1	25	10	5	1	13	5
	Windows p/100m					200	16	369	70	22	16	248	601
	Number of blind units	No Blind	Few blind /	Some blind /	Many blind /	0	3	2	0	1	3	2	0
	Level of details and materials	Many details (4)	Details (3)	Few details (1)	No details (0)	0	0	3	0	1	0	4	0
8	**Inclusiveness**												
	Average width of pavement	x<7,5	7,5<x<15	15<x<22	x>22	6	6.5	6.2	4.5	9.24	6.5	7.21	6
	Instances of ramps	everywhere (4)	mostly everywhere (3)	some place (1)	no instances (0)	4	4	4	0	3	3	0	3
	Instances of dropped kerbs	everywhere (4)	mostly everywhere (3)	some place (1)	no instances (0)	4	4	4	0	3	3	0	3
	Seating possibilities	x>5	5>x>3,5	3,5>x>2	x<2	0	0	1	0	1	0	0	0
	Bus shelters	everywhere (4)	mostly everywhere (3)	some place (1)	no instances (0)	0	0	0	0	1	0	0	0
	Public toilettes	everywhere (4)	mostly everywhere (3)	some place (1)	no instances (0)	0	0	0	0	0	0	0	0
9	**Maintenance**												
	Assessment of pavement	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3
	Assessment of street	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3
	Furniture condition	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3

Figure 57. Urban qualities measurement for each participant's location.

S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
1,84	2,51	3,53	3,61	2,14	0,94	1,31	3,37	1,49	2,02
0,61	0,83	1,18	1,20	0,72	0,32	0,44	1,24	0,50	0,67
1,1224	2,0833	4,1654	4,332	1,5408	0,3008	0,5764	4,1788	0,745	1,3534
1,1224	2,03833	4,1654	4,332	1,5408	0,3008	0,5764	4,1788	0,745	1,3534
74	68	71	72	74	66	73	70	73	75
42	65	145	165	10	293	10	164	20	68
100	520	106	204	210	424	111	123	184	205
911,92	1049	961	964	923	903	1010	927	923	1010
35	71749	130397	14649	213838	15353	18112	8411	21388	58133
3,52	3,38	3,42	3,41	3,39	3,15	3,37	3,37	3,42	3,52
8	6	6	3	8	4	3	4	8	2
3345	6652	12980	952	12717	1289	1402	5989	16003	2557
2060	9599	6129	6119	2860	1829	2298	6056	3358	2662
0,1349	0,9	0,19	0,3	0,20	0,15	0,15	0,20	0,15	0,15
0,22	0,30	0,44	0,62	0,38	0,26	0,29	0,46	0,29	0,53
2	2	2	2	1,5	1,5	1,5	2	2	2
10	0	0	12	20	0	10	0	20	10
4	8	10		3	13	6	28	3	6
3	6	5	2	3	6	3	3	3	3
0,1349	0,9	0,19	0,3	0,20	0,15	0,15	0,20	0,15	0,15
4	3	3	1	1	3	1	4	1	1
5	28	8	8	3	15	11	25	3	11
601	244	105	156	200	86	576	130	200	576
0	1	0	0	0	0	0	1	0	0
0	3	3	1	0	1	0	4	0	0
6	8	3	5	7.4	6	8	4	7	7
3	3	0	0	3	3	3	3	3	3
3	3	0	3	3	3	3	3	3	3
0	0	1	0	0	0	0	1	0	0
0	0	0	0	1	0	1	0	1	0
0	0	0	0	0	0	0	0	0	0
3	3	3	3	3	2	3	3	3	3
3	3	3	3	3	2	3	3	3	3
3	3	3	3	3	2	3	3	3	3

7.2.3. Non-physical and physical factors of social co hesion.

7.2.3.1. Density

As discussed before in this research, higher density areas are related to higher social interaction encounters, however density is discussed to be a matter of quantity and quality and therefore density without land uses and accessibility can not work alone but rather with. This paper investigated density with the Space-mate created by Berghauser Pont & Haupt (2009).

The samples used for this research show an average number of FSI 2.44 GSI of 0.80. The majority of locations are between an FSI 1 and 3,5, with a GSI among 0,40 and 0,85 showing a high tendency on mid-rise typologies.

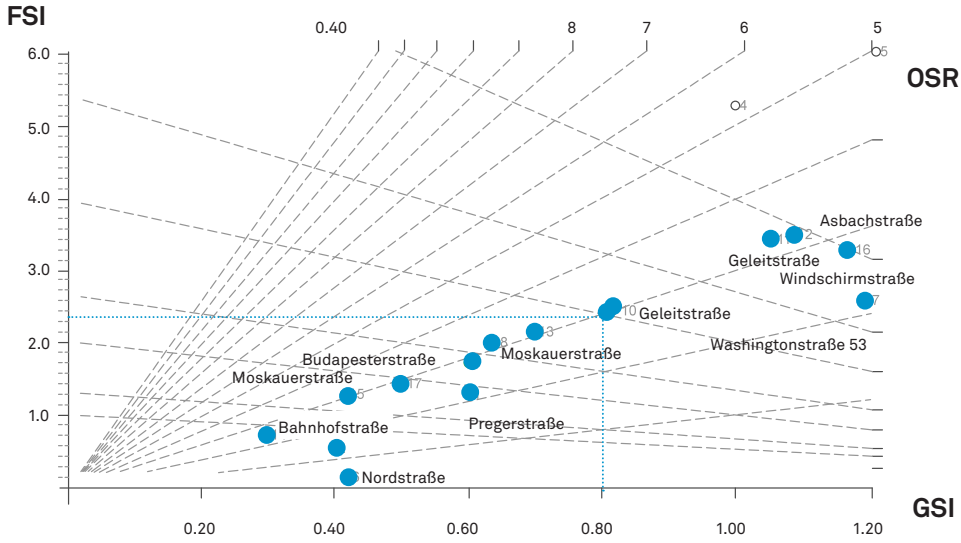

Figure 58. Space-mate/Spacematrix measurements for each location.

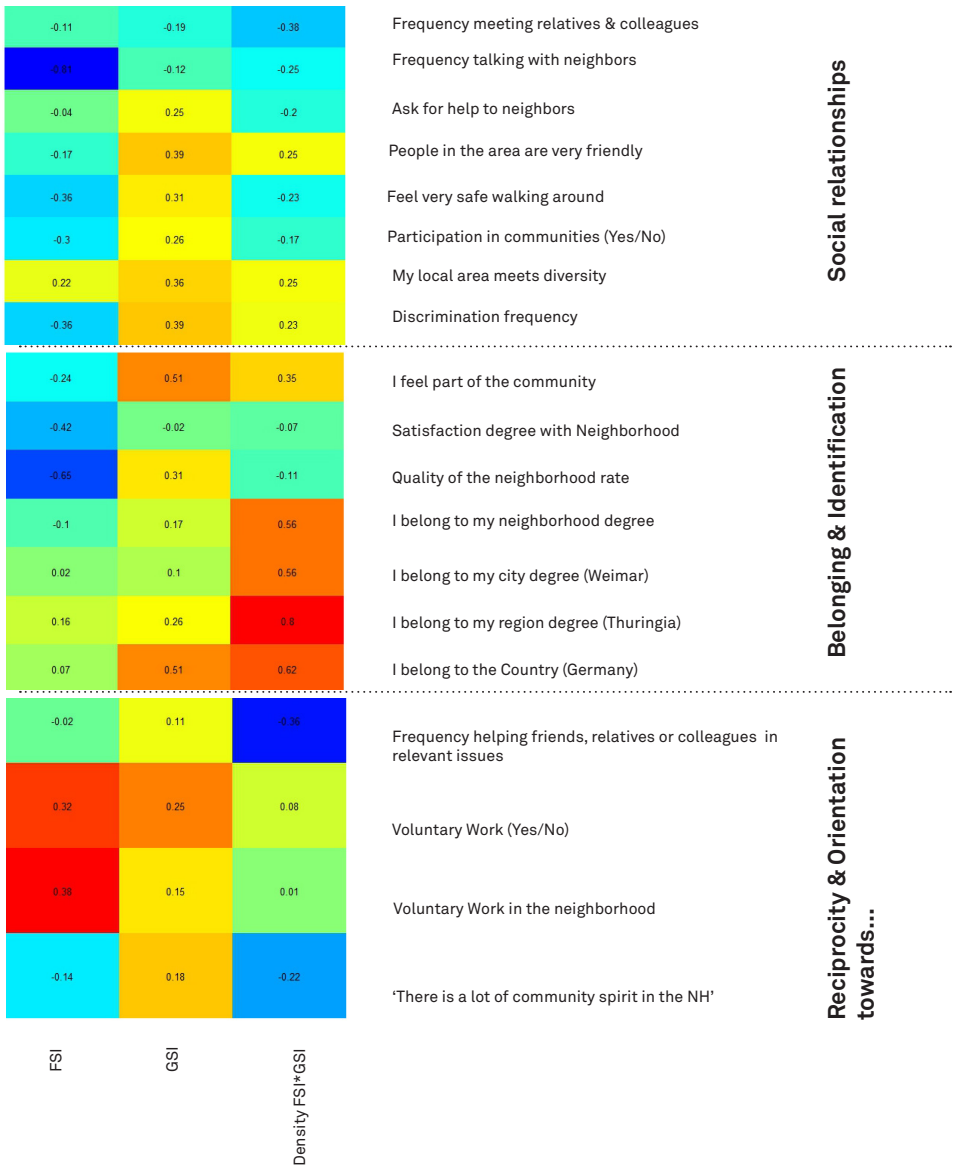

Figure 59. Heatmap showing correlation values between density measurements and Non-Physical factors of Social cohesion.

Social relationships dimension

Ground Space Index (GSI) represents the relationship between built and non-built space (Berghauser Pont & Haupt, 2009, p.95). Positive indicators between density and 'Social relationships' dimensions are shown when correlating GSI and Discrimination frequency ($R^2 = 0.39$), Friendliness of people in the local area (R^2 0.39), Acceptance of diversity at local level ($R^2 = 0.36$), and feelings of safety as well in the local area ($R^2 = 0.31$), in that order.

Building Intensity, also known as FSI demonstrate a strong negative relation with frequency of talking with neighbors, in fact as Building Intensity decreases, talking with neighbors increases ($R^2 = 0.81$). Remarkable is from this data the importance of the quality of density rather than the quantity and the significant value of the pedestrian scale. The following analysis demonstrate similar behaviors. Coincidently, as the building intensity decreases the feelings of safety and discrimination increases, the sample applies backwards ($R^2 = 0.36$ both of them). This findings appear to be well sustained under Jacobs theory where it is argued that more eyes looking at the street in a pedestrian level enforce security in the environment. Single family houses or mid-rise typologies offer more possibilities of entrances and windows **directly** looking at the street.

Moreover, in neighborhoods characterized by a 'good density', understood as the density that allows for social interaction and community behavior, 'territoriality among residents' (Nubani & Wineman, 2019, p.416) is present, and indeed residents take care of each other naturally. In any case, this is closely related to pedestrian movement, land use and accessibility rather than only density. We believe this correlation is also related in a great degree to what Forrest & Kearns (2001) call ***'neighboring'*** -great degree of local social interaction which implies feeling at home, security and social support- (See Forrest & Kearns, 2001).

Belonging and Identification dimensions

Building Intensity relates negatively with level of satisfaction with the neighborhood ($R^2 = -0.42$) and in a major extent to the quality of it ($R^2 = -0.65$). Ground coverage behaves positively to feeling part of the community ($R^2 = 0.51$) and to quality of neighborhood in that order ($R^2 = 0.31$).

Density depicted a great correlation to belonging feelings in general as well as feeling part of the community

Reciprocity and Orientation towards common good

Building intensity appears to relate to voluntary work within the neighborhood and in general ($R^2 = 0.38$, $R^2 = 0.32$). The same applies to ground coverage but in lesser degrees ($R^2 = 0.25$, $R^2 = 0.18$).

Density values as the result of FSI*GIS reveal negative relation to frequency helping others and community spirit ($R^2 = -0.36$, $R^2 = -0.22$).

7.2.3.2. Accessibility

The physical factor of 'Accessibility' shows interesting results in both directions positive and negative correlations. However, no very strong positive correlations have been found, rather moderate positive correlations.

Interesting is to reveal how as the distance to supermarket decreases the frequency meetings relatives and colleagues, as well as frequency talking with neighbors increases showing a negative moderate correlation of R^2 -0.5 and R^2 -0.53 accordingly.

Unexpectedly, the correlation between *integration* values and *feelings of safety* have turned negative. For instance lower *integration* values are showing higher *feelings of safety* (R^2 -0.43), or the other way around. Furthermore, the same applies to Participation in communities ($R^2 = -0.57$). Given that our findings are based on a limited number of samples, the results from such relationship should thus be treated with considerable caution. Nonetheless, this finding shows a tendency among the samples recruited.

Only one positive correlation over 0.30 was found which represents that the higher the integration values, the higher the perceived diversity in the local area by participants ($R^2 = 0.39$). The same behavior can be seen relating *choice* values R=n and *diversity in the local area* ($R^2 = 0.30$).

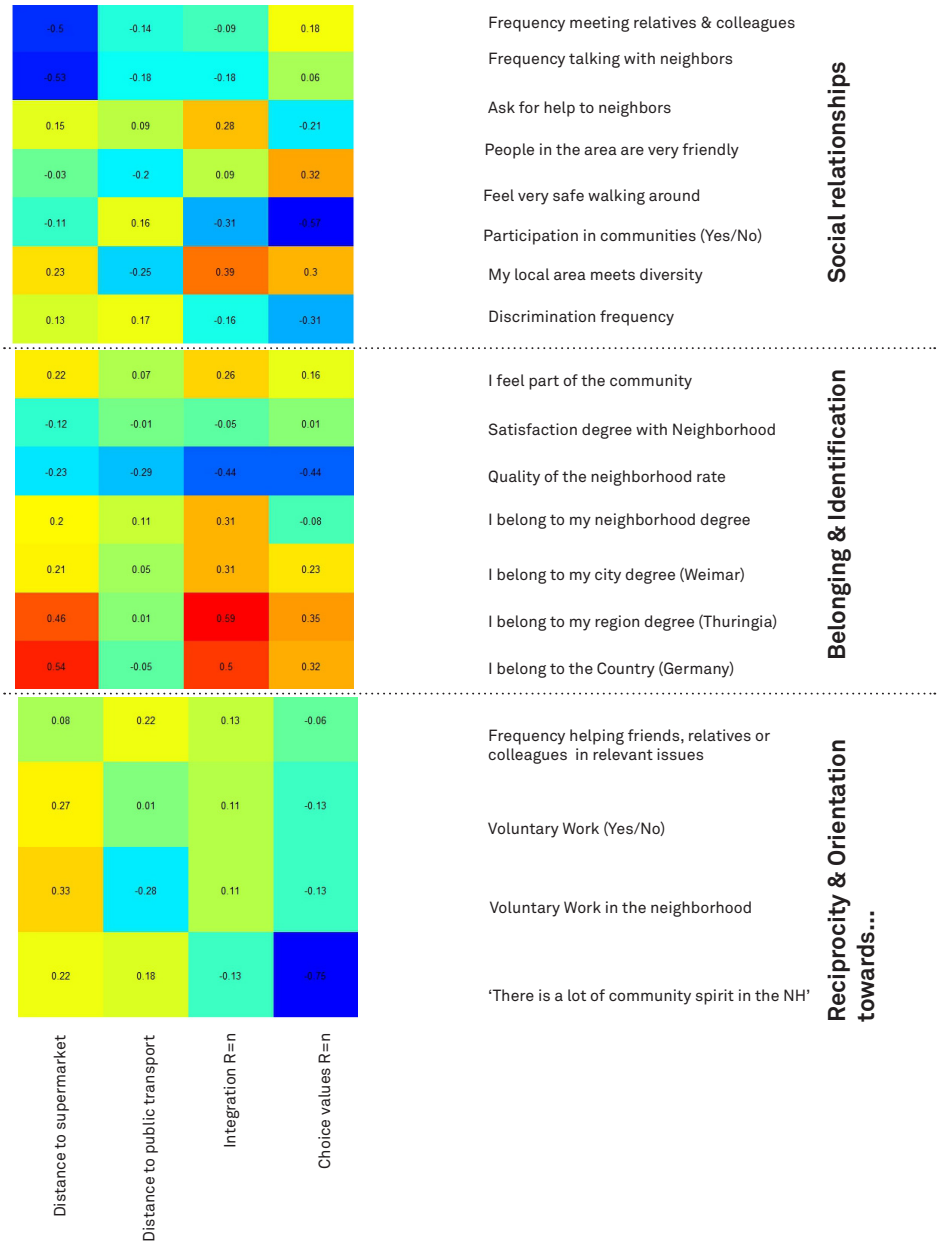

Figure 60. Heatmap showing correlation values between density measurements and Non-Physical factors of Social cohesion.

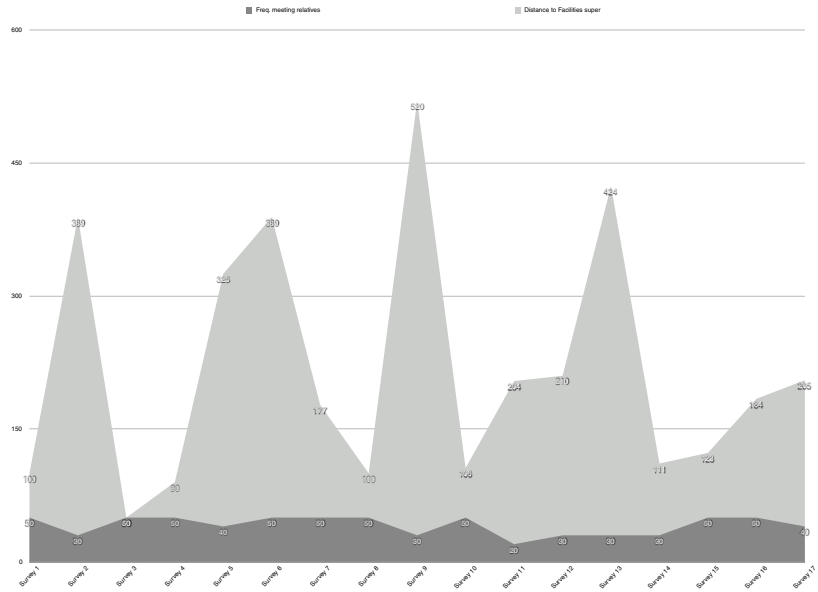

Figure 61. Behavior of Frequency meeting people socially and Distance to supermarket.

At the end, another weak but positive relation is the *frequency of helping neighborhoods* and *integration* values ($R^2 = 0.28$).. In the same direction people perceived inhabitants as very friendly and Choice R=n values demonstrate similar nature (R^2 0.32).

Belonging & Identification dimension

Positive relations among belonging feelings to different geographical locations as well as to the community and Integration (R=n)values is easily visible.

Reciprocity and Orientation towards common good dimension

Distance to facilities, more specifically to Supermarket reveal a positive trend towards Voluntary work in general (R^2 0.33) and within the neighborhood (R^2 0.27), whereas in lesser degree to community spirit feeling (R^2 0.22).

Additionally distance to public transport interrelate positively but low to frequency helping other people (R^2 0.22) and feeling of community spirit within the local area (R^2 0.18). Within this measurement negative correlation was found with voluntary work within the neighborhood (R^2 -0.28)

Lastly, *choice* values (R=n) and *community spirit* show the highest negative relation with R^2-0.75.

7.2.3.3. Land use

Land use diversity do not show high positive or negative correlations, however some findings can be mentioned. For this case we need to consider that the values of land use do not reveal that the highest numbers are more diverse and the lowest numbers the opposite. Considering that MXI Index has been utilized for this urban quality, values representing 0 or 100 represent single use, whereas 50 is considered as the perfect mixture of 50% non-residential use, 50% residential use. All the analyzed areas show diversity indexes from 66 as the lowest and closest point to a perfect mix use index that represents mostly a semi-central area, to 78 describing a rather peripheral area that emphasize residential use, whereas offers a variety at some extent facilities and services.

Social relationships dimension

However small it is, a relation between areas that get well along with diversity (R^2 0.22) and mix of uses is described in our results, the same applies to frequency of meeting relatives and colleagues (R^2 0.18). In this context we can deduce that this implies more residential use with frequency of meeting relatives and colleagues. Interestingly almost no correlation between areas with higher density use and frequency talking with neighbors is shown. In fact the frequency of meeting people, relatives, colleagues does not include a relationship with their neighbors.

Further on, findings show a negative behavior between land use and rates of discrimination (R^2 -0.31). As discrimination rates is represented as follows: 3 =Never, and 0 = Very frequently, the negative correlation can be explained as follows: the higher values of MXI representing less frequency of diversity use show a decrease on discrimination rate values, in fact lesser degree of discrimination. This result can be read backwards as well. Even though it results confusing for reading the results, this was done for the purpose of creating a social cohesion index in which no discrimination

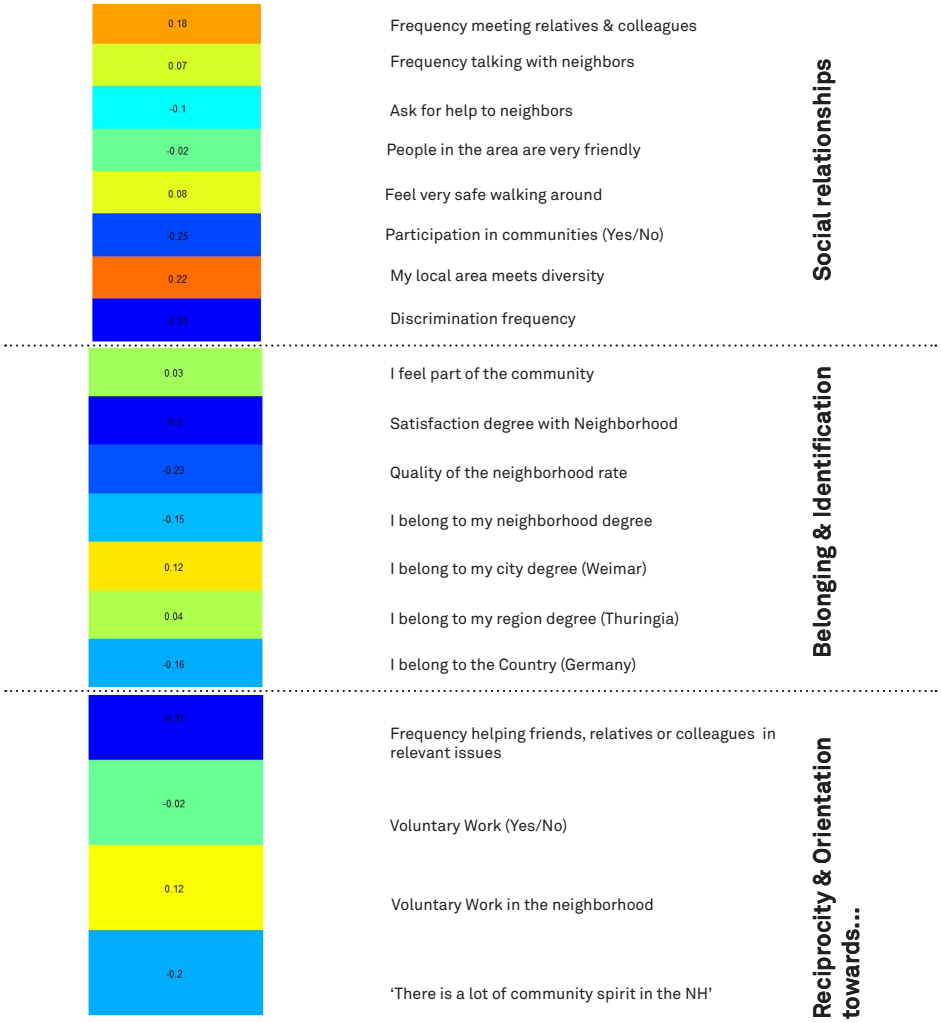

Figure 62. Heatmap showing correlation between MXI and Social cohesion Non-Physical factors.

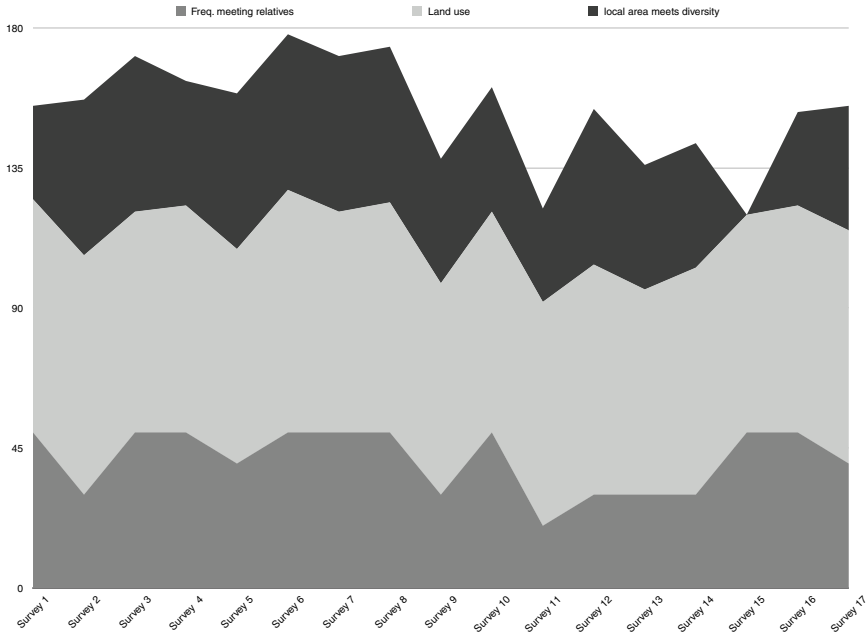

Figure 63. Relation Frequency meeting relatives, Land use and perceived diversity.

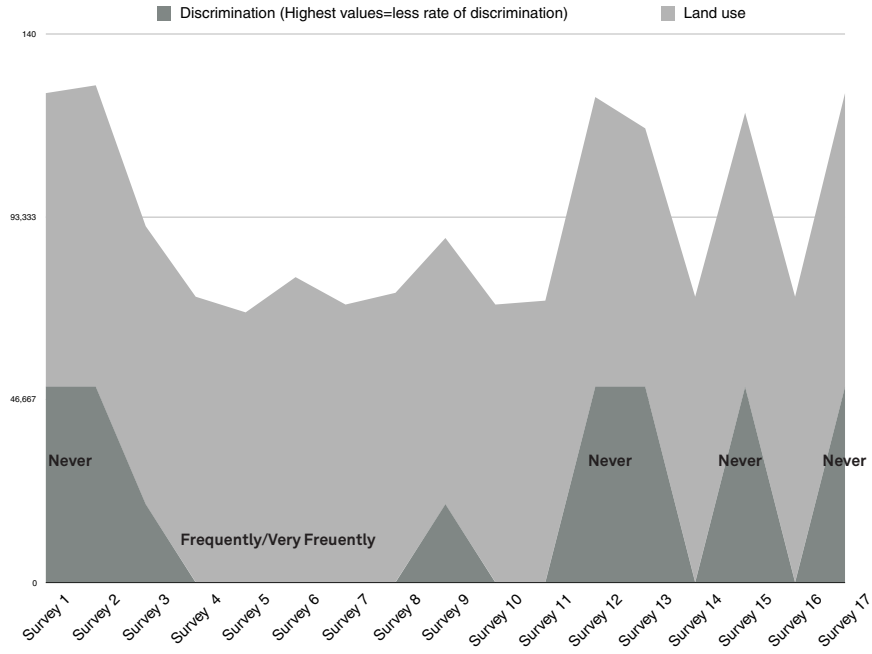

Figure 64. Discrimination experiences and MXI.

experiences are considered a positive rate.

Belonging and Identification

A weak negative correlation is revealed between MXI and satisfaction degree to neighborhood (R^2 = -0.31). The same behavior can be seen in lesser degrees when it comes to rate the quality of neighborhood (R^2 = -0.23) and belonging feelings to the neighborhood (R^2 = -0.15) in that order.

Reciprocity and Orientation towards common good

Negative correlations are highlighted in what frequency helping others is concerned (R^2 = -0.37), expressing the highest negative correlation shown in Land Use measurements. A second negative relation degree of community spirit in the NH is also present revealing a value of R^2 = -0.20.

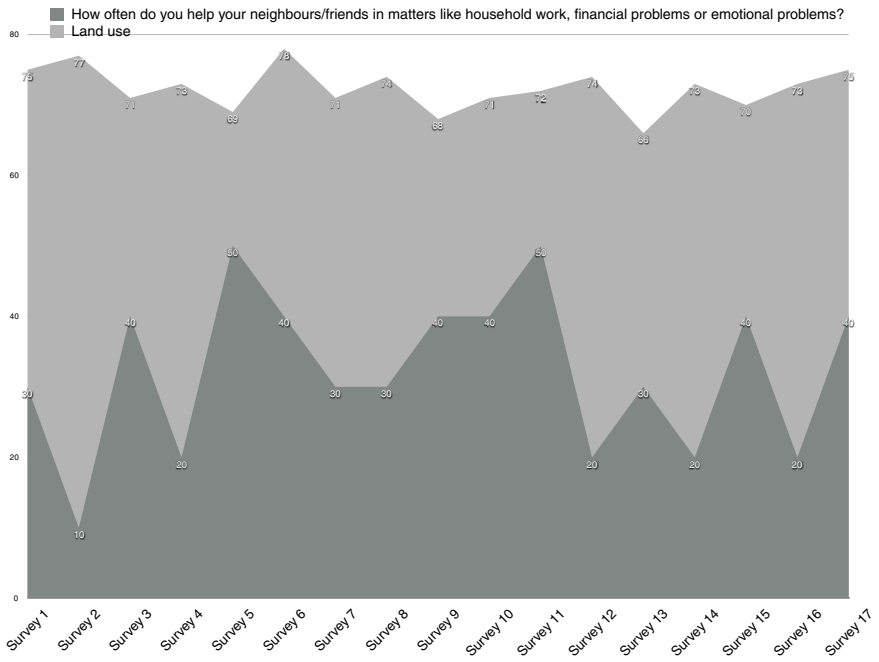

Figure 65. Frequency helping others and MXI.

A very low positive relation between land use and voluntary work appears

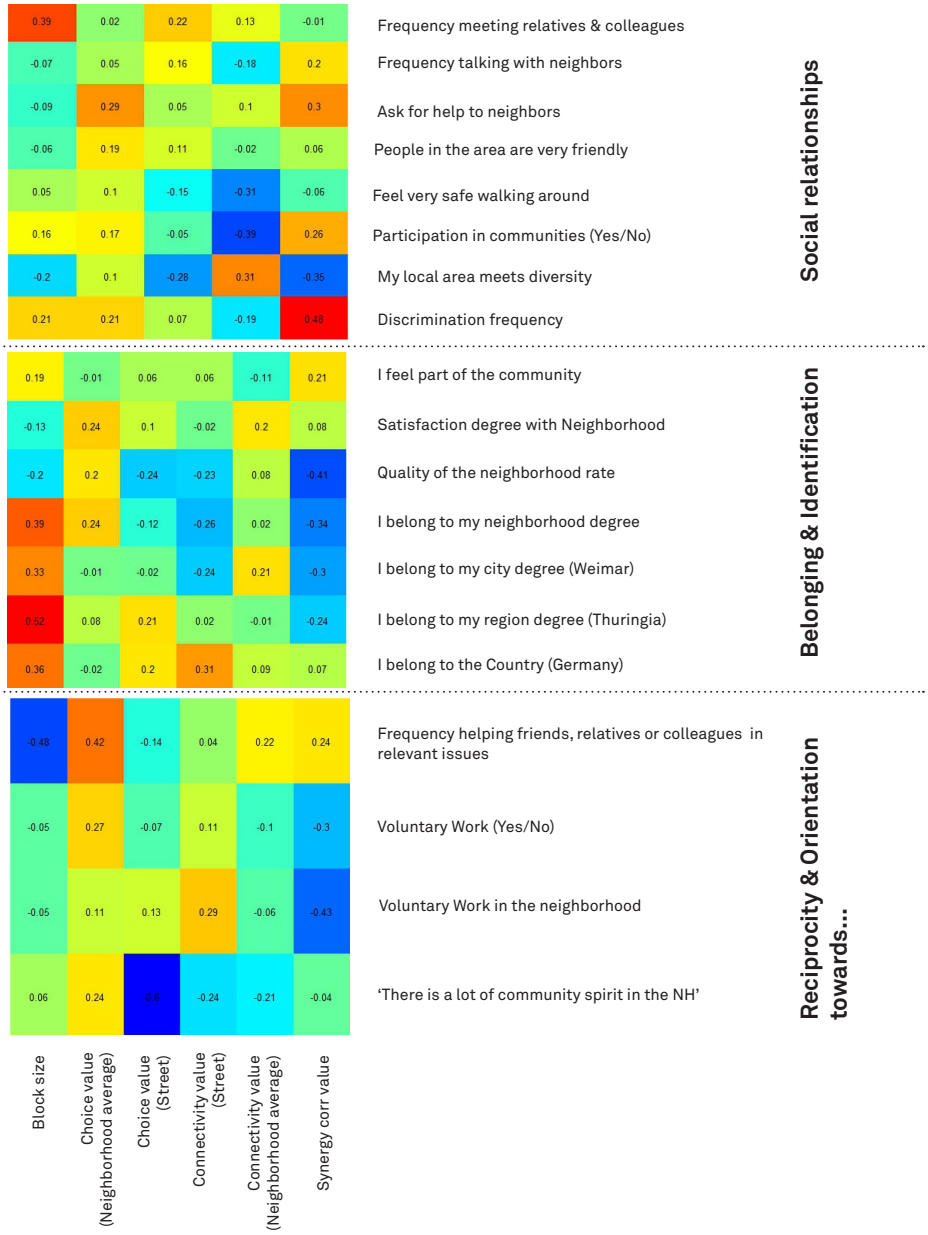

Figure 66. Heatmap showing correlations between Connecitivity and Permeability measurements and Social cohesion Non-Physical factors.

with a correlation value of $R^2 = 0.12$.

7.2.3.3. Connectivity & Permeability

Social relationships

Block sizes which allow for more permeable areas relate positively to people meeting socially more often ($R^2 = 0.39$).

Belonging and Identification

A positive tendency on the relation between block sizes and feeling of belonging to geographical areas is also stated in our results as follows: Region ($R^2 = 0.52$), Neighborhood ($R^2 = 0.39$), Country ($R^2 = 0.36$) and City ($R^2 = 0.33$). From this previous review we find relevant the relationship to the neighborhood and city as bigger scales scape our research goals and we lack on relevant reasons to explain this behaviors. Further research in this topic, might be insightful.

In line with previous studies, block size analysis is a key measurement for permeable spaces and is listed under the characteristics of 'responsive spaces' defined by Bentley et al. (1985). Responsive spaces is a concept leaded by social-humanistic urban planners, who believe that enriching the possibility of choice in an urban layout increases the democratic attitude of it. In fact, permeability offers alternatives of routes and increases choice of the user. As indicated by Bentley et al., smaller blocks are said to facilitate visual permeability, the smaller the block the easier to see to the next junction (1985). Indeed, this contributes to more public routes, for instance more edges and more public space.

Reciprocity and Orientation towards common good

Further in our findings, reasonable relation is shown among *choice* average neighborhood value and frequency helping friends, relatives and colleagues ($R^2 = 0.42$). *Choice* reveals the *'through movement'* which is argued to fore-

cast both pedestrian and vehicular movement. However, in what *'through movement'* in neighborhood average (R=800m) refers, while a positive

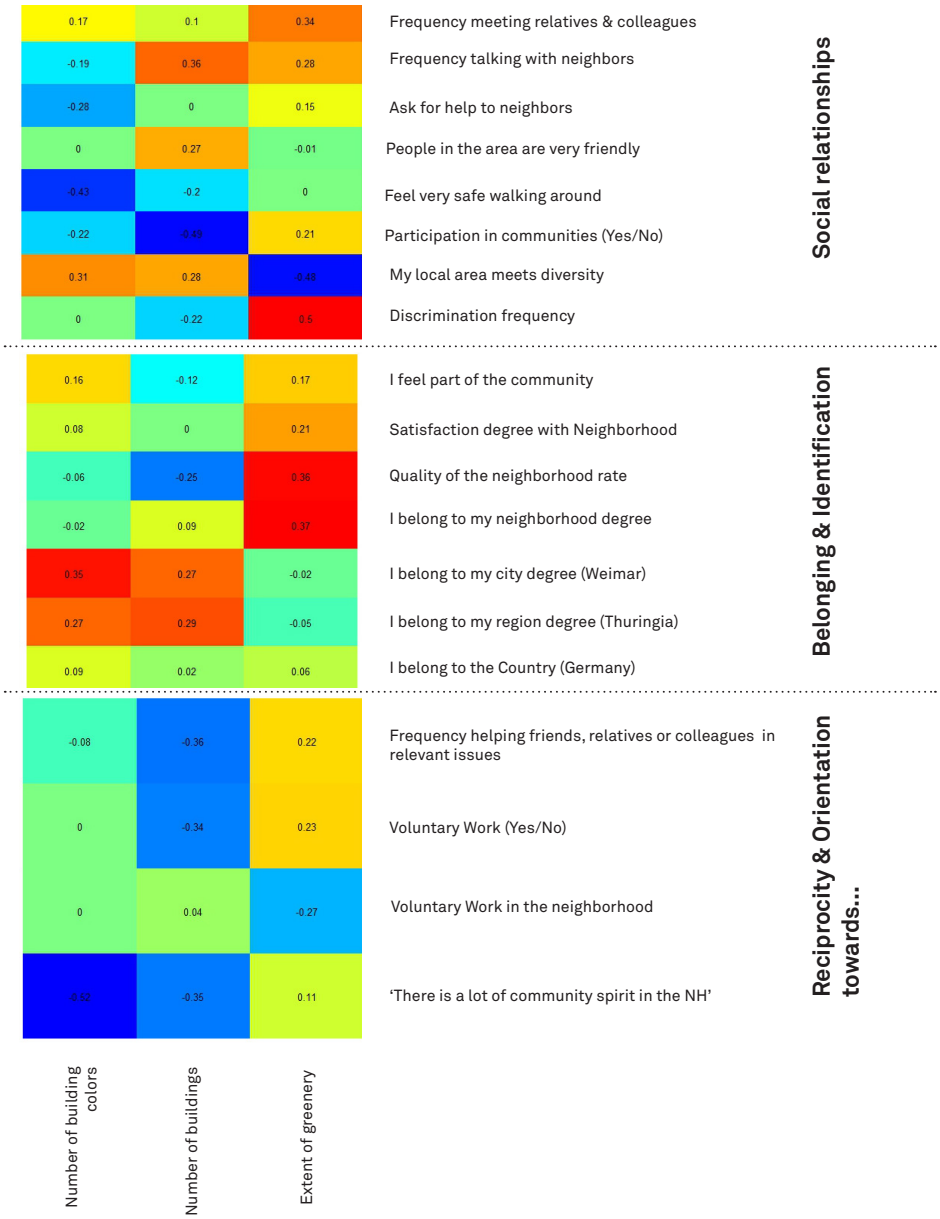

Figure 67. Heatmap showing correlations between Attractiveness measurements and Social cohesion Non-Physical factors.

tendency in helping others is shown and also slightly positive relation to people participating in voluntary activities (R^2 = 0.27), no relation with voluntary work within their local area is identified. In contrast, connectivity values reveal a weak but positive relation with voluntary work within the area (R^2 = 0.29). Closer inspection in this field is required to make final conclusions on it due to the limited response rate the questions about voluntary activities had in our field work.

In some cases, as the *'through movement'* decreases, the stronger the community feeling is revealing a negative correlation of (R^2 = - 0.60).

7.2.3.4. Attractiveness

Attractiveness and a sense of embellishment or style play an important role in the perception of the neighborhood character. It is argued that the 'style' dimension -considered as secondary objective of space configuration- is capable of adding a meaning or *'cultural identity'* over functionality, identified as first objective of urban space (Hillier & Hanson, 1989). Attractiveness is closely related to what others authors call complexity (Ewing & Clemente, 2013) or visual appropriateness and richness (Bentley, Alcock, Murrain, McGlynn, & Smith, 1985). The visual richness of the built environment encompasses numbers and kind of buildings, ornamentation, diverse architecture, colors, landscape elements, greenery, street furniture is all encompassed. While complexity is 'complex' to measure and requires of many observation details which due to time limitations was not possible to fulfill, this research have taken the attractiveness concept how Dempsey (2008) defines it and limited the measures to: extent of greenery, number of buildings and color of buildings. Is worth noting that the way Dempsey has clustered urban qualities are also related to the social behavior that is researching along, social cohesion. In fact, for instance, street furniture is considered under 'Inclusiveness' dimension, while for Ewing and Clemente is under complexity, as they emphasize spatial configuration in their study. In conclusion, some of these urban qualities are grouped in different ways by diverse authors and researches, but at the end they contribute to the same goal: enriching the experience of people in public space at the pedestrian level.

Positive relations are shown as the extent of greenery increases and the frequency meeting with people (R^2 0.34), but also talking with neighbors

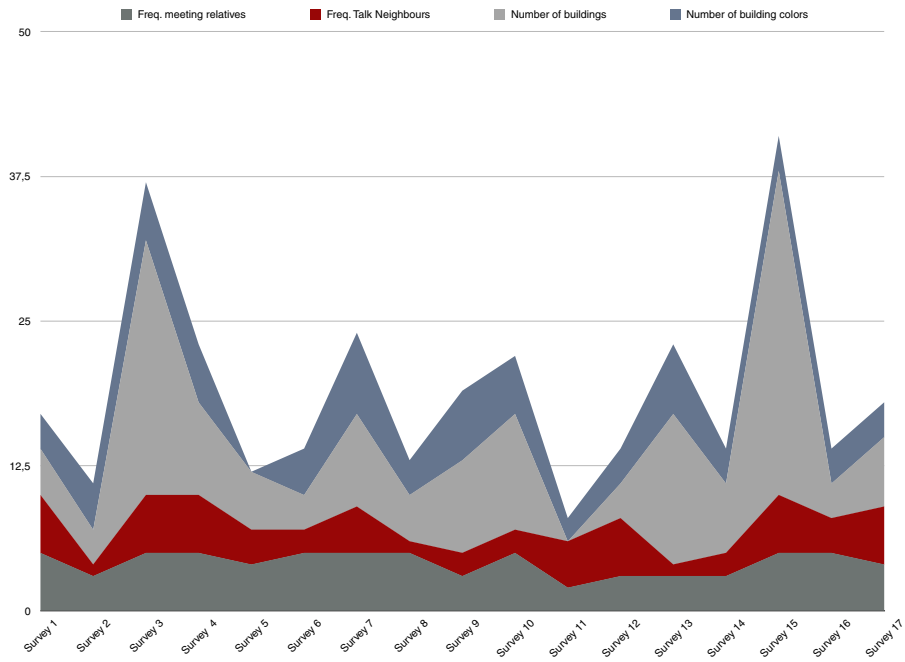

Figure 68. Behavior Number of Buildings and Number of building colors with frequency of social interaction.

get higher ($R^2 = 0.28$). Also in this direction, the as the number of building increases, also do the frequency how people talk with their neighbors ($R^2 = 0.36$). Further positive relations are shown concerning number of building colors and people having the perception of their area as a place that gets good along with cultural diversity ($R^2 = 0.31$), the same applies for the perception of friendliness of the local area inhabitants ($R^2 = 0.27$). The highest positive trend we found in what social relationships dimensions is concerned, is extent of greenery and discrimination frequency, the higher the number of trees, the lower the discrimination rate experienced (R^2 0.50) -as we've explained that discrimination rate was processed as the higher the number the lesser the frequency-.

In what is concerned to the Belonging and Identification dimension, people who rated their neighborhood quality higher match with the location with more extent of greenery ($R^2 = 0.35$). Stronger feelings of belonging to the neighborhood are related to higher numbers of trees showing the highest correlation in this dimension with an R^2 0.37. Implications of extent of

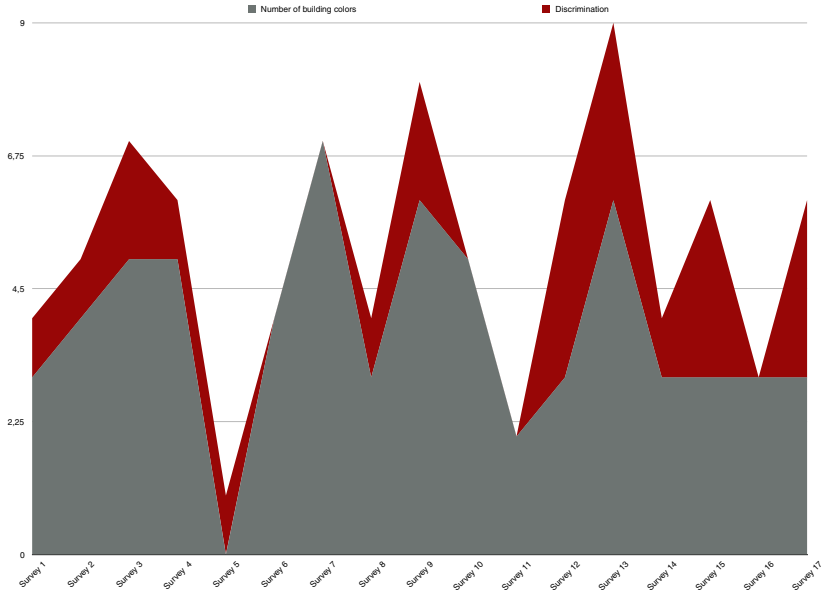

Figure 69. Behavior Number of building colors and discrimination frequency.

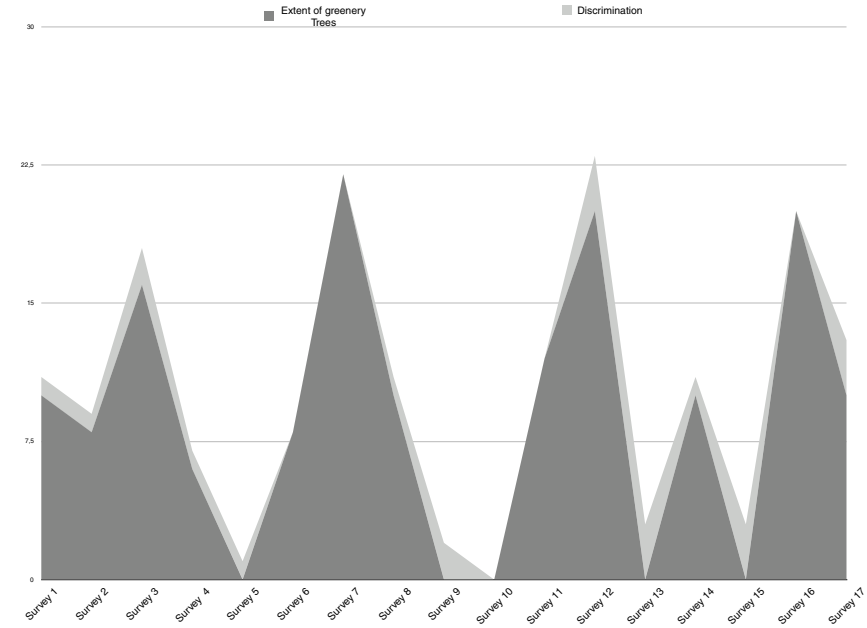

Figure 70. Behavior Extent of greenery and discrimination frequency.

greenery in neighborhood satisfaction is also possible to identify, however with a slightly positive relation ($R^2 = 0.21$) . A high variety of building colors result in a higher belonging feeling to the city ($R^2 = 0.35$). While this index provides a trend in our participants, we can not assure that the number of trees in the street level will directly influence the way they feel towards the city. Good perceptions of the local area can surely influence daily life activities and attitudes towards it, in line with this the research believes this micro-scale measurement (extent of greenery) can reveal a psychological facilitator which contributes to a better perception of the meso and macro scale, but it does not mean that gives an objective information. The same applies to higher scales like region, country, etc.

Interesting is that a weak negative correlation was found considering number of buildings and quality of neighborhood (R^2 -0.25)

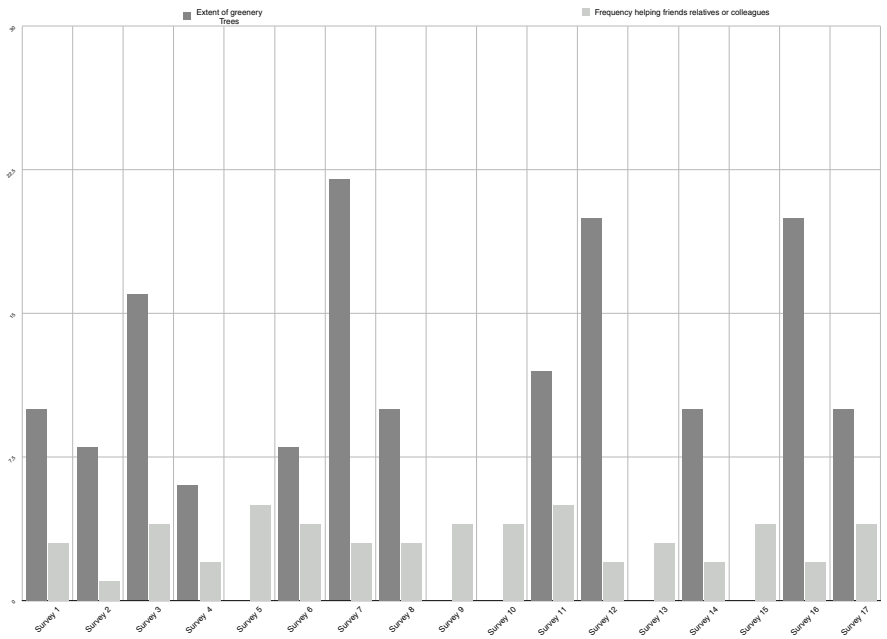

Figure 71. Behavior Extent of greenery and frequency helping others.

Reciprocity and Orientation towards common good show the following insightful results. How green the edges of streets are seem to have an influence to the frequency in what people help others and if they do voluntary work with 0.22 and 0.23 values respectively. We can assume favorable and

attractive conditions of the built environment influence on the friendliness of people in this aspect, interesting would be to identified if this helping factor is mostly in their local area or not, to confirm is the extent of trees is influencing directly or rather unconsciously. Any way, findings related

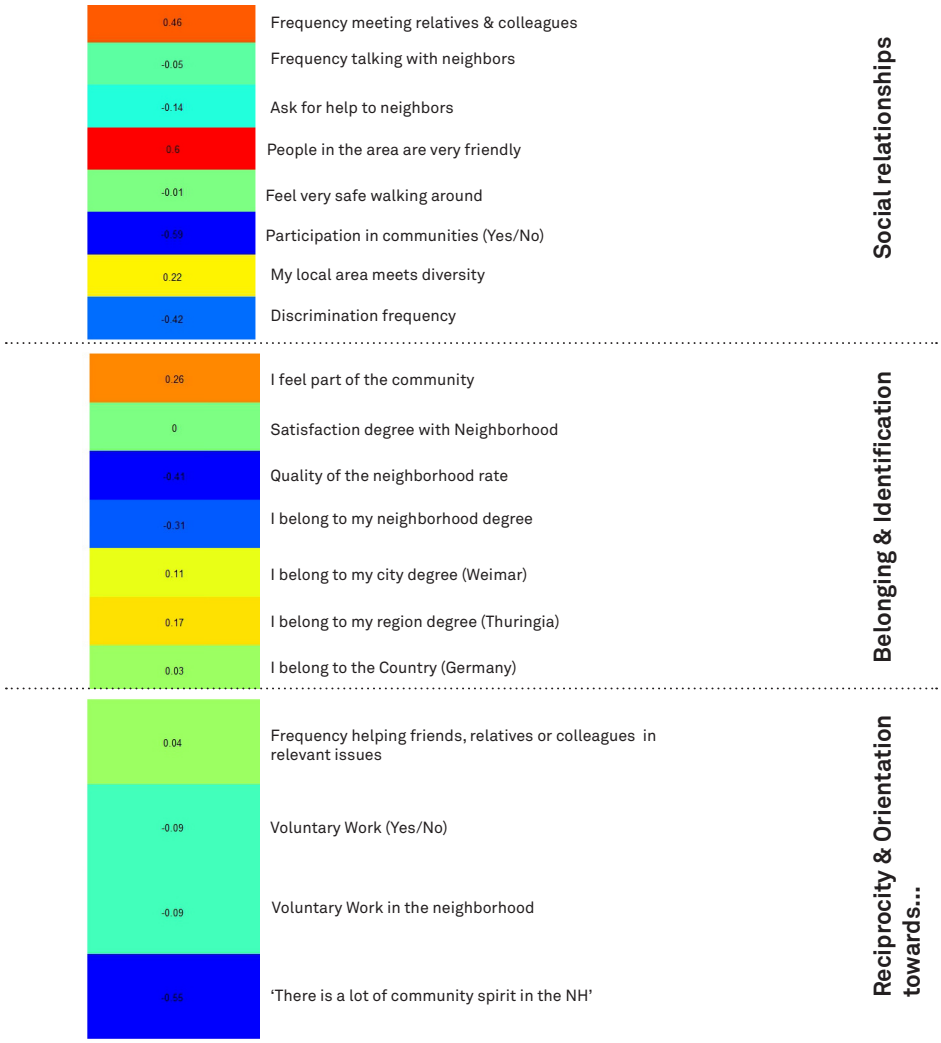

Figure 72. Heatmap showing correlations between Intelligibility measurements and Social cohesion Non-Physical factors.

to voluntary work need to be cautiously taken into account due to low response rate to it. A very high negative correlation was found concerning Number of building colors and frequency meeting with friends, relatives or colleagues (-0.52).

7.2.3.5. Legibility

Legibility is said to contribute to the human experience in the built environment, while creating a satisfaction of a clear and 'graspable' image of the place where the individual is. In this context, expectations concerning intensity of human activity and enjoyment of neighborhood qualities should be expected.

In line with legibility theories the social relationship dimension of social cohesion is relevant. This might appear to be the case of *intelligibility* values and *frequency of meeting friends, relatives or colleagues,* which show s a positive relation with a 0.46 value. Additionally, pleasant experience with people in the area show the highest correlation with *intelligibility*, under the statement *'People in the area are very friendly'*.

In what *'Belonging & Identification'* is concerned, feeling of belonging to the community reveals a positive interconnectedness with *intelligibility* measures ($R^2 = 0.25$).

The negative correlations were corroborated with other methods and were not showing major interesting findings, therefore no comments about it will be done. We can assume the negative correlations have been expressed for two situations. In some cases the lack of responses processed as 0 values and making strong cliffs in the list of values, or for example individual cases where there was only one measurement in which one value was too high and the other one too low, but the rest values of the list were behaving differently.

7.2.3.6. Extent of natural surveillance

Extent of natural surveillance is relevant to spatial experience and is materialized in edges. Edges are an exchange zone as described by Gehl (2010),

and in consequence an essential space for social interaction. The findings show meaningful interconnectedness between edges attributes and social cohesion dimensions.

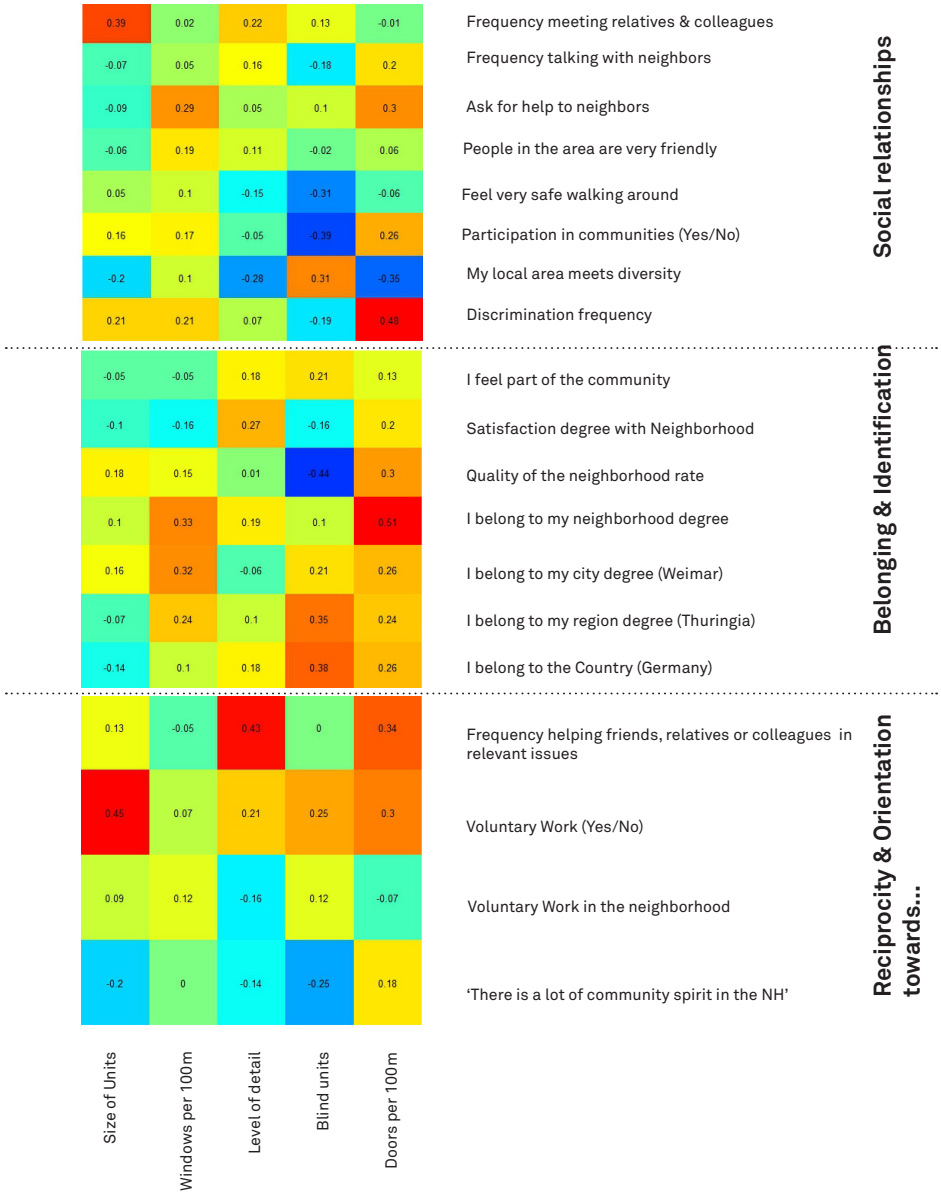

Figure 73. Heatmap showing correlations between Extent of natural surveillance measurements and Social cohesion Non-Physical factors.

'Social relationships'

Size of units and social interaction frequency show a very good correlation ($R^2 = 0.39$), this might be due to the dynamic character provided by smaller units, the rhythm, the facilitator of the area as a staying zone by encouraging feelings of safety among other reasons. Moreover, discrimination rate is also revealing positive relation to the size of units, in the sense that smaller units have the smaller discrimination rates. Transparency of edges under the attributes of windows number show relation to neighborliness ($R^2 = 0.19$). Number of windows per 100m are said to contribute to the transparency of edges. Our findings on social relationships dimension and transparency show the highest correlation with feelings of trust to ask for help to neighbors ($R^2 = 0.29$), as a second positive relation discrimination frequency appears with an $R^2 = 0.21$ value, weak but positive. Edge's degree of detail also reveal a minor relation to regularity meeting socially with people ($R^2 = 0.22$) and talking with nearby residents ($R^2 = 0.16$).

In line with previous researches, blind units decreases feelings of safety and therefore we identified a negative correlation of -0.31. Unexpectedly

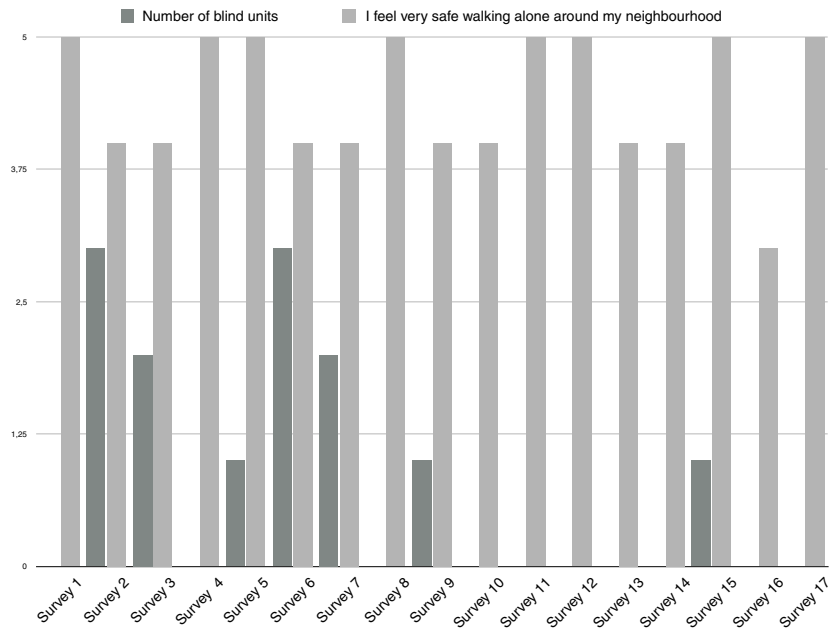

Figure 74. Number of blind units and feelings of safety.

a positive correlation is shown when looking at how diverse people perceive their local area and the number of blind units. One assumption can be because more newcomers are living in segregated areas, in fact Weimar West assessed the majority of participants in the formulated questionnaire, followed by people living provisionally in the Refugee Camp. In this both situations many people decide for different factors to relate with other new comers, or they do it initially as is fast and easier to access to it.

Number of entrances in frontages reveals another measurement of this research that concerns transparency and active frontages. This measurement positively reacts to discrimination frequency rates (R^2 0.48), and reliance on neighbors assistance in case of help ($R^2 = 0.30$) in a second place.

'Belonging and Identification' dimensions also seems to have an interrelation with the extend of natural surveillance. Indeed, quality of neighborhood and feelings of belonging to the city show positive but weak relations with size of units with 0.18 and 0.16 values respectively.
Active involvement in communities, feelings of belonging to the neighborhood, city and region are also showing interrelation with numbers of window in this order 0,17, 0.33, 0.32 and 0.34 accordingly. In this direction, the extent of detail levels relates to satisfaction degree to the local area and results in a positive number ($R^2 = 0.27$), in parallel with belonging feeling to the community ($R^2 = 0.18$).

A second attribute of transparency measured by the number of doors provided along one street shows decisive relation to belonging feeling to the neighborhood as first place ($R^2 = 0.50$), quality of the neighborhood (R^2 0.30), belonging to the city and participation in communities ($R^2 = 0.26$), and lastly satisfaction degree to neighborhood ($R^2 = 0.20$).

As before explained blind units decreases rhythm, action, and dynamic character of a certain area. Consequently might have a great influence in how high the sense of appropriation of the space experiences the individual the individual, one case relevant for this study is the Refugee Camp located in a segregated and Industrial zone. The effects of higher number of blind might be the cause of the following results. A negative relation to people taking part of community associations ($R^2 = -0.39$), along with a negative value to the assessment of quality in the neighborhood ($R^2 = -0.41$).

At the end, as the number of blind units increases or decreases also do the belonging feelings to city, region ans country in that order at different de-

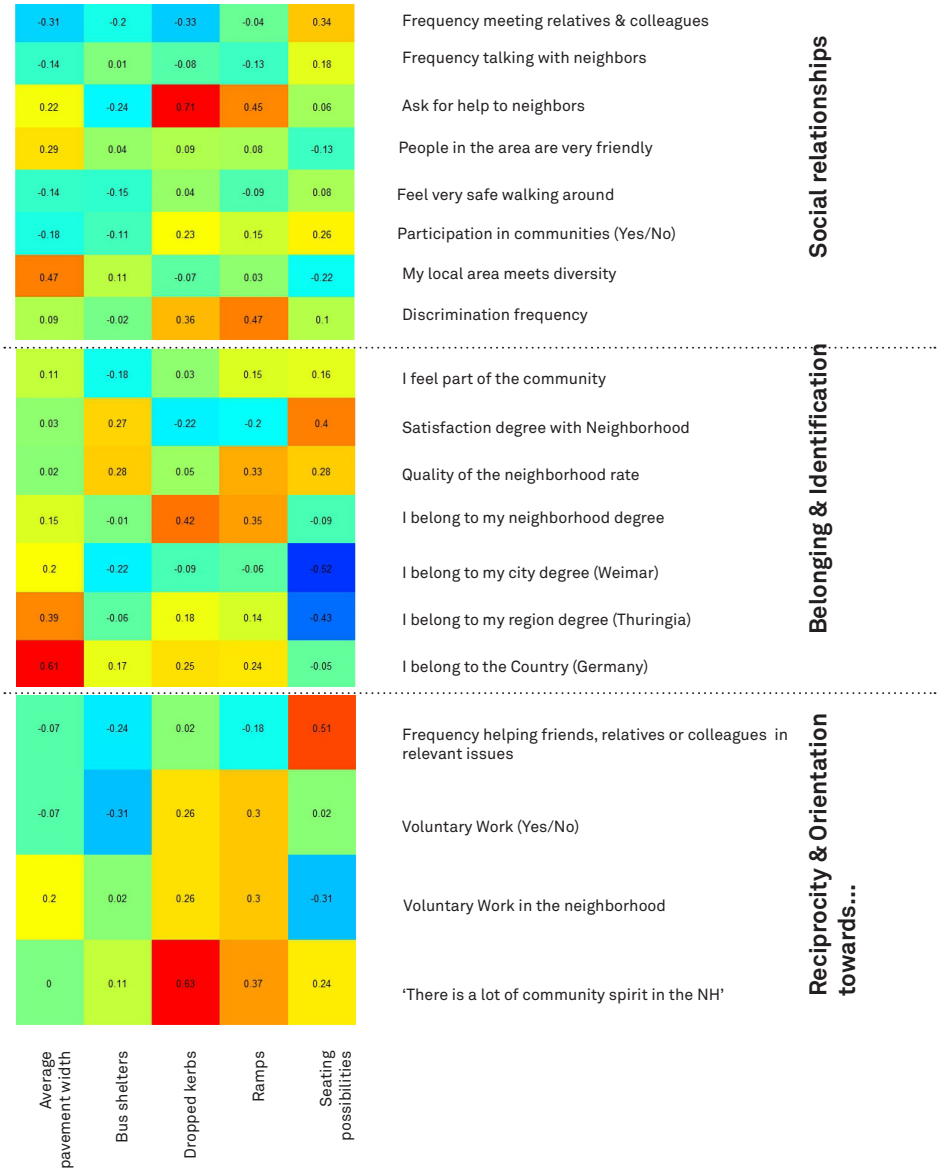

Figure 75. Heatmap showing correlation between Inclusiveness measurements and Non-Physical factors of social cohesion.

grees (0.21, 0.35, 0.38 in that order).

Thirdly the ***'Reciprocity and orientation towards common good'*** dimension reveal positive values in what voluntary work and size of units concern ($R^2 = 0.45$). Details level and prevalence of helping other people show a high value ($R^2 = 0.43$). Voluntary work and details level is also related to some degree but not dramatically ($R^2 = 0.21$). A negative relation of blind units and community spirit was demonstrated ($R^2 = -0.25$).

Entrances counting as a feature of transparency display positively again frequentness helping relatives, friends or colleagues in a weak but still positive way ($R^2 = 0.34$), in a similar degree to people engages in community associations ($R^2 = 0.30$), and lesser degree to the community essence at the local level ($R^2 = 0.18$).

7.2.3.7. Inclusiveness

Inclusiveness is about equal access to public space for every member despite of age, gender, religion, ethnic background, disabilities, etc. The aim is an inclusive and welcoming environment. In terms of measurement one attribute related to human scale like pavement width, and others related to ease of access to public space facilities are taken into account, for instance instances of ramps, dropped kerbs, presence of bus shelters and public toilettes are measured.

Social relationships dimension

Pavement width show an interesting negative correlation with frequency of meeting people socially ($R^2 = -0.39$). This means when one variable increases the other decreases, and vice-versa. Indeed lower width values, would reveal higher social meetings and lower social meetings, higher pavement width. This fact is in line with theories of human scale related to pavement width, which argue that 'human scale is as far as the human is visible' (Blumenfeld, 1971). The relation between road with and areas perceived as respecting diversity has the strongest positive correlation showing $R^2 = 0.45$. The following positive relations are linked with people's friendliness $R^2 = 0.29$, and asking people for help $R^2 = 0.22$. Concerning this findings much more theories are argued about comfort as a major requiring for facilitating walkability a major affair for pedestrian urban activity. In line with pave-

ment width, appropriate maintenance system is said to play a crucial role in what street level scale is concerned (Corazza, Di Mascio, & Moretti, 2016).

Dropped kerbs facilitate walkable spaces and equal accessibility in the public space. The relation they show to ask their neighbors for help shows a very positive correlation with a value of 0.71, and consequently with discrimination frequency with a positive but moderate relation of 0.36.

Belonging and Identification dimension

Feelings of belonging to the country and region are identified with positive relations to average pavement width R^2 0.61 and R^2 0.39 correspondingly. No other relation in terms of pavement width and belonging was found. The visualization in different diagrams show a relation however difficult to conclude in any relevant reason besides the human scale already mentioned in the social relationships dimension.

Further in facilitators of pedestrian movement the presence of bus shelters and instances of ramps or not has also reveal importance to the degree in which neighbors are satisfied with their neighborhood (R^2 = 0.27, 0.35 accordingly) and how they rate the quality of it in a higher but slight difference degree (R^2 = 0.28, 0.33 in that order).

Another quality of the walkable space represented in this research as availability of dropped kerbs relate doubtlessly with belonging feelings to the neighborhood.

Reciprocity and Orientation towards common good dimension

Presence of bus shelters and instances of ramps reveal higher feeling of community spirit in the area (R^2 0.63, 0.37), and in lesser degrees to involvement in voluntary activities within the neighborhood (0.26 and 0,30 respectively). Further than that, no other relations were found.

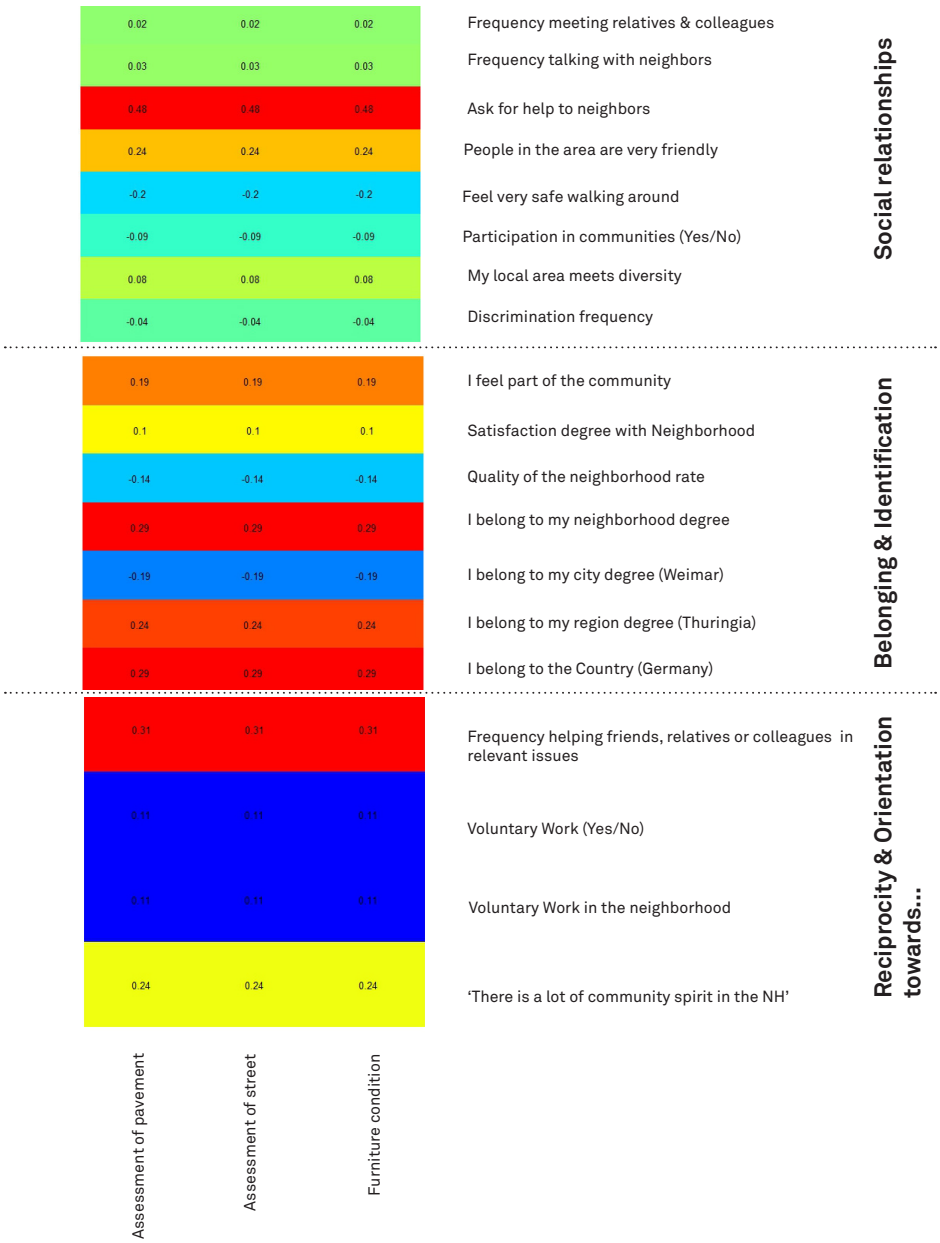

Figure 76. Heatmap showing correlation between Maintenance measurements and Non-Physical factors of social cohesion.

7.2.3.8. Maintenance

As expected according to previous researches and theories a well maintained urban space allows for meaningful significance and attachment. Positive and negative correlations show different findings. Is necessary to say how the measurements taken into account are strongly interconnected, in fact places with excellent pavement assessment demonstrated the same quality in street and furniture condition.

Social relationships dimension

Levels of trust to neighbors when asking for help, neighborliness, and feelings of safety relate to assessment of pavement, assessment of street and furniture condition in the same way expressing to following values correspondingly 0.48, 0.24 and -0.20.

The negative relation represents that one variable decreases and the other increases, in fact maintenance has not revealed in our case study influence to feelings of safety of the people in their area, which draws unexpected attention under the many investigation that explains the opposite. However, two things needs to be considered to understand the results. One one side, extreme or bad maintenance among study cases was not identified. Weimar has shown in general quite good standards of both availability of inclusive attributes of public spaces and maintenance of them. On the other side, vital to retract better overview of this negative relation would be accomplishing higher number of samples and compare them anew.

Belonging and Identification dimension

Along with expectations, maintenance show interconnectedness to belonging feeling(neighborhood value 0.39), feeling member of the community (0.19).

Negative correlation was found concerning quality rate of the neighborhood which it can be assumed that cultural and background differences play a role in here. Is crucial to comprehend that quality standards are not the same for everybody, understanding their history. This also applies to feelings of safety, weather an individual coming from war might not experience

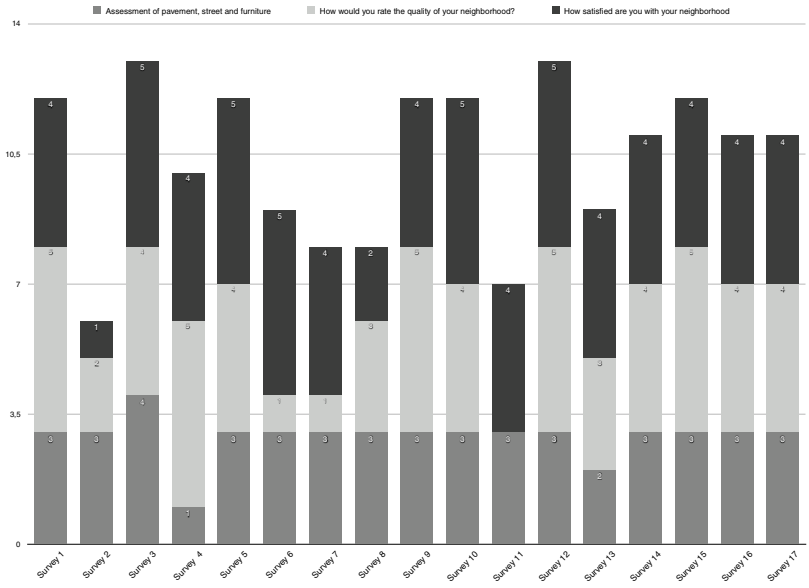

Figure 77. Maintenance assessment, rate of neighborhood and satisfaction towards neighborhood.

08/

Conclusion & research outlook

The last chapter provided a wide overview of the findings assessed in this research and interesting discussion. Findings have appraised and provided discussion for both sociological and urban aspects under the notion of social cohesion.

8.1. Conclusion

Sociological results or ***Non-Physical factors*** reported insightful information about how people who were interviewed are relating themselves socially within the new community. Results show that even though in most of the cases a social network is available, it is undetermined to which extent it is directly to the hosting community or rather with their own community of people who meet in the 'refugees integration' context, which does not necessarily escapes from affirming the existence of a network but reveals deficiency when, for instance, evaluating to which extent people feel part of the community. The social network to which people with forced migration are related in the context of our research remains not perfectly clear. Another fact that calls for attention is the high frequency to which people would rather meet in a house than in a public space, even when urban qualities of the case study have shown in most of the cases good parameters.

Further on, interesting associations of perceived social quality of the neighborhood, in fact how people perceive their local community, have been positively related to socially cohesive behaviors. Reciprocity feelings and orientation towards common good have been mainly represented by frequency helping friends, colleagues, or relatives, whereas the rest of sub-dimensions have been mostly undermined.

In what ***Physical factors*** are concerned, the influence of urban qualities on social cohesion has been drawn in detail and highlighted the most relevant issues in both cases, positive and negative interrelation of variables. As it has been argued somewhere else, direct relation of every variable to every variable does not exist. However, meticulous view of the results allow for illustrating tendencies.

Density showed that GSI values revealed positive trends to the most of the Non-physical factors of cohesion except to frequency of social relationships. However, higher trends are in this aspect are shown in FSI*GSI (Density). Moreover, Density (FSI*GSI) behaves positively to 'Belonging and Identification' sub-dimensions. High negative tendencies relate FSI and neighboring, the same applies to the rate of quality given to the neighborhood.

In contrast to existing research available, accessibility has shown mainly

weak correlations to Non-Physical factors. The highest impact refers to Belonging and Identification sub-dimensions. Nonetheless, distance to local facilities (Supermarket) illustrated strong negative interrelatedness to social interaction, where as one variable increases, the other decreases.

Land uses depicted positive outcomes to social interaction and acceptance of diversity in what 'Social relationships' sub-dimensions of Non-Physical factors are implicated. However, in the overall analysis land uses interrelation to social cohesion to Non-Physical factors has been barely noticeable.

Connectedness and permeability showed merely positive outcomes in 'Social relationships' dimension as well as to 'Belonging and Identification'. Concerning 'Reciprocity' sub-dimensions more specifically concerning the Block size measurement and Choice measurements with frequency of helping other people. Another great relation is the one represented by Block size analysis and frequency of social interation.

Attractiveness measurements showed high influence to 'Belonging and Identification' sub-dimensions, secondly to 'Social relationships' sub-dimensions, and not much impact on 'Reciprocity and Orientation towards common good'. Expected high correlation is shown between attractiveness and perceived neighborhood quality and neighborhood satisfaction degree.

Concerning legibility, intelligibility measurements have not shown positive relations in most dimensions, but rather in specific ones as friendliness of local neighbors with a high correlation (R^2 0.6), frequency of social interaction (R^2 0.4) and in lesser degrees to acceptance of diversity (R^2 0.22). Even though this quality has not impacted categorically in every dimension, it reveals positive trends to focus on further enhancement. Subsequently, feeling part of the community also depict good interrelation with intelligibility, whereas community spirit within the neighborhood expresses a reasonable negative correlation.

Extent of natural surveillance, in accordance to Dempsey's (2008) research showed in general positive relations to 'Belonging' feelings and community feelings. Some crucial findings were exposed by size of units and frequency of meeting people, which relates in great extent to the theory of active frontages of Gehl, representing areas that invite people and encourage them to stay longer (2010). Windows presence revealed impact in most of the 'Social relationships' and 'Belonging and Identification' sub-dimensions. Whereas Blind units, levels of details and number of entrances attracted

positive interrelation to 'Belonging and Identification', as well as to 'Reciprocity and 'Orientation towards common good'. In general, extent of natural surveillance have revealed the urban quality with more positive degrees of correlation to Non-physical factors compared to the rest urban qualities.

Inclusiveness show limited but relevant connections to 'Social relationships' sub-dimensions like meeting people, trust feelings to neighbors, acceptance of diversity and discrimination experiences. Moreover positive outcomes have been depicted concerning inclusiveness measurements and satisfaction feeling towards their neighborhood as well as to perceived neighborhood quality in relation to 'Belonging and Identification' sub-dimensions.

At the end maintenance reveal very positive relation to belonging feelings, trust on neighbors, friendliness of people in the local area and frequency helping others.

Our findings relating urban qualities (*Physical factors*) to social cohesion dimensions (*Non-physical factors*) are in line with the general overview Dempsey (2008) offers in her conclusion to the same topic but in London context and disregarding multicultural environments. Our approach shows an advantage over Dempsey's research, in terms of accuracy and overview of concrete quantification of each urban quality variable and sociological variables. In line with this, our study provides additional support for urban policies analysis because of its large descriptive attribute of sociological and urban factors. The analysis framework provided in this research has potential for further analysis in this field. Under this basis, is important to not disregard the value multiculturalism adds to this research.

In line with Dempsey (2008) findings, further research on facilities accessibility might delineate concrete outcomes, as the focus on street level qualities such as extent of natural surveillance, attractiveness, maintenance and inclusiveness.

8.2. Research limitations

It is plausible that a number of limitations might have influenced the results obtained. In fact, as already mentioned, pre, in transit and post migration

experiences might undoubtly influence the individual experience each person builds in their new environment, limitation that scapes from our research scope. However, taking this issue in consideration when building up a quantitative questionnaire might inevitably help to understand if people carry with them traumatic experiences or they rather have arrived to a new community from a somehow safe environment.

Moreover, language barriers which were tried to be overcome by translation of questionnaires and the presence of interpreters when interviewing, had anyway influenced our examination. For instance, some people accepted to participate on the questionnaires in German language but then found themselves not able to understand fully their questions. Amidst this problematic, German native speakers of the institutions where the questionnaires were held tried to help but, as a result interviewers lost the anonymity of their responses which might have influence their answers. In what language is concerned, as it was already mentioned this paper limited itself to Arabic, English and German speakers which do not cover all languages speaked by new comers in Germany. However, this decision was taken due to time limitations.

In what methodology limitations is concerned, we assume that the normalization of values obtained would have contributed to clearer results and easier comparison of variables. However, results remain satisfactory for the scope of this paper. In line with this, the creation of a social cohesion index done under the Non-Physical factors of social cohesion could be an easier numerical factor to compare with all qualities.

Given that our findings are based on a limited number of samples, results need to be taken with some caution. However, despite the number of samples the method provided in this paper allows for further research. The application of this research framework to a larger number of participants and in diverse cultural backgrounds, for instance diverse hosting countries, can contribute to depict stronger tendencies between socially cohesive behaviors and urban qualities, as well as individually to each aspects Non-physical factors and Physical factors.

8.3. Suggestion for further research

The recognition and comparison of diverse cultural backgrounds is considered by this research essential, due to the perception of cohesion and quality

standards each individual construct according to their personal experiences. Further on, the analysis of urban qualities in diverse spatial configurations would allow for easily identifying those urban attributes which remain crucial despite the existing cultural background. The creation of a social cohesion index under Schiefer et al. (2012) conception of social cohesion and comparison with normalized values high recommended suggestions for further research.

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

Extended research material is available on digital version: mariavictoriabehler@gmail.com

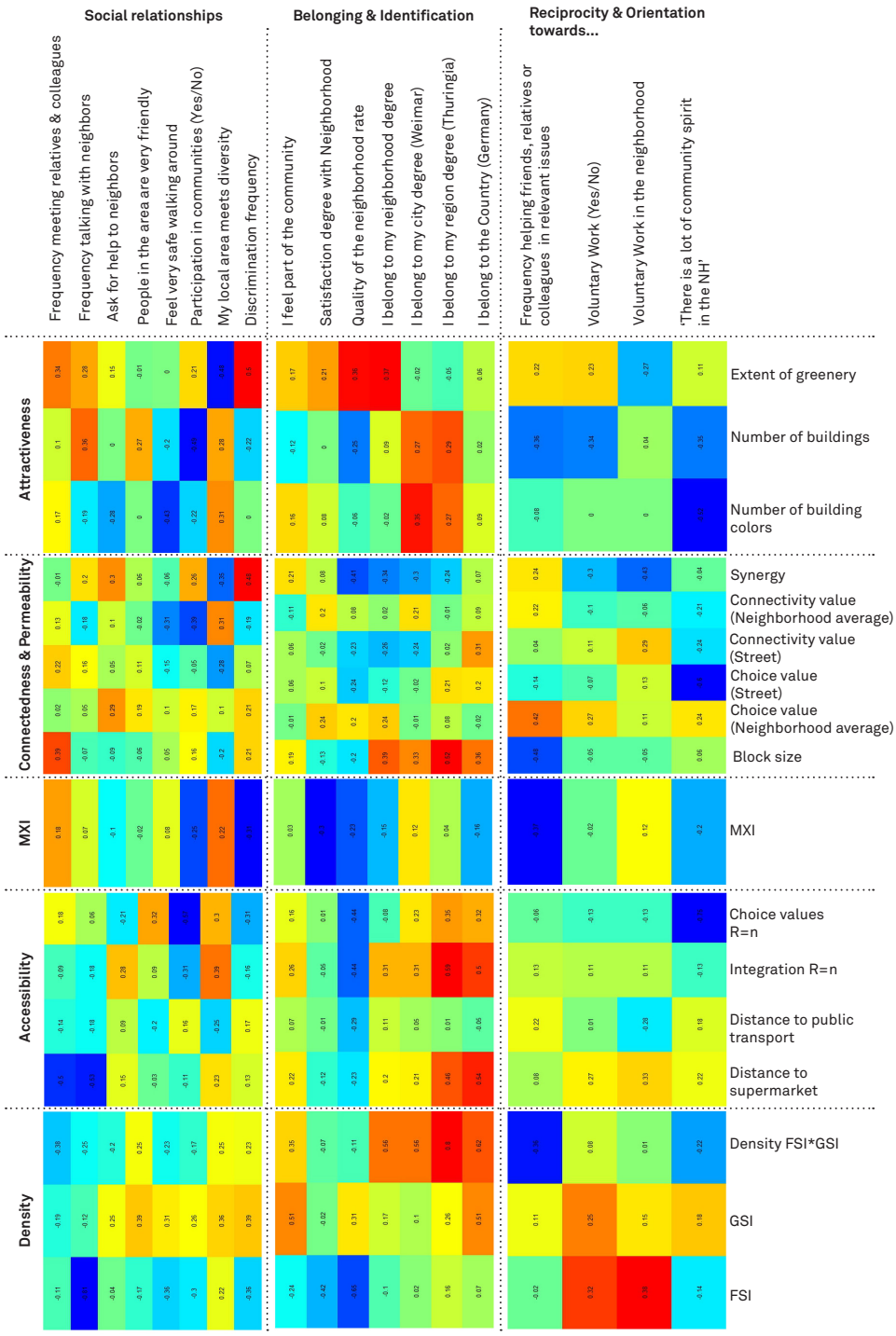

Figure 78. Heatmap showing all correlations found in this research part A.

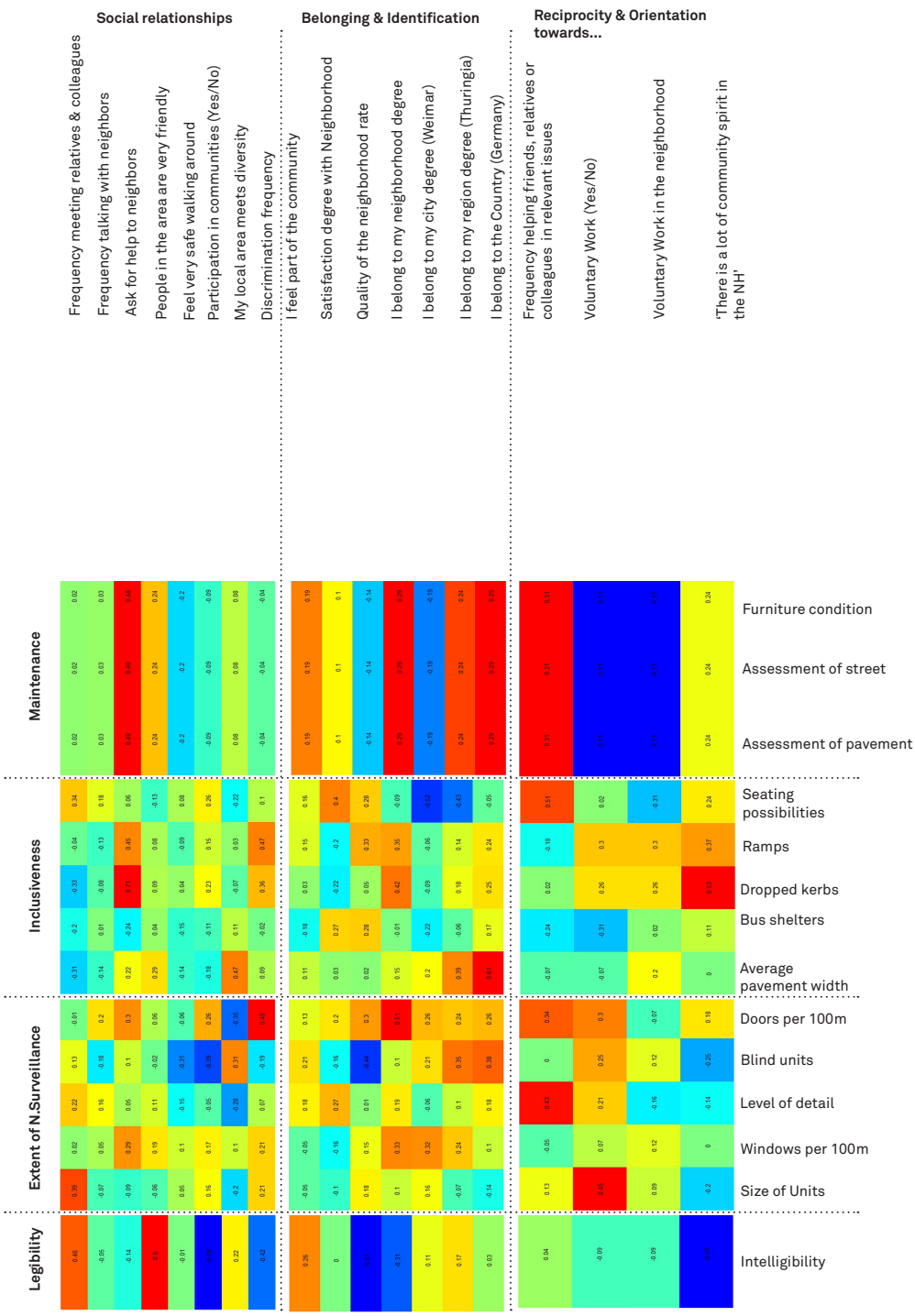

Figure 79. Heatmap showing all correlations found in this research part B.

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Declaration of Authorship

I hereby solemnly declare that the following dissertation is my own work and that no impermissible assistance from others or references other than those specifically cited were used in its making. Data and/or concepts taken directly or indirectly from other sources have been properly referenced.
I affirm that no other individuals were involved in producing the content of this dissertation. Furthermore, no placement or consulting services (promotion consultants or other persons) were paid to assist me in any way. I affirm that no one received direct or indirect
pecuniary compensation or payment in kind for work conducted in connection with the content of this dissertation despite translation and interpreters costs which were inevitably needed for making this research possible. Payments were done through the support of the Women's Promotion Fund 2018 for which the author of this research was granted the last year for the present project and clearly revealed to the Institution involved.
This dissertation has not been previously submitted in the same or similar form to any other examination authority in Germany or abroad.
I certify that, to the best of my knowledge, the declaration above is absolutely true and nothing has been concealed.

Weimar, 25th March 2019
Maria Victoria Behler

Appendix 1_ Questionnaire results and cohesion ratings

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

Questions	Answers		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
How often do you meet friends, relatives or colleagues socially?	Very frequently	5	195,652173913043	5		5	5		5			5		5					5			5			
	Frequently	4	69,5652173913043					4												4				4	4
	Occasionally	3	104,347826086957	3						3		3			3	3	3				3		3		
	Rarely	2	17,3913043478261											2					2						
	Never	1	0																						
Do you have people who would help you without any difficulty in matters like household work, financial problems or emotional problems? If yes Where?	In my house	5	30,4347826086957								1		1								1	1	1	1	1
	In my Neighbourhood	4	17,3913043478261																2	2					
	In the City	3	130,434782608696				3	3		3	3	3	3			3	3	3							3
	In the country	2	69,5652173913043			4			4				4		4										
	Not here	0	43,4782608695652	0						5				5											
			0																						
If yes how many?			0																						
			0																						
			0																						
How often do you talk with your neighbours?	Very frequently	5	130,434782608696	5		5	5								5			5		5					
	Frequently	4	34,7826086956522							4				4											
	Occasionally	3	39,1304347826087					3			3								3						
	Rarely	2	78,2608695652174						2			2	2				2				2	2	2	2	2
	Never	1	13,0434782608696		1						1					1									
I feel I can ask my neighbours for help in an emergency	Strongly Agree	5	130,434782608696		5									5						5		5		5	5
	Agree	4	139,130434782609	4	4			4			4	4				4		4					4		
	Neutral	3	78,2608695652174						3	3					3		3		3		3				
	Disagree	2	26,0869565217391			2				2			2												
	Strongly disagree	1	0																						
People in the area are very friendly	Strongly Agree	5	86,9565217391304	5				5	5						5										
	Agree	4	173,913043478261			4		4				4	4	4		4	4	4		4	4				
	Neutral	3	78,2608695652174				3						3						3			3	3	3	
	Disagree	2	26,0869565217391		2					2															2
	Strongly disagree	1	0																						

	Strongly disagree	1	0																										
I feel very safe walking alone around my neighbourhood	Strongly Agree	5	195,652173913043	5			5	5			5	5			5	5			5		5								
	Agree	4	139,130434782609		4	4			4	4			4	4			4	4											
	Neutral	3	26,0869565217391																	3			3						
	Disagree	2	34,7826086956522																			2		2	2	2			
	Strongly disagree	1	0																										
			78,2608695652174	1	1	1	1	1				1	1	1	1	1	1	1	1	1	1	1			1	1				
			56,5217391304348	1	1	1	1	1				1	1	1		1	1		1		1	1							
Do you participate actively to any community, groups or clubs? Which ones?	Sport (in*)	2	78,2608695652174	2	2		2						2			2	2	2	2		2								
	Sport (on*)	2	43,4782608695652	2		2		2					2	2															
	Social and cultural associations (in*)	2	86,9565217391304				2					2		2		2	2			2	2	2			2	2			
	Social and cultural associations (on*)	2	43,4782608695652					2				2		2					2			2							
	Religious group (in*)	2	43,4782608695652				2					2				2			2		2								
	Religious group (on*)	2	26,0869565217391									2			2		2												
	Political associations (in*)	2	8,69565217391304													2													
	Political associations (on*)	2	17,3913043478261								2						2												
	Environmental, animal and citizens associations (in*)	2	8,69565217391304													2													
	Environmental, animal and citizens associations (on*)	2	26,0869565217391		2												2		2										
	Other	2	17,3913043478261											2		2													
	Other	2	26,0869565217391			2								2			2												
My local area is a place where people from different national or ethnical groups get on well together	Strongly Agree	5	152,173913043478		5	5		5	5	5		5				5													
	Agree	4	139,130434782609				4				4		4	4			4	4			4				4				
	Neutral	3	52,1739130434783	3											3					3		3							
	Disagree	2	8,69565217391304																									2	
	Strongly disagree	1	8,69565217391304																				1	1					

because of your skin color, ethnic origin, rilion, language or gender?	Occasionally	1	39,1304347826087	1	1		1				1	1						1				1			1	1
	Rarely	2	17,3913043478261			2							2														
	Never	3	56,5217391304348					1								3	3		3		3						
	max	71	0																								
	min	6	0																								
SOCIAL RELATIONSHIPS RATE				34	26	40	36	35	28	31	25	39	32	40	31	47	40	27	39	22	40	25	20	16	25	25
MAX 71-54 MED=54-37 LOW= 37-20 V.LOW=20- 6				low	low	med	low	low	low	low	low	med	low	med	low	med	med	low	med	low	med	low	vlow	vlow	low	low
I feel like I'm part of the community	Strongly Agree	5	65,2173913043478						5							5					5					
	Agree	4	139,130434782609	4		4		4		4			4	4			4		4							
	Neutral	3	130,434782608696		3		3				3	3			3			3				3		3	3	3
	Disagree	2	17,3913043478261																	2			2			
	Strongly disagree	1	0																							
How satisfied are you with your neighborhood	Very satisfied	5	108,695652173913			5		5	5					5		5										
	Satisfied	4	243,478260869565	4			4			4	4		4		4		4	4	4	4	4	4	4			4
	Neither satisfied not dissatisfied	3	13,0434782608696																					3		
	Dissatisfied	2	17,3913043478261									2											2			
	Very Dissatisfied	1	4,34782608695652		1																					
How would you rate the quality of your neighborhood?	Very good	5	108,695652173913	5			5						5			5			5							
	Good	4	121,739130434783			4		4			4			4				4		4	4					
	Acceptable	3	91,304347826087									3					3					3	3	3	3	3
	Poor	2	8,69565217391304		2																					
	Very poor	1	8,69565217391304						1	1																
Where do you usually spend social time?	People's Home (in*)	2	69,5652173913043	1		1	1	1	1	1	1		1	1			1	1			1		1	1	1	1
	People's Home (on*)	1	34,7826086956522			1					1			2		2			2							
	Community Building (in*)	3	91,304347826087	2	2		2							3		3	3				3			3		
	Community Building (on*)	2	52,1739130434783	2	2									4					4							
	Parks / Square (in*)	4	91,304347826087										3		3		3		3				3	3	3	
	Parks / Square	3	104,347826086957						3	3			3	3		3	3				3	3				

	Streets / sidewalks (in*)	5	69,5652173913043	4															4					4	4	
	Streets / sidewalks (on*)	4	104,347826086957						4	4			4			4	4				4					
	Other (in*)	2	43,4782608695652	2																	2			2	2	2
	Other (on*)	1	60,8695652173913	2		2		2								2	2		2	2						
Where do you usually spend free time?	People's Home (in*)	2	47,8260869565217			1	1				1		1	1				1			1		1	1	1	1
	People's Home (on*)	1	30,4347826086957			1					1		1	1		1	1		1							
	Community Building (in*)	3	43,4782608695652		2		2					2		2			2									
	Community Building (on*)	2	86,9565217391304				4					4		4		4			4							
	Parks / Square (in*)	4	78,2608695652174		3					3					3		3						3		3	
	Parks / Square (on*)	3	130,434782608696		3				3	3		3	3	3		3			3		3	3				
	Streets / sidewalks (in*)	5	34,7826086956522														4							4		
	Streets / sidewalks (on*)	4	69,5652173913043										4			4			4		4					
	Other (in*)	2	43,4782608695652														2				2			2	2	2
	Other (on*)	1	34,7826086956522			2										2			2	2						
I feel I really belong to the following groups			0																							
Neighbourhood	Strongly Agree	5	43,4782608695652													5			5							
	Agree	4	104,347826086957			4							4				4	4			4	4				
	Neutral	3	65,2173913043478		3										3								3	3	3	
	Disagree	2	26,0869565217391						2	2		2														
	Strongly disagree	1	8,69565217391304																	1						1
City (Weimar)	Strongly Agree	4	104,347826086957				4		4	4			4			4					4					
	Agree	3	52,1739130434783			3						3					3	3								
	Neutral	2	52,1739130434783		2										2							2	2	2	2	
	Disagree	1	4,34782608695652																1							
	Strongly disagree	1	8,69565217391304																	1						1

Region (Thuringuia)	Strongly Agree	3	52,1739130434783						3	3			3			3										
	Agree	2	34,7826086956522														2	2			4					
	Neutral	1	26,0869565217391		1	1									1							1		1	1	
	Disagree	1	13,0434782608696									1							1				1			
	Strongly disagree	1	8,69565217391304																	1						1
Country (Germany)	Strongly Agree	2	52,1739130434783					2	2	2			2			2					2					
	Agree	1	34,7826086956522								1						1	1	1				4			
	Neutral	1	39,1304347826087		1	1									1									3		3
	Disagree	1	13,0434782608696									1													2	
	Strongly disagree	1	4,34782608695652																	1						
	max	61	0																							
	min	7	0																							
BELONGING & IDENTIFICATION RATE				26	25	30	26	18	33	34	16	24	46	37	20	57	49	23	50	18	50	23	27	33	37	22
MAX 46>x>61, MED+ 45>X>30, LOW 29>X>14, MIN 13>X>7				low	low	med	low	low	med	med	low	low	max	med	low	max	max	low	max	low	max	low	low	med	med	low

How often do you help your neighbours/friends in matters like household work, financial problems or emotional problems?	Very frequently	5	43,4782608695652					5							5														
	Frequently	4	104,347826086957			4			4				4	4					4		4								
	Occasionally	3	130,434782608696	3						3	3	3					3					3	3	3	3	3			
	Rarely	2	34,7826086956522				2									2		2		2									
	Never	1	4,34782608695652		1																								
Do you do any voluntary work?	Yes	2	43,4782608695652		2						2	2	2						2										
	No	0	0	0		0	0	0	0	0				0	0	0	0			0	0	0	0	0	0	0	0	0	0
Where?	Inside the neighborhood	3	52,1739130434783								3	3	3							3									
	Outside the neighborhood	2	26,0869565217391		2						2								2										
There is a lot of community spirit in the neighbourhood	Strongly Agree	5	21,7391304347826												5														
	Agree	4	139,130434782609			4		4			4		4			4	4		4		4								
	Neutral	3	117,391304347826	3	3				3			3		3				3		3		3			3				
	Disagree	2	26,0869565217391				2																2	2					
	Strongly disagree	1	4,34782608695652																										1
RECIPROCITY & ORIENTATION TOWARDS COMMON GOOD RATE				6	8	8	4	9	7	3	14	11	13	7	10	6	7	5	12	8	8	6	5	5	6	4
MAX=15-12; MED=11-8; LOW= 7-4; VLOW= 4-0				low	med	med	vlow	med	low	vlow	max	med	max	low	med	low	low	low	max	med	med	low	low	low	low	vlow

Appendix 2_ Urban qualities measurement Protocol in site (Example which it was applied for every study case)

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

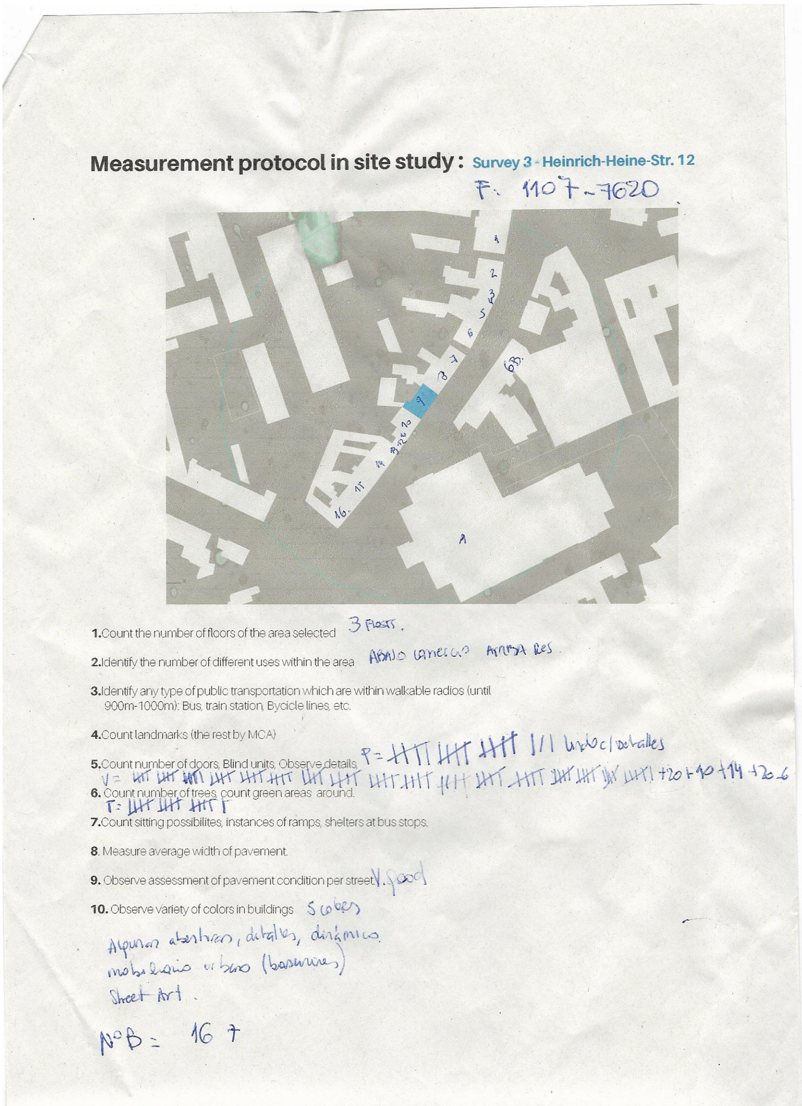
Measurement protocol in site study : _____

Density	**1.**Count the number of floors of the area selected
Land use_	**2.**Identify the number of different uses within the area
Accessibility _	**3.**Identify any type of public transportation which are within walkable radios (until 900m-1000m): Bus, train station, Bycicle lines, etc.
Connectedness	
Legibility	**4.**Count landmarks (the rest by MCA)
Permeability	
Character	
Attractiveness	**5.**Count number of doors, Blind units, Observe details, count number of trees, count green areas around.
Inclusiveness	**6.**Count sitting possibilites, instances of ramps, shelters at bus stops. **7**. Measure average width of pavement.
Maintenance	**8.** Ovserve assessment of pavement condition per street.

Appendix 3_ Urban qualities measurement Protocol in site

(Example of Heinrich-Heine Str., the rest study cases are available in digital version)

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.



Measurement protocol in site study: Survey 3 - Heinrich-Heine-Str. 12

F. 1107-7620

1. Count the number of floors of the area selected 3 Floors.

2. Identify the number of different uses within the area Abajo comercio Arriba Res.

3. Identify any type of public transportation which are within walkable radios (until 900m-1000m): Bus, train station, Bycicle lines, etc.

4. Count landmarks (the rest by MCA)

5. Count number of doors, Blind units, Observe details

6. Count number of trees, count green areas around.

7. Count sitting possibilites, instances of ramps, shelters at bus stops.

8. Measure average width of pavement.

9. Observe assessment of pavement condition per street V. good

10. Observe variety of colors in buildings 5 colores

Algunas alteraciones, detalles, dinámico.
mobiliario urbano (basureros)
Street Art.

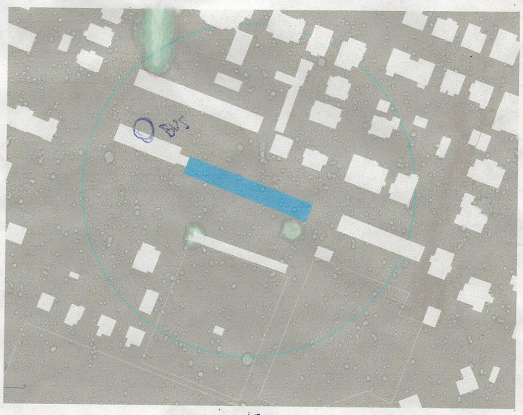
N°B = 16 +

Appendix 4_ Urban qualities measurement Protocol in site

(Example of Gutenbergstrasse, the rest study cases are available in digital version)

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

Measurement protocol in site study : Survey 5 - Gutenbergstrasse 28



1. Count the number of floors of the area selected 4 floors 15

2. Identify the number of different uses within the area Residential and one church

3. Identify any type of public transportation which are within walkable radios (until 900m-1000m): Bus, train station, Bycicle lines, etc.

4. Count landmarks (the rest by MCA)

5. Count number of doors, Blind units, Observe details, Y= D: regular de 1 lado muy pero sombra del otro lado no...

no entrance / no blind

6. Count number of trees, count green areas around.

7. Count sitting possibilites, instances of ramps, shelters at bus stops. Rampas de acc IIII / 9 Bus shelter

8. Measure average width of pavement.

9. Observe assessment of pavement condition per street. V. good

10. Observe variety of colors in buildings 2 colours / Quite Boring.

Appendix 5_ Urban qualities measurement table

	Urban qualities	Maxi m 0,2	Medi um 0,15	Low 0,10	V Low 0,05	S1	S2	S3	S4	S5	S6	S7	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
1	**Density**																					
L	FSI	<1,5	1,00< X<1,5	0,50< X<1,00	0,00< X<0,50	1,22	0,84	6,25	5,25	2,48	0,084	2,64	1,84	2,51	3,53	3,61	2,14	0,94	1,31	3,37	1,49	2,02
L	GSI	< 0,50	0,25 < X<0,50	0,125 < X< 0,25	0,00< X<0,012	0,61	0,42	1,25	1,05	0,82	0,42	1,32	0,61	0,83	1,18	1,20	0,72	0,32	0,44	1,24	0,50	0,67
L	DENSITY	+FSI +GSI	-FSI -GSI	+FSI -GSI	+GSI - lsi	0,7442	0,3528	5	5,5125	2,0336	0,03528	3,4848	1,1224	2,0833	4,1654	4,332	1,5408	0,3008	0,5764	4,1788	0,745	1,3534
L						0,74	0,3528	5	5,51	2,03	0,03528	3,4848	1,1224	2,08833	4,1654	4,332	1,5408	0,3008	0,5764	4,1788	0,745	1,3534
2	**Land use**																					
		50			100	75	77	71	73	69	78	71	74	68	71	72	74	66	73	70	73	75
3	**Accessibility**																					
	Distance to P. Transport	x<200	201< x<600	601<x <800	x>800	42	116	100	140	50	116	79	42	65	145	165	10	293	10	164	20	68
	Distance to Facilities super	x<200	201< x<600	601<x <800	x>800	100	389	50	90	325	389	177	100	520	106	204	210	424	111	123	184	205
	Integration (R=n) value					912	1082	1099	839	947	1082	1080	911,92	1049	961	964	923	903	1010	927	923	1010
	Choice (R=n) Global measurement					35	269534	30437	0	221846	269534	1995770	35	71749	130397	14649	213838	15353	18112	8411	21388	58133
4	**Connectedness & Permeability**																					
	Connectivity average (neighborhood)	X>10	6<X< 9	3<X<5	X<2	3	3,04	3,47	3,49	3,44	3,06	3,64	3,52	3,38	3,42	3,41	3,39	3,15	3,37	3,37	3,42	3,52
	Connectivity Street (neighborhood)	X>10	6<X< 9	3<X<5	X<2	4	8	4	1	13	8	10	8	6	6	3	8	4	3	4	8	2
	Choice street (in relation to the neighborhood)					30	8393	2956	0	7808	8142	27482	3345	6652	12980	952	12717	1289	1402	5989	16003	2557
	Choice neighbourhood average					2486	935	5104	2799	1387	926	3723	2060	9599	6129	6119	2860	1829	2298	6056	3358	2662
	Legibility _ Intelligibility					0,1988	0.2629	0.1959	0.1851	0.3884	0,2624	0,2197	0,1349	0,9	0,19	0,3	0,20	0,15	0,15	0,20	0,15	0,15
	Permeability synergy					0,54	0,67	0,42	0,45	0,79	0,67	0,52	0,22	0,30	0,44	0,62	0,38	0,26	0,29	0,46	0,29	0,53
	Block size analysis	x<400	401< x<800	801 <x <1200	x>1201	2	1,5	2	2	2	1,5	2	2	2	2	2	1,5	1,5	1,5	2	2	2

5	**Attractiveness/Legibility**																			
	Extent of greenery Trees	X>16	16>X >12	12>X> 5	X<5	10	8	16	6	0	8	22	10	0	0	12	20	0	10	0	20	10
	Number of buildings	X<14	14>X >10	15>X> 22	X>22	4	3	22	8	5	3	8	4	8	10		3	13	6	28	3	6
	Number of building colors	X<12	12>X >8	8>X>4	X<3	3	4	5	5	2-3	4	7	3	6	5	2	3	6	3	3	3	3
6	**Legibility _ Intelligibility**					0,1988	0.2629	0.1959	0.1851	0.3884	0,2624	0,2197	0,1349	0,9	0,19	0,3	0,20	0,15	0,15	0,20	0,15	0,15
7	**Extent of natural surveillance**																			
	Size of units	small units (4)	Relati vely small units	Small and Large units	Large Units (1)	1	1	3	3	1	1	3	4	3	3	1	1	3	1	4	1	1
	Doors p/100m	X<15	14>X >10	10>X> 5	X<5	3	1	25	10	5	1	13	5	28	8	8	3	15	11	25	3	11
	Windows p/100m					200	16	369	70	22	16	248	601	244	105	156	200	86	576	130	200	576
	Number of blind units	No Blind	Few blind /	Some blind /	Many blind /	0	3	2	0	1	3	2	0	1	0	0	0	0	0	1	0	0
	Level of details and materials	Many detail s (4)	Detail s (3)	Few details (1)	No detail s (0)	0	0	3	0	1	0	4	0	3	3	1	0	1	0	4	0	0
8	**Inclusiveness**																			
	Average width of pavement	x<7,5	7,5<x <15	15<x< 22	x>22	6	6.5	6.2	4.5	9.24	6.5	7.21	6	8	3	5	7.4	6	8	4	7	7
	Instances of ramps	every where (4)	mostl y every wher e (3)	some place (1)	no insta nces (0)	4	4	4	0	3	3	0	3	3	0	0	3	3	3	3	3	3
	Instances of dropped kerbs	every where (4)	mostl y every wher e (3)	some place (1)	no insta nces (0)	4	4	4	0	3	3	0	3	3	0	3	3	3	3	3	3	3
	Seating possibilities	x>5	5>x> 3,5	3,5>x >2	x<2	0	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0
	Bus shelters	every where (4)	mostl y every wher e (3)	some place (1)	no insta nces (0)	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0
	Public toilettes	every where (4)	mostl y every wher	some place (1)	no insta nces (0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

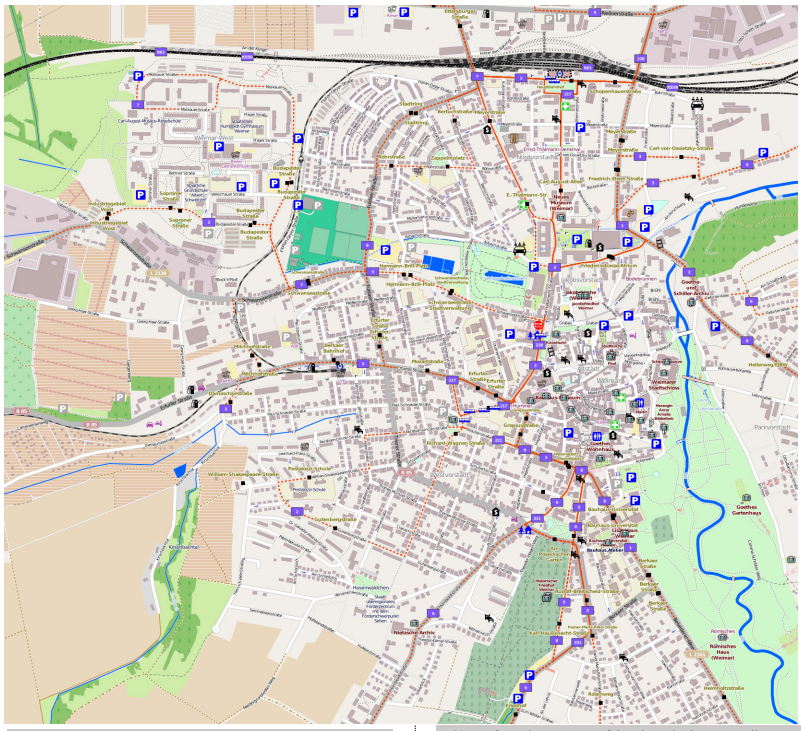
9	Maintenance																					
	Assessment of pavement	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3	3	3	3	3	2	3	3	3	3
	Assessment of street	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3	3	3	3	3	2	3	3	3	3
	Furniture condition	Excellent(4)	V.Good (3)	Acceptable(2)	Poor (1)	3	3	4	1	3	3	3	3	3	3	3	3	2	3	3	3	3

Appendix 6_ Questionnaire in English language

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

This is a questionnaire for a Master Thesis at Bauhaus University in Weimar, Germany.
The following questions observe your perception of integration in this city and how you interact with the community.
The knowledge gained from it should result in valuable data to support refugees integration policies.
Your contribution is completely anonymous and reserved for the purpose of this research.
Your honest answers will be highly appreciated. Many thanks!
Date:
Location: **Number of questionnaire (random):**

Please mark on the map below the area where do you live:



1.How old are you?

☐ 18-24 ☐ 25-39 ☐ 40-60 ☐ >60

2. Since when do you live in Weimar?

☐ - 1 year ☐ + 1 year ☐ 1-3 Years ☐ + 3 years

3. Which is your level of german?

☐ Fluent ☐ Good ☐ Medium ☐ Low ☐ None

4. What is your status? If you work or study, please can you mark on the map where?

☐ Student ☐ Worker ☐ Other

5. How often do you meet friends, relatives or colleagues socially?

☐ Very frequently ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Never

6. How often do you talk with your neighbors?

☐ Very frequently ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Never

(*)Very frequently= everyday; Frequently= once a week; Ocassionally= once per month; Rarely= Less than once per month; Never= Never

7. How often do you help your neighbours/friends in matters like household work, financial problems or emotional problems?

☐ Very frequently ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Never

8. Where do you usually spend social time?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
People's Home	☐	☐
Community Buildings	☐	☐
Parks / Squares	☐	☐
Streets/sidewalks	☐	☐
Other_____	☐	☐

9.Where do you usually spend free time?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
People's Home	☐	☐
Community Buildings	☐	☐
Parks / Squares	☐	☐
Streets/sidewalks	☐	☐
Other_____	☐	☐

10. Do you have people who would help you without any difficulty in matters like household work, financial problems or emotional problems ? If yes, where?

☐ In my house ☐ In my neighborhood ☐ In the city ☐ In the country ☐ Not here

If yes, how many? _____

11. Do you do any voluntary work ? If yes, Where?

☐ Yes ☐ No ☐ In my neighborhood ☐ Outside the neighborhood

12. Do you participate actively to any community , groups or clubs? Which ones? Are they inside or outside your neighborhood area?

	Inside	Outside
Sport	☐	☐
Social and cultural associations	☐	☐
Religious group	☐	☐
Political associations	☐	☐
Enviromental, animal and citizens associations	☐	☐
Other _____	☐	☐

13. How satisfied are you with your neighborhood as your home?

☐ Very satisfied ☐ Satisfied ☐ Neither satisfied nor dissatisfied ☐ Dissatisfied ☐ Very Dissatisfied

14. How would you rate the quality of your neighborhood?

☐ Very good ☐ Good ☐ Acceptable ☐ Poor ☐ Very poor

15. Have you experience discrimination because of your skin color, ethnic origin, religion, language or gender?

☐ Very frequently ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Never

Mostly for which reasons? (Can be more than one)

☐ Skin color ☐ Ethnic group ☐ Religion ☐ Language ☐ Gender

For questions below please mark how much do you agree on the statement:

16. I feel I can ask my neighbors for help in an emergency

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

17. There is a lot of community spirit in the neighborhood

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

18. People in the area are very friendly

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

19. I feel very safe walking alone around my neighborhood

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

20. My local area is a place where people from different national or ethnical groups get on well together

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

21. I feel like I'm part of the community

☐ Stronlgy Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

22. I feel I really belong to the following groups...

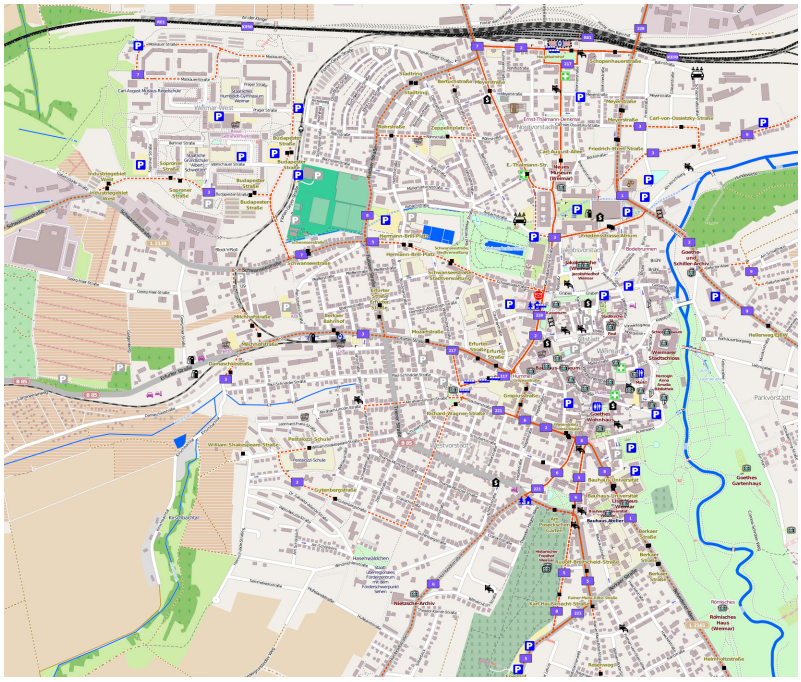
	Stronlgy Agree	Agree	Neutral	Disagree	Strongly Disagree
Place of birth	☐	☐	☐	☐	☐
Neighborhood	☐	☐	☐	☐	☐
City (Weimar)	☐	☐	☐	☐	☐
Region (Thuringuia)	☐	☐	☐	☐	☐
Country (Germany)	☐	☐	☐	☐	☐
Continent (Europe)	☐	☐	☐	☐	☐
World	☐	☐	☐	☐	☐

(*)Very frequently= everyday; Frequently= once a week; Ocassionally= once per month; Rarely= Less than once per month; Never= Never

Appendix 7_ Questionnaire in Arabic language

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

هذه الإستمارة هي جزء من أطروحة ماجيستر في جامعة باوهاوس فايمر- ألمانيا.
الأسئلة التالية يعرضون وجهة نظركم حيال مدينة سكنكم و مدى إندماجكم في المجتمع.
كل المعلومات التي ستدلون بها، ستشكل مادة مساهمة في تعديل سياسة دمج اللاجئين في المجتمع.
مساهمتكم ستبقى مجهولة ألهوية، وحصرياً لهذه الدراسة.
نقدر مصداقية أجوبتكم ونشكركم على المساعدة.
نرجو منكن تحديد مكان سكنكم على الخريطة.



1- كم تبلغ(ين) من العمر ؟

☐ ما فوق ال- ٦٠ ☐ ٣٩-٦٠ ☐ ٣٤-٣٩ ☐ ٢٤-١٨ ☐ ما دون ال-١٨

2- حدد مدة سكنك هنا لغاية اليوم

☐ ما فوق الثلاثة سنوات ☐ ما بين ألسنة و ثلاثة ☐ سنوات ☐ سنة أو ما دون

3- قيم مستوى اللغة الالمانية لديك

☐ لا أتكلم اللغة الألمانية ☐ عاطل ☐ لا بأس ☐ جيد ☐ جيد جداً ☐ ممتاز

4- ما هو وضعك المهني ؟

نرجو منك تحديد مكان عملك / دراستك على الخريطة

☐ ابحث عن وظيفة ☐ عامل ☐ تلميذ

5- كم غالباً تقابل فيها أصدقاؤك، زملائك في العمل أو المجتمع ؟ `

☐ أبداً ☐ نادراً ☐ أحياناً ☐ غالباً ☐ غالبا جداً

6- كم غالباً تتحدث مع جيرتك ؟-٩

☐ أبداً ☐ نادراً ☐ أحياناً ☐ غالباً ☐ غالبا جداً

غالباً جداً = كل يوم ؛ غالباً = مرة في الأسبوع ؛ أحياناً = مرة في الشهر ؛ نادراً = أقل من مرة في الشهر ؛ أبداً

15- هل شعرت يوماً بنوع من التمييز العنصري ؟

☐ أبداً ☐ نادراً ☐ أحياناً ☐ غالباً ☐ غالباً جداً

حدد السبب.

☐ الجنس ☐ اللغة ☐ الدين ☐ الاثنية ☐ لون البشرة

16- حدد درجة موافقتك على الخيارات التالية
في حال حدوث أي طارئ، استطيع طلب املساعدة من جيري

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

17- يوجد تواصل إجتماعي قوي في الجوار الذي اقطنه

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

18- المجتمع هنا ودود جد أ

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

19- أشعر بالأمان التام عندما أتجول بمفردي في الجوار الذي أسكنه

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

20- مجتمعي السكني هو مكان يندمج ويتفق فيه أفراد من مختلف الجنسيات مع بعضهم البعض

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

21- أشعر بأنني جزء من المجتمع

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
	☐	☐	☐	☐	☐

22- أشعر بالإنتماء إلى المجموعة التالية

	غير موافق على الاطلاق	غير موافق	لا أدري	أوافق	أوافق جد أ
مكان الوالدة	☐	☐	☐	☐	☐
مجتمع السكني	☐	☐	☐	☐	☐
المدينة (قاهرة)	☐	☐	☐	☐	☐
الولاية (تورينغيا)	☐	☐	☐	☐	☐
البلد (ألمانيا)	☐	☐	☐	☐	☐
القارة (أوروبا)	☐	☐	☐	☐	☐
العالم	☐	☐	☐	☐	☐

7- كم غالباً تساعد جيرتك، أصدقاؤك، في أمور المنزل، العمل ، مشاكل مادية أو أمور شخصية ؟

☐ أبد أ ☐ نادر أ ☐ أحيان أ ☐ غالب أ ☐ غالبا جد أ

8- أين تمضي (ن) معظم وقتك الإجتماعي ؟

	خارج مجتمعي السكني	داخل مجتمعي السكني
منزل أحد الأصدقاء أو أقارب	☐	☐
في أحد المراكز الاجتماعية	☐	☐
في الحدائق والساحات العامة	☐	☐
في الشوارع والأرصفة	☐	☐
مكان آخر	☐	☐

9- أين تمضي(ن) معظم وقت فراغك ؟

	خارج مجتمعي السكني	داخل مجتمعي السكني
منزل أحد الأصدقاء أو أقارب	☐	☐
في أحد المراكز الاجتماعية	☐	☐
في الحدائق والساحات العامة	☐	☐
في الشوارع والأرصفة	☐	☐
مكان آخر	☐	☐

10- إلى جانبي شخص يساندني في مختلف المصاعب، مثل الأمور- المنزلية و العائلية ، العمل، المشاكل المعيشية والإقتصادية او أي مشاكل عاطفية

☐ خارج البلاد ☐ في البلد ☐ في المدينة ☐ في الحي السكني ☐ في منزلي

إذا كان جوابك نعم، حدد عدد الأشخاص ----------

11- هل تمارس أي نشاط أو عمل تطوعي وأين ؟

☐ لا ☐ نعم ☐ خارج مجتمعي السكني ☐ داخل مجتمعي السكني

هل أنت ناشط في أي مجتمع، مجموعة أو جمعية ؟
حدد ما هم. هل هم داخل أو خارج
12- مجتمعك السكني ؟

	خارج	داخل
رياضة	☐	☐
مجموعة دينية	☐	☐
نادي إجتماعي أو ثقافي	☐	☐
جمعية سياسية	☐	☐
جمعية بيئة / الرفق بالحيوان	☐	☐
مدنية /_____	☐	☐

13- ما درجة رضاك عن المجتمع السكني الذي تقطن فيه ؟

☐ غير راضياً على الإطلاق ☐ غيرراضياً ☐ لاأدري ☐ راضياً ☐ راضياً جداً

14- كيف تقيم جودة العيش في مجتمعك السكني ؟

☐ سيئ جداً ☐ سيئ ☐ مقبول ☐ جيد ☐ جيد جداً

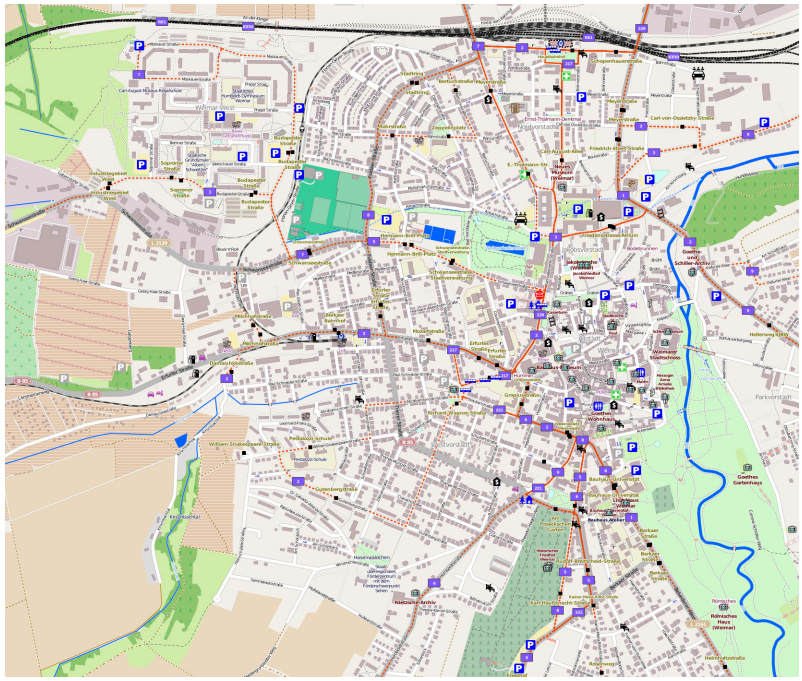
غالباً جداً = كل يوم ؛ غالباً = مرة في الأسبوع ؛ أحياناً = مرة في الشهر ؛ نادراً = أقل من مرة في الشهر ؛ أبداً

Appendix 8_ Questionnaire in German language

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

Dies ist eine Umfrage für eine Master Thesis an der Bauhaus-Universität Weimar, Deutschland.
Die folgenden Fragen beziehen sich auf Ihre Wahrnehmung der Integration in dieser Stadt und wie Sie mit der Gesellschaft interagieren. Das daraus gewonnene Wissen soll Daten zur Unterstützung von Integrationspolitik für Flüchtlinge auswerten.
Ihr Beitrag ist völlig anonym und zum Zwecke dieser Forschung vorbehalten.
Ihre ehrlichen Antworten werden sehr geschätzt. Danke vielmals!

Date:
Location: Number of questionnaire (random):
Bitte markieren Sie auf der Karte den Bereich, in dem Sie leben:



1. Wie alt sind Sie?

☐ 18-24 ☐ 25-39 ☐ 40-60 ☐ >60

2. Seit wann leben Sie hier?

☐ - 1 Jahr ☐ +1 Jahr ☐ 1- 3 Jahre ☐ + 3 Jahre

3. Wie sind Ihre Deutschkenntnisse?

☐ fließen ☐ gut ☐ mittel ☐ wenig ☐ gar nicht

4. Was ist ihr Status? Bitte markieren Sie auf der Karte wo Sie arbeiten/ studieren.

☐ Student ☐ Arbeiter ☐ Arbeiter suchend ☐ Anderes

5. Wie oft treffen Sie Freunde, Verwandte oder Kollegen in der Freizeit?

☐ sehr oft ☐ oft ☐ gelegentlich ☐ selten ☐ nie

6. Wie oft sprechen Sie mit ihren Nachbarn?

☐ sehr oft ☐ oft ☐ gelegentlich ☐ selten ☐ nie

(*)sehr oft= Mehr als einmal pro Woche; oft= einmal die Woche; gelegentlich= einmal im Monat; selten= Weniger als einmal im Monat; Nie= Nie

7. Wie oft helfen SIe Ihren Nachbarn oder Freunden im Haushalt, finanziellen Problemen oder emotionalen Problemen?

☐ sehr oft ☐ oft ☐ gelegentlich ☐ selten ☐ nie

8. Wo treffen Sie sich mit Freunden / Bekannten?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Wohnung von Freunden/Bekannten	☐	☐
öffentliche Gebäude	☐	☐
Park / Plätze	☐	☐
Straßen / Gassen	☐	☐
Anderes _____	☐	☐

9.Wo verbringen Sie Ihre Freizeit?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Wohnung von Freunden/Bekannten	☐	☐
öffentliche Gebäude	☐	☐
Park / Plätze	☐	☐
Straßen / Gassen	☐	☐
Anderes _____	☐	☐

10. Kennen Sie Menschen, die Ihnen ohne Schwierigkeiten helfen können bei Haushalt, finanzielle Probleme oder emotionale Probleme? Falls Ja, wo?

☐ in meinem Haus ☐ in meiner Nachbarschaft ☐ in der Stadt ☐ im Land ☐ nicht hier

Falls Ja, wie viele? _____

11. Verrichten Sie freiwillige Arbeit ? Falls ja, Wo?

☐ Ja ☐ Nein ☐ innerhalb der Nachbarschaft ☐ außerhalb der Nachbarschaft

12. Nehmen Sie aktive an einer Gemeinschaft, Gruppe oder einem Klubteil? Wenn Ja, welche? Sind diese innerhalb oder außerhalb Ihres Ortsbereich?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Sport	☐	☐
religiöse Gruppe	☐	☐
Soziale und kulturelle Vereine	☐	☐
Politische Vereine	☐	☐
Umwelt-, Tier oder Bürgervereine	☐	☐
Anderes_____	☐	☐

13. Wie zufrieden sind Sie in Ihrer Nachbarschaft zu leben?

☐ sehr zufrieden ☐ zufrieden ☐ weder noch unzufrieden ☐ unzufrieden ☐ sehr unzufrieden

14. Wie würden Sie die Qualität Ihrer Nachbarschaft bewerten?

☐ sehr gut ☐ gut ☐ akzeptabel ☐ schlecht ☐ sehr schlecht

15. Haben Sie Diskrimination aufgrund Ihrer Hautfarbe, Herkunft, Religion, Sprache oder Ihres Geschlechts erfahren?

☐ sehr oft ☐ oft ☐ gelegentlich ☐ selten ☐ nie

Aus welchen Gründen? (mehrere Antworten möglich)

☐ Hautfarbe ☐ Herkunft ☐ Religion ☐ Sprache ☐ Geschlecht

Markieren Sie für die folgenden Fragen wie stark Sie der Aussage zustimmen:

16. Ich habe das Gefühl meine Nachbarn in einer Notlage nach Hilfe fragen zu können.

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

17. Es herrscht ein großer Gemeinschaftssinn in der Nachbarschaft.

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

18. Die Menschen in dem Gebiet sind sehr freundlich.

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

19. Ich fühle mich in meiner Nachbarschaft/Ortsbereich sehr sicher, auch wenn ich nachts allein unterwegs bin.

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

20. Mein Ortsbereich / Meine Nachbarschaft ist ein Ort, an dem Menschen verschiedener Nationalitäten gut miteinander auskommen.

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

21. I fühle mich als ein Teil der Gemeinschaft

☐ Stimme absolut zu ☐ Stimme zu ☐ Weder noch ☐ Stimme nicht zu ☐ Stimme absolut nicht zu

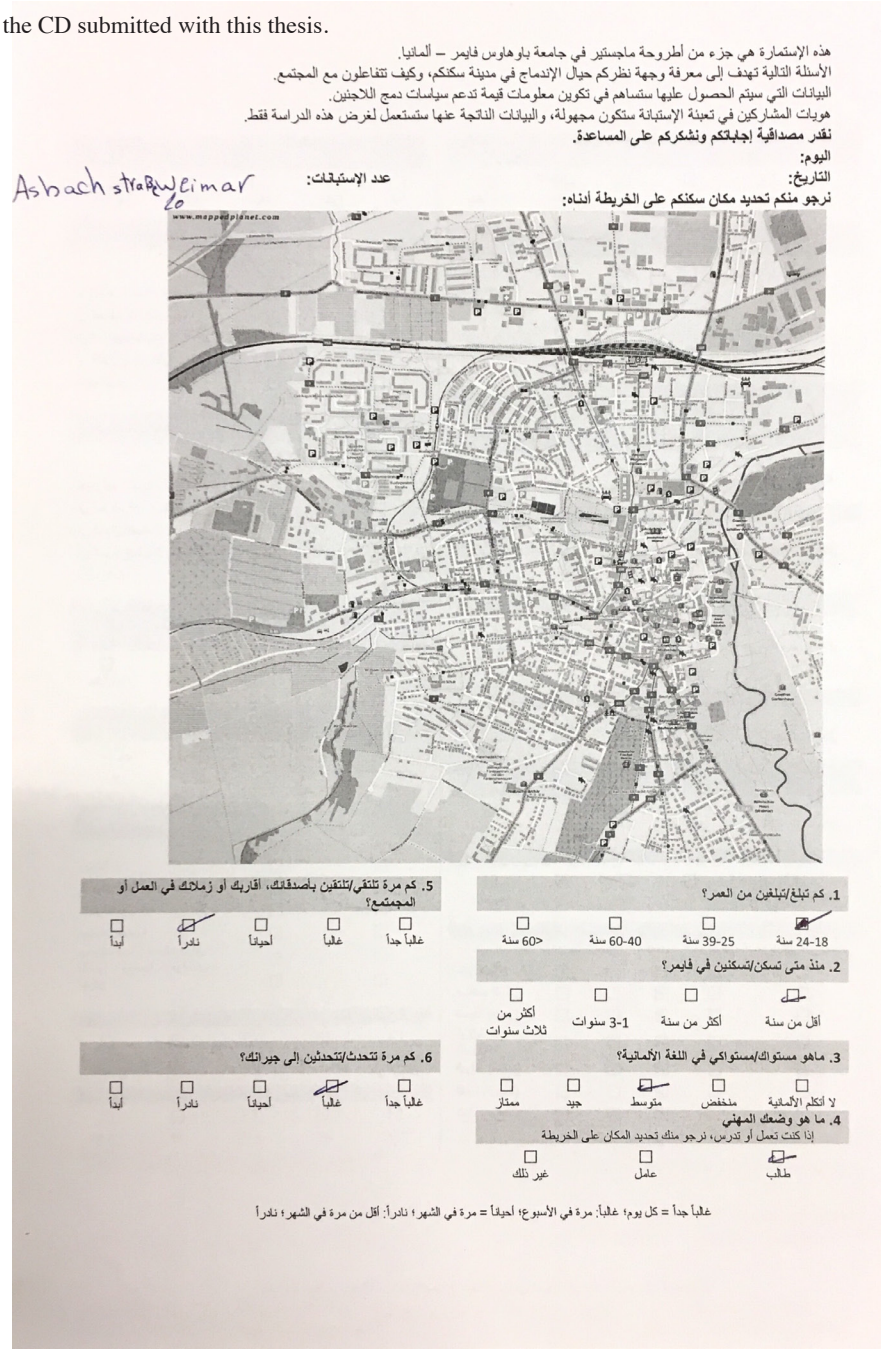
22. Ich fühle mich den folgenden Gruppen zugehörig:

	Stimme absolut zu	Stimme zu	Weder noch	Stimme nicht zu	Stimme absolut nicht zu
Geburtsort	☐	☐	☐	☐	☐
Nachbarschaft	☐	☐	☐	☐	☐
Stadt (Weimar)	☐	☐	☐	☐	☐
Region (Thuringuia)	☐	☐	☐	☐	☐
Land (Deutschland)	☐	☐	☐	☐	☐
kontinent (Europe)	☐	☐	☐	☐	☐
Welt	☐	☐	☐	☐	☐

(*)sehr oft= Mehr als einmal pro Woche; oft= einmal die Woche; gelegentlich= einmal im Monat; selten= Weniger als einmal im Monat; Nie= Nie

Appendix 9_ Answered questionnaire (1 sample)

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.



هذه الإستمارة هي جزء من أطروحة ماجستير في جامعة باوهاوس فايمر – ألمانيا.
الأسئلة التالية تهدف إلى معرفة وجهة نظركم حيال الإندماج في مدينة سكنكم، وكيف تتفاعلون مع المجتمع.
البيانات التي سيتم الحصول عليها ستساهم في تكوين معلومات قيمة تدعم سياسات دمج اللاجئين.
هويات المشاركين في تعبئة الإستبانة ستكون مجهولة، والبيانات الناتجة عنها ستستعمل لغرض هذه الدراسة فقط.
نقدر مصداقية إجابتكم ونشكركم على المساعدة.

اليوم:
التاريخ:
عدد الإستبانات:

Ashach straße 10 Weimar

نرجو منكم تحديد مكان سكنكم على الخريطة أدناه:

www.mappedpisnet.com

1. كم تبلغ/تبلغين من العمر؟

☐ 18-24 سنة ☐ 25-39 سنة ☐ 40-60 سنة ☐ <60 سنة

2. منذ متى تسكن/تسكنين في فايمر؟

☐ أقل من سنة ☐ أكثر من سنة ☐ 1-3 سنوات ☐ أكثر من ثلاث سنوات

3. ماهو مستواك/مستواكي في اللغة الألمانية؟

☐ لا أتكلم الألمانية ☐ منخفض ☐ متوسط ☐ جيد ☐ ممتاز

4. ما هو وضعك المهني
إذا كنت تعمل أو تدرس، نرجو منك تحديد المكان على الخريطة

☐ طالب ☐ عامل ☐ غير ذلك

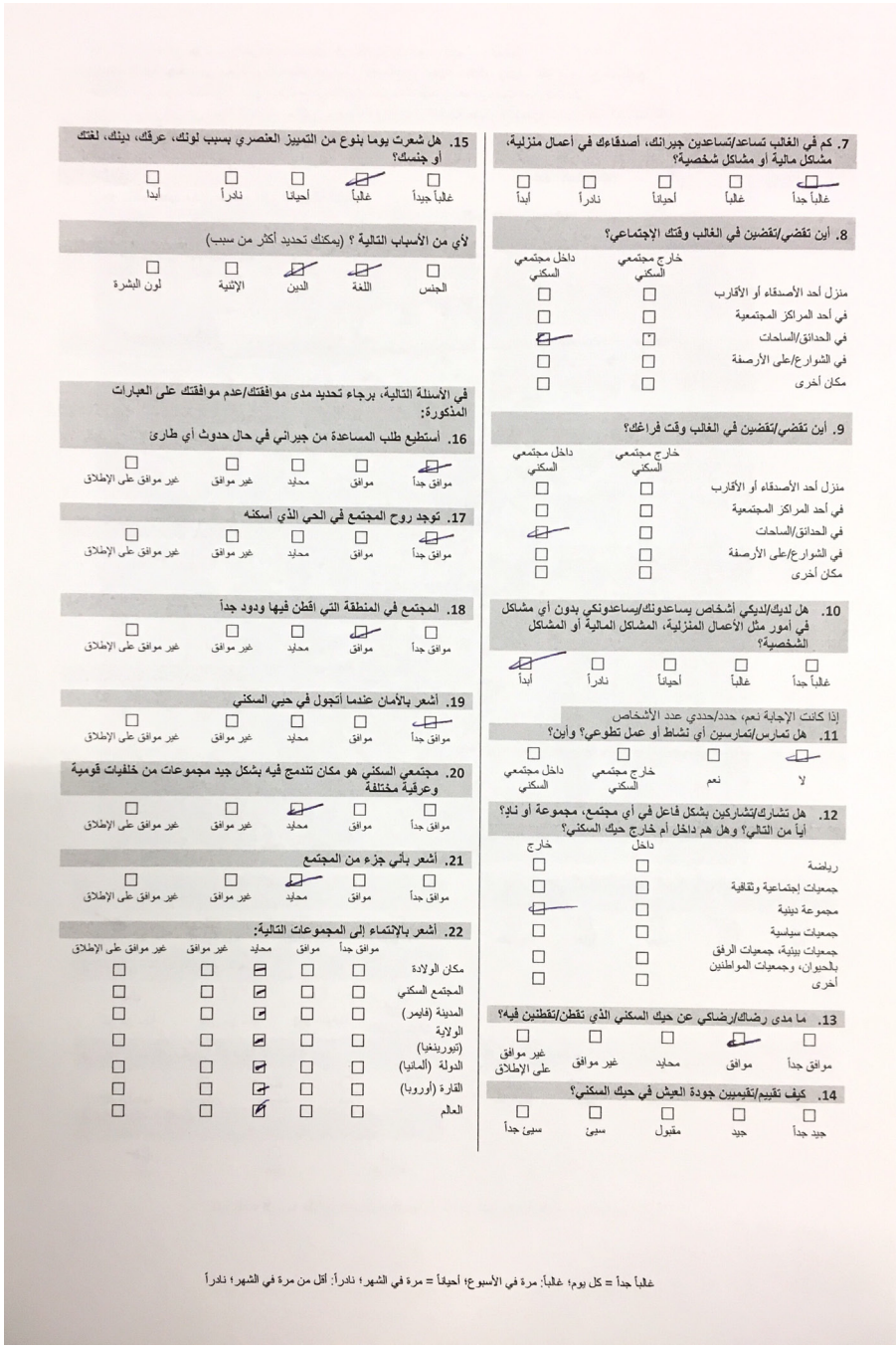
5. كم مرة تلتقي/تلتقين بأصدقائك، أقاربك أو زملائك في العمل أو المجتمع؟

☐ غالباً جداً ☐ غالباً ☐ أحياناً ☐ نادراً ☐ أبداً

6. كم مرة تتحدث/تتحدثين إلى جيرانك؟

☐ غالباً جداً ☐ غالباً ☐ أحياناً ☐ نادراً ☐ أبداً

غالباً جداً = كل يوم؛ غالباً: مرة في الأسبوع؛ أحياناً = مرة في الشهر؛ نادراً: أقل من مرة في الشهر؛ نادراً



7. كم في الغالب تساعد/تساعدين جيرانك، أصدقاءك في أعمال منزلية، مشاكل مالية أو مشاكل شخصية؟

غالباً جداً	غالباً	أحياناً	نادراً	أبداً
☑	☐	☐	☐	☐

8. أين تقضي/تقضين في الغالب وقتك الإجتماعي؟

	خارج مجتمعي السكني	داخل مجتمعي السكني
منزل أحد الأصدقاء أو الأقارب	☐	☐
في أحد المراكز المجتمعية	☐	☐
في الحدائق/الساحات	☐	☑
في الشوارع/على الأرصفة	☐	☐
مكان أخرى	☐	☐

9. أين تقضي/تقضين في الغالب وقت فراغك؟

	خارج مجتمعي السكني	داخل مجتمعي السكني
منزل أحد الأصدقاء أو الأقارب	☐	☐
في أحد المراكز المجتمعية	☐	☐
في الحدائق/الساحات	☐	☑
في الشوارع/على الأرصفة	☐	☐
مكان أخرى	☐	☐

10. هل لديك/لديكي أشخاص يساعدونك/يساعدونكي بدون أي مشاكل في أمور مثل الأعمال المنزلية، المشاكل المالية أو المشاكل الشخصية؟

غالباً جداً	غالباً	أحياناً	نادراً	أبداً
☐	☐	☐	☐	☑

إذا كانت الإجابة نعم، حدد/حددي عدد الأشخاص

11. هل تمارس/تمارسين أي نشاط أو عمل تطوعي؟ وأين؟

لا	نعم	خارج مجتمعي السكني	داخل مجتمعي السكني
☑	☐	☐	☐

12. هل تشارك/تشاركين بشكل فاعل في أي مجتمع، مجموعة أو ناد؟ أيا من التالي؟ وهل هم داخل أم خارج حيك السكني؟

	داخل	خارج
رياضة	☐	☐
جمعيات إجتماعية وثقافية	☐	☐
مجموعة دينية	☐	☑
جمعيات سياسية	☐	☐
جمعيات بيئية، جمعيات الرفق بالحيوان، وجمعيات المواطنين	☐	☐
أخرى	☐	☐

13. ما مدى رضاك/رضاكي عن حيك السكني الذي تقطن/تقطنين فيه؟

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☐	☑	☐	☐	☐

14. كيف تقيم/تقيمين جودة العيش في حيك السكني؟

جيد جداً	جيد	مقبول	سيئ	سيئ جداً
☐	☐	☐	☐	☐

15. هل شعرت يوما بنوع من التمييز العنصري بسبب لونك، عرقك، دينك، لغتك أو جنسك؟

غالباً جداً	غالباً	أحياناً	نادراً	أبداً
☐	☑	☐	☐	☐

لأي من الأسباب التالية ؟ (يمكنك تحديد أكثر من سبب)

الجنس	اللغة	الدين	الإثنية	لون البشرة
☐	☑	☑	☐	☐

في الأسئلة التالية، برجاء تحديد مدى موافقتك/عدم موافقتك على العبارات المذكورة:

16. أستطيع طلب المساعدة من جيراني في حال حدوث أي طارئ

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☑	☐	☐	☐	☐

17. توجد روح المجتمع في الحي الذي أسكنه

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☑	☐	☐	☐	☐

18. المجتمع في المنطقة التي اقطن فيها ودود جداً

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☐	☑	☐	☐	☐

19. أشعر بالأمان عندما أتجول في حيي السكني

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☑	☐	☐	☐	☐

20. مجتمعي السكني هو مكان تندمج فيه بشكل جيد مجموعات من خلفيات قومية وعرقية مختلفة

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☐	☐	☑	☐	☐

21. أشعر بأني جزء من المجتمع

موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
☐	☐	☑	☐	☐

22. أشعر بالإنتماء إلى المجموعات التالية:

	موافق جداً	موافق	محايد	غير موافق	غير موافق على الإطلاق
مكان الولادة	☐	☐	☑	☐	☐
المجتمع السكني	☐	☐	☑	☐	☐
المدينة (فايمر)	☐	☐	☑	☐	☐
الولاية (تيورينغيا)	☐	☐	☑	☐	☐
الدولة (ألمانيا)	☐	☐	☑	☐	☐
القارة (أوروبا)	☐	☐	☑	☐	☐
العالم	☐	☐	☑	☐	☐

غالباً جداً = كل يوم؛ غالباً: مرة في الأسبوع؛ أحياناً = مرة في الشهر؛ نادراً: أقل من مرة في الشهر؛ نادراً

Appendix 10_ Answered questionnaire (1 sample)

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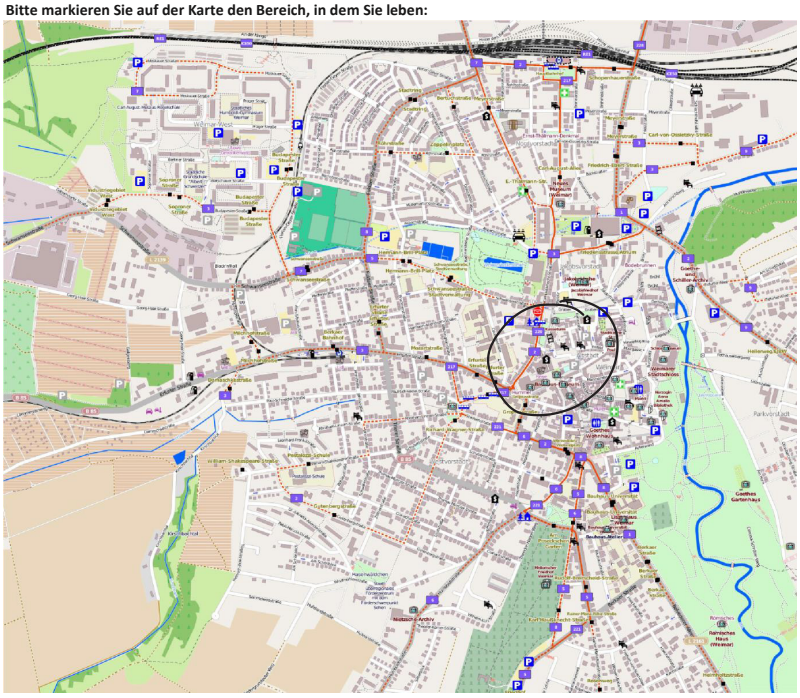
Ihre ehrlichen Antworten werden sehr geschätzt. Danke vielmals!

Date:
Location: Number of questionnaire (random):

Bitte markieren Sie auf der Karte den Bereich, in dem Sie leben:



1. Wie alt sind Sie?

☒ 18-24 ☐ 25-39 ☐ 40-60 ☐ >60

2. Seit wann leben Sie hier?

☐ - 1 Jahr ☐ +1 Jahr ☐ 1- 3 Jahre ☒ + 3 Jahre

3. Wie sind Ihre Deutschkenntnisse?

☒ fließen ☐ gut ☐ mittel ☐ wenig ☐ gar nicht

4. Was ist ihr Status? *Bitte markieren Sie auf der Karte wo Sie arbeiten/ studieren.*

☒ Student ☐ Arbeiter ☐ Arbeiter suchend ☐ Anderes

5. Wie oft treffen Sie Freunde, Verwandte oder Kollegen in der Freizeit?

☒ sehr oft ☐ oft ☐ gelegentlich ☐ selten ☐ nie

6. Wie oft sprechen Sie mit ihren Nachbarn?

☐ sehr oft ☐ oft ☐ gelegentlich ☒ selten ☐ nie

(*)sehr oft= Mehr als einmal pro Woche; oft= einmal die Woche; gelegentlich= einmal im Monat; selten= Weniger als einmal im Monat; Nie= Nie

7. Wie oft helfen SIe Ihren Nachbarn oder Freunden im Haushalt, finanziellen Problemen oder emotionalen Problemen?

☐ ☒ ☐ ☐ ☐

sehr oft | oft | gelegentlich | selten | nie

8. Wo treffen Sie sich mit Freunden / Bekannten?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Wohnung von Freunden/Bekannten	☒	☒
öffentliche Gebäude	☒	☒
Park / Plätze	☐	☐
Straßen / Gassen	☐	☐
Anderes _____	☐	☐

9.Wo verbringen Sie Ihre Freizeit?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Wohnung von Freunden/Bekannten	☒	☒
öffentliche Gebäude	☒	☒
Park / Plätze	☐	☒
Straßen / Gassen	☐	☐
Anderes _____	☐	☐

10. Kennen Sie Menschen, die Ihnen ohne Schwierigkeiten helfen können bei Haushalt, finanzielle Probleme oder emotionale Probleme? Falls Ja, wo?

☒ ☐ ☒ ☒ ☐

in meinem Haus | in meiner Nachbarschaft | in der Stadt | im Land | nicht hier

Falls Ja, wie viele? _____

11. Verrichten Sie freiwillige Arbeit ? Falls ja, Wo?

☐ ☒ ☐ ☐

Ja | Nein | innerhalb der Nachbarschaft | außerhalb der Nachbarschaft

12. Nehmen Sie aktive an einer Gemeinschaft, Gruppe oder einem Klubteil? Wenn Ja, welche? Sind diese innerhalb oder außerhalb Ihres Ortsbereich?

	innerhalb der Nachbarschaft	außerhalb der Nachbarschaft
Sport	☐	☒
religiöse Gruppe	☐	☐
Soziale und kulturelle Vereine	☒	☒
Politische Vereine	☐	☐
Umwelt-, Tier oder Bürgervereine	☐	☐
Anderes_____	☒	☒

13. Wie zufrieden sind Sie in Ihrer Nachbarschaft zu leben?

☒ ☐ ☐ ☐ ☐

sehr zufrieden | zufrieden | weder noch unzufrieden | unzufrieden | sehr unzufrieden

14. Wie würden Sie die Qualität Ihrer Nachbarschaft bewerten?

☐ ☒ ☐ ☐ ☐

sehr gut | gut | akzeptabel | schlecht | sehr

15. Haben Sie Diskrimination aufgrund Ihrer Hautfarbe, Herkunft, Religion, Sprache oder Ihres Geschlechts erfahren?

sehr oft: ☒ | oft: ☐ | gelegentlich: ☐ | selten: ☐ | nie: ☐

Aus welchen Gründen? (mehrere Antworten möglich)

Hautfarbe: ☒ | Herkunft: ☒ | Religion: ☐ | Sprache: ☒ | Geschlecht: ☐

Markieren Sie für die folgenden Fragen wie stark Sie der Aussage zustimmen:

16. Ich habe das Gefühl meine Nachbarn in einer Notlage nach Hilfe fragen zu können.

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☒ | Stimme absolut nicht zu: ☐

17. Es herrscht ein großer Gemeinschaftssinn in der Nachbarschaft.

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☐ | Stimme absolut nicht zu: ☐

18. Die Menschen in dem Gebiet sind sehr freundlich.

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☐ | Stimme absolut nicht zu: ☐

19. Ich fühle mich in meiner Nachbarschaft/Ortsbereich sehr sicher, auch wenn ich nachts allein unterwegs bin.

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☐ | Stimme absolut nicht zu: ☐

20. Mein Ortsbereich / Meine Nachbarschaft ist ein Ort, an dem Menschen verschiedener Nationalitäten gut miteinander auskommen.

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☐ | Stimme absolut nicht zu: ☐

21. Ich fühle mich als ein Teil der Gemeinschaft

Stimme absolut zu: ☐ | Stimme zu: ☐ | Weder noch: ☐ | Stimme nicht zu: ☐ | Stimme absolut nicht zu: ☐

22. Ich fühle mich den folgenden Gruppen zugehörig:

Geburtsort	Stimme absolut zu	Stimme zu	Weder noch	Stimme nicht zu	Stimme absolut nicht zu
Nachbarschaft	☐	☐	☐	☐	☐
Stadt (Weimar)	☐	☐	☐	☐	☐
Region (Thuringuia)	☐	☐	☐	☐	☐
Land (Deutschland)	☐	☐	☐	☐	☐
kontinent (Europe)	☐	☐	☐	☐	☐
Welt	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
schlecht	☐	☐	☐	☐	☐

(*)sehr oft= Mehr als einmal pro Woche; oft= einmal die Woche; gelegentlich= einmal im Monat; selten= Weniger als einmal im Monat; Nie= Nie

Note: Due to the large research material available, please find a full Appendix version in the CD submitted with this thesis.

Extended research material is available on digital version: mariavictoriabehler@gmail.com

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