

ID 1324 | EVALUATING THE ROLE OF PUBLIC SPACES IN PROMOTING SOCIAL INTERACTION IN DIVIDED CITIES. THE CASE STUDY OF NICOSIA, CYPRUS

Marija Kukoleca¹, Ana Mafalda Madureira¹, Javier Martinez¹

¹Faculty of Geo-Information Science and Earth Observation, University of Twente
m.madureira@utwente.nl

ABSTRACT: Social interaction is the contact between individuals, groups and environments. There are different levels of social interaction, starting with superficial ones, i.e. observing other individuals and greeting them, to a high level of interaction that can be found in neighbourhoods where individuals form communities and share emotional investment in the same things. Public spaces such as streets, plazas and parks have the ability to facilitate and promote social interaction, because they create opportunities for people to interact in the form of activities and special events. The UN-Habitat defines social interaction as an element of public space. Divided cities originate as the result of divisions within a nation. With little to no relation between the two sides of the divided city, they continue to develop independently. In cases where the citizens of the divided cities are allowed to move across the border, one place where they still come in contact with each other and have an opportunity to interact is the public space. Thus public spaces have the potential to build connections between different groups, and cultivate good will, friendship, compassion and tolerance. This paper analyses the ability of public spaces in a divided city to facilitate social interaction. It uses a mixed method design, building an index of social interaction to quantify the ability of public spaces to promote social interaction, and conducting expert interviews to design and validate the index and its results. The results show that the public spaces in Nicosia are not used to their full potential and there is a tendency for inhabitants to focus on spaces that offer activities such as shopping, cafes and restaurants, and festivals. The public spaces which had a larger number of such activities had a higher ability to promote social interaction. The social dimension of public spaces demonstrated a high level of significance. The presence of both communities in the public spaces, as well as the occupant density had a great impact on the outcome of the index, and therefore, on the ability of public spaces to promote social interaction.

1 INTRODUCTION

Nicosia is both the capital of the Republic of Cyprus and the Turkish Republic of Northern Cyprus. A UN-administered buffer zone still divides the island and passes through the centre of Nicosia. This buffer zone, also referred to as the “dead zone”, can only be crossed through checkpoints. Currently there are three crossing points in Nicosia, around which several public spaces exist, ranging from commercial streets to parks and markets. This paper analyses opportunities for social interaction in a divided city, by focusing on the ability of public spaces in Nicosia to enable this social interaction among the divided communities.

Divided cities originate as the result of nation divisions (Kliot & Mansfeld, 1999). With little to no relationship happening, the two sides of a divided city continue to develop independently. The spatial division of a wall creates a distinct urban environment on either side of it. This division of space has a physical function as much as it affects the administrative and political structure, thereby creating an imbalanced distribution of resources and opportunities (Abdelmonem & McWhinney, 2015). It also becomes a negative feature that deters mobility, interaction and social cohesion. The built fabric becomes an object of remembrance that is paradoxical and contested, with different meanings and connotations (Bevan, 2007).

However, in cities where the citizens are allowed to move across the border, public spaces provide one option for shared spaces where people can interact (Pullan et al., 2012b), can become a common space for shared functions and social activities, and important catalysts for change which allow people to experience life on the other side and bond with their neighbors. This interaction discourages stigmatization of “the other” through shared experiences that promote mutual trust and respect. Hence public spaces, if accessible to both sides of the city, become places of exchange with a significant social role as a complex

system of open socio-spatial engagement (Marcus & Francis, 1998). Even streets can act as shared spaces and binding factors within divided cities (Bollens, 2006, UN Habitat, 2013).

Researchers have long focused on divided cities, and on public spaces within these divided cities, particularly focusing on the political or historical aspect of the division (Till et al. 2013, Öngül 2012). Others stress the importance of public spaces as binding mechanisms in divided cities, and analyse the physical aspect and the ways people use the space (Nagle, 2009). Where a physical barrier that divides the city sends a clear message of exclusion, public spaces contest this notion by presenting a shared space where everyone is welcome. Gaffikin et al. (2010) analyse the role urban design plays in divided cities, concluding that public spaces provide an opportunity for social contact, which can lead to social interaction. Others observed how people interact with the public space and within one (Abu-Ghazze 1999, Talen 1999).

In this paper we developed an index that measures the ability of public spaces to promote social interaction in a divided city, and confronted the index's conclusions with expert interviews. The results show that public spaces in Nicosia are not used to their full potential and there is a tendency for inhabitants to use public spaces where semi-public activities occur outside, in the street or in the square. The public spaces which had a larger number of such activities had a higher ability to promote social interaction. Focusing on public spaces located around the two pedestrian border crossings, we could also observe how an area marked by infrastructures of conflict (Till et al, 2013) such as the UN-administered buffer area and the wall, were slowly converting into areas where the two communities came together.

Following this introduction we discuss what are divided cities and how public spaces can enable social interaction in these cities. We then introduce Nicosia and the public spaces that were analysed, how the data was collected and analysed and how the index was built. The results will focus on the public spaces that scored highest and lowest in the index, followed by discussion and conclusions.

2 PUBLIC SPACES ENABLING SOCIAL INTERACTION IN DIVIDED CITIES

2.1 DIVIDED CITIES

Divided cities have been defined as a city comprising two or more distinct entities that have to be spatially separated, mutually exclusive and relatively homogeneous enclaves (Nagle 2009). Van Kempen (2007), and Marcuse (1993), consider highly fragmented cities to be divided cities, whereas O'leary (2007), refers to this phenomena as a political partition, where an entity becomes divided by a barricade, in form of a wall, fence or other type of physical obstacle.

The physical borders dividing cities have a practical and a symbolic function. They represent "infrastructures of conflict" (Till et al., 2013), such as walls, barricades and buffer zones, which are not only a physical divide, but also a social and symbolic one (Pullan, et.al., 2012a). The symbolic divide may be the deepest one. It causes stigmatization, feelings of insecurity and disassociation from the population on the other side (Pullan et al., 2012a). Symbols of divisions can also be "Infrastructures of peace" (Till et al., 2013), for example the "Home for Cooperation", a revitalised building in the buffer zone of Cyprus, located on a neutral territory and administered by both Greek and Turkish Cypriots. These send a message of unity and cooperation, and turn an artefact of conflict into a promise of peace (Till et al., 2013).

Even in cases where the members of the divided communities are free to move across the divide, they often opt for not to, due to personal beliefs or out of principle (Pullan et al., 2012b). In the case of Nicosia, some of the members of the Greek Cypriot population consider that by crossing the divide and showing their identification at the border, they acknowledge the legitimacy of the Turkish Republic of Northern Cyprus (Webster & Timothy, 2006).

PUBLIC SPACES

Any space accessible to the general public and part of the built environment could be considered a public space. Squares, streets, gardens, cafés and markets, among others, qualify as public spaces. Dymnicka (2010) argues that a public space is formed by the interactions of its users, while at the same time,

shaping their interactions. However, what determines a public space is a set of rules and restrictions that applies to it, and determines who can use it and how. Amin (2002) argues that most public spaces are 'places of transit' where meaningful interactions among strangers are unlikely. However there is potential for chance encounters among strangers "and in such serendipities rests the opportunity for exchange and learning that can help break barriers" (Gaffikin et al., 2010, pp. 498). In divided cities the motivation for using public spaces may arise from daily tasks, rather than to integrate with neighbors (Pullan et al., 2012b).

Public spaces have been studied based on their functions at the city level, their use and the roles of different stakeholders in shaping them (Madanipour, 2010). In its physical sense, public spaces are urban generators that stimulate communication channels with morphological, environmental and aesthetic values (Lynch, 1960; Marcinczak & Sagan, 2011; Woolley, 2003). Culturally, public spaces are points of convergence that host numerous traditional functions that allow for symbolic value embedded in identity and sense of place. The cultural and political meanings of these spaces are vital in day to day life (Low, 2000). Politically, they are spaces for demonstration, an arena for negotiations of conflict and of political actions (Van Deusen, 2002; Low, 2000; Mitchell, 1995). They can host clashes among oppositions but tensions can change over time, and the resulting effect can be witnessed in shared spaces.

The functions and activities that public spaces allow diverge extensively and so do its users. Activities in public spaces are determined by the socio-economic characteristics and political ideology of its users (Aziz, Ahmad, & Nordin, 2012; Aratani, 2010) and can change the way people behave in these spaces. Public spaces are experimental environments that groups use to legitimize themselves through decisions of where to stay, gather, and socialize (McCann, 1999). They gain genuine significance where groups can react to the condition of co-existence and overcome boundaries of division in a quest to build a consensus of shared living (Abdelmonem & McWhinney, 2015) .

Thus the roles, function and even definition of public spaces can have varied connotations. In this paper, we consider a public space as an urban structure, including but not limited to streets, squares, cafés, and parks, accessible to everyone pending a set of rules applied to all users, visible and accessible from the street level, and determined by and determining the interactions of its users.

2.3 SOCIAL INTERACTION

Social interaction is the contact between individuals, groups, and environments (Talen, 1999). Individuals and groups feel the need for social interaction, and find opportunities for it within public spaces (Drucker and Gumpert 1998, Marcus and Francis 1998).

Social interaction can happen anywhere, between any two individuals or groups. Being such an elusive phenomena, it is difficult to measure. Researchers often emphasise the importance of social interaction in public spaces on a local level, i.e. neighbourhood, or residential area. Talen (1999) found that public spaces that are attractive to visitors promote a sense of community. Hickman (2013) found that much of a neighbourhood interaction takes place in spaces such as cafés, parks and shops. One of their most important characteristics is their functional role, for example acquiring goods, entertainment or recreation.

There are different levels of social interaction, starting with very superficial interaction, i.e. observing others and greeting them, to a high level of interaction, which can be found in neighbourhoods where individuals form communities and share emotional investments in the same things (Talen, 1999). When communities are physically separated by a divide and neighbourhoods are relatively homogenous, any level of social interaction becomes relevant and contributes to the social life of a divided city.

SOCIAL INTERACTION WITHIN PUBLIC SPACES IN DIVIDED CITIES

The two major communities of the divided city perform most of their daily activities on their own sides of the divide. The places where they come in contact are limited. Public spaces provide an opportunity for people to interact, by offering a shared space where people can come in contact (Hickman, 2013).

In order for public spaces to attract visitors from both sides of the divided city and become places of social interaction, they must possess certain qualities. The aspects that influence the ability of public spaces to attract visitors and interaction can be grouped in three dimensions – Physical, Social and Activities. The physical dimension includes size and accessibility, both of which define the public space – how will it be used, how many activities and visitors can it accommodate, whether big events can be hosted. The social dimension links back to visitors and their diversity. People attract more people, therefore increasing the possibility for social interaction in public spaces. Also different types of visitors, from different communities and age groups influence the atmosphere of the public space, potentially making them more inclusive. Activities determines what types of activities and events take place in the public space, which increase its appeal, and provide reasons for people to use it. The combination of these dimensions determines the way the public space will be used, and influences its ability to accommodate and promote social interaction.

3 METHODOLOGY

3.1 DATA AND METHOD

Data was collected through expert interviews and fieldwork observation. The interviews were semi-structured and aimed at obtaining information about the social interaction between the two communities and the public spaces in the city, the way they were used, what affected the social interaction in public spaces and how the public spaces influenced social interaction. A total of 13 interviews were conducted with Turkish and Greek Cypriot experts, and international experts involved in bicomunal work.

The indicators of the index were selected through a review of the relevant literature, and further aligned based on the expert interviews and fieldwork observations. The indicators were calculated in their own unit and then standardized to values from 0 to 1. The same formula was used for standardizing the indicators, considering that all of them present benefits:

$$(\text{The value of "X"} - \text{Minimum value}) / (\text{Maximum value} - \text{Minimum value}) = \text{Standardized value of "X"}$$

Where “X” stands for the value of an indicator for a public space, while the minimum and maximum values represent the lowest and highest values of the public spaces for the indicator in question. To determine the weights for each indicator, the indicators that were prioritized are those assumed as having the biggest influence on social interaction, according to the experts’ testimonies (table 1). The exceptions are the indicators “Presence of different age groups at the public space”, that was given a value 1, if members of all age groups were present during the counting sessions, and a value 0, if any age group was not present. In “Number of events taking place in the public space”, the first category (<2 events/ month) was given the value 0. The second category (3-8 events/ month) was given a value of 0.5, and the last category, (>8 events/ month), a value of 1. The “Cafes and restaurants” sub-indicator was given a sub-weight of 0.2, while the other sub-indicators were given a sub-weight of 0.1, adding up to a total of 1, because during the expert interviews this activity was mentioned as more likely to promote social interaction.

Indicator	Data collection and measurement	Rationale	Weight of indicator
Surface area (m ²)	-Extracted from the map of Nicosia. The surface area of any structure which was not a public space was deducted from the total surface area.	Surface area determines the capacity and number of different activities that can happen in the public space. More activities make the public	0.1

		space potentially more attractive and generate opportunities for social interaction (Van Deusen, 2002)	
Accessibility ¹	The road network was used to calculate the distance of each public space to the nearest crossing point. Distances were measured considering all possible combinations with every street. The closest distance was chosen as the best result.	A public space must be accessible to the population it serves (Whyte, 1988). Public spaces that are easily reachable and at a convenient location have more visitors (Shaftoe, 2008)	-
Number of different types of activities carried out	-Guided observation Activities were counted and grouped under: Shopping; Cafes and restaurants; Education; Art and culture; Religion; Private businesses; Beauty services; Non-governmental organizations and International organizations.	The variety of activities attracts more visitors to the area. Activities can be the instigator for communities to cross divide and participate in social interaction (Pullan et al., 2012b)	0.1
Number of each type of activity carried out 2	-Guided observation	A higher number of activities of the same type offers a wider choice to the visitors, increasing chances of getting the visitors interested and spend time in the public space	0.1
Number of events taking place	Information about events in the public spaces came from websites of different organizations, expert interviews, and social media. Grouped as 2 or less per month; 3 to 8 per month; more than 8 per month.	Events such as festivals or concerts have the ability to build solidarity among participants (Shaftoe, 2008). Events attract visitors and make the space more interesting (Holland et. al. 2007).	0.15
Occupant density, walking	-Guided observation Counting the number of people in the public space and dividing it by surface área. The unit of this indicator is people per square meter. Public spaces are divided into sections, of approximately the same size, via imaginary lines, called “gates”, which are observed in five-minute counting sessions. Only the people who cross the imaginary line are counted. The counting sessions are repeated at each gate at different times of day (Grajewski & Vaughan, 2001). The counting occurred at three times of day, 8am to 10am, noon to 2pm and 4pm to 6pm.	The more visitors circulate through the public space, the higher the opportunity for social interaction. The occupant density can also indicate the popularity of the public space	0.15
Occupant density, static	-Guided observation Similar to indicator “Occupant density, walking”. Number of people standing or sitting in the public space, inside each section. People who were sitting in cafés and restaurants were only considered if sitting outdoor.	The more visitors spend time in the public space the higher the opportunity for social interaction. The occupant density can also indicate the popularity of the public space	0.15
Presence of different age groups	-Guided observation The age group classes are: 0-14; 15-24; 25-44; 45-64; 65 and older (Provisional guidelines on standard international age classifications,	Presence of all age groups in the public space indicates that it meets diverse needs and that it is safe and inviting	0.05

Table 1 Indicators, data collection, rationale and weight of the index of social interaction

1. The indicator of accessibility was not relevant in the case of Nicosia, because all the public spaces identified were equally accessible, and at a close proximity to one another. Thus it would not have a significant contribution to the outcome of the index.
2. During the expert interviews, it was determined that locally owned shops and cafés have a greater impact on social interaction. Thus the locally owned activities were given a higher weight.

3.2 CASE STUDY

This paper focuses on the divided city of Nicosia, in Cyprus, which is divided by an UN-administered zone, also known as the “buffer zone”, which can only be crossed through checkpoints. Currently, there are three checkpoints in the city. The Ayios Dhometios (Metehan) crossing, located in the western suburb of Nicosia, is mostly used by cars. The Ledra Palace crossing is located just outside the Venetian walls that circle the old town, the center of the city. The Ledra Street crossing is located in the very center of the old town. Ledra Palace and Ledra Street are intended for pedestrians. Opening the border crossings has helped the economic development of both sides of Nicosia, and revived the public spaces in the area (Gaffikin et al., 2010). The analysis focused on public spaces in the vicinity of Ledra Palace and Ledra Street. The public spaces analyzed also needed to: be accessible to everyone, and no entrance fee charged; the users occupy it for an amount of time longer than needed just to pass through it; the space is used on a daily basis, not only during special events; it is used by the members of both majority communities in Nicosia. Based on field observation and expert interviews seven public spaces were considered, three of which are located on the Greek side of Nicosia (Ledra Street, Faneromeni Square and the Municipal gardens), three are on the Turkish Cypriot side (Lokmaci Street, Buyuk Han market, and Bandabulya market), and one located entirely in the UN buffer zone (Markou Drakou Street) (figure 1).

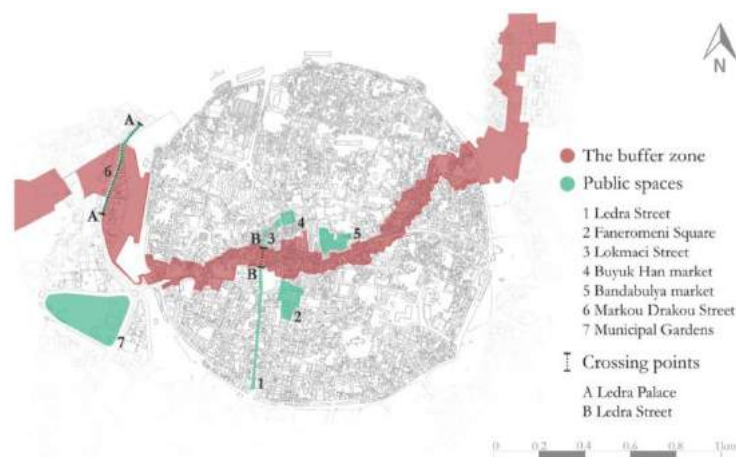


Figure 1 Location of crossings and public spaces analysed

Ledra Street is a pedestrian area with many shops, cafés and restaurants. A department of the University of Cyprus is also located there and brings students and young people to the area. According to the experts, Ledra Street and the surrounding areas were revived after the Ledra crossing opened in 2008: “Ledra Street became more alive, right now, after the borders were opened. It’s more commercialised (than the north side), [...] there are many communities, not just Greek Cypriots, and Turkish Cypriots, but many tourists walking and visiting the place.” (Interview 7).

Faneromeni Square hosts one of the oldest schools in Cyprus, a church, a mosque and a museum. The area also includes a plateau and a network of alleys with cafés and shops and is very popular with both communities. “Faneromeni is not being used because it’s a square, but because it’s part of a café. If cafés bring their chairs outside, it is still public in that sense.” (Interview 1).

The Lokmaci Street was the street of craftsmen and tradesmen, and this tradition lives on in the types of shops found nowadays. There are also local cafés. The area gained significance after the Ledra street crossing was opened. “This area emerged after the borders were opened. It was deserted before the checkpoints opened, now they have come alive. They have attracted new and interesting uses, like cafés, [...]visited by all sorts of people. The mixing of different people creates a culture of diversity.” (Interview 11)

The Buyuk Han market is used as a market and a public space, hosting cafés, restaurants and several shops, locally owned, that sell hand-made products and typical Cypriot ornaments, artist workshops and studios. Several festivals take place here, as well as food markets and live music sessions. Every Saturday, there is a standing meeting for Greek and Turkish Cypriots at one of the cafés and everyone is welcome to join. “Buyuk Han is a prime location, where Greek and Turkish Cypriots meet.” (Interview 11).

The Bandabulya market is a municipal market dating back to 1939, located in the old town. Vendors, mostly Turkish Cypriot, sell fresh fruits and vegetables, meat, ornaments and souvenirs. There are art studios, cafés and restaurants. The market attracts tourists and Greek and Turkish Cypriot population. However, the majority of the users who sit in the cafés and spend time here are the members of the local, older population. “Bandabulya is the old market. [...] here you would see the Greek Cypriots also, but I don’t know if you would see them spending a lot of time. They would go there for shopping” (Interview 6).

The Markou Drakou Street, located entirely in the buffer zone, offers a neutral ground for Greek and Turkish Cypriots, with many meetings and political discussions taking place here. International and non-governmental organizations are situated here, mainly in the “Home for Cooperation”, an educational centre, where events, dialogues, workshops and Greek and Turkish language courses take place. It also hosts a café where events are organized, such as bicommunal music nights, dance lessons, and festivals. Some experts observed that the visitors of the Markou Drakou Street are always the same people. Several private businesses also locate here, and a restaurant where many diplomatic events take place: “This space here ok, it’s controlled by the UN, but it’s usually very quiet unless somebody arranges an event or something. [...] The “Home for cooperation” is very active” (Interview 10).

The Municipal Gardens are a large park, one of the few in Nicosia. Besides benches, a children playground, and one café, there are no activities here. According to some experts, they are used mainly by other minority communities during weekends, or during events. “The Municipal Gardens are frequented by Sri-Lankans and Filipinos. The Asian minorities use it more than the Greek and Turkish Cypriots.” (Interview 13).

4 RESULTS

The main outcome of the index is a score for each of the public spaces, representing their ability to promote and facilitate social interaction between the Greek Cypriot and the Turkish Cypriot communities. The results as well as their position relative to the border and the distance from the nearest crossing are shown in Figure 2. The public spaces are presented on the map in graduated symbols, where the darker colours represents higher scores of the index and the lighter colours represent the lower scores.

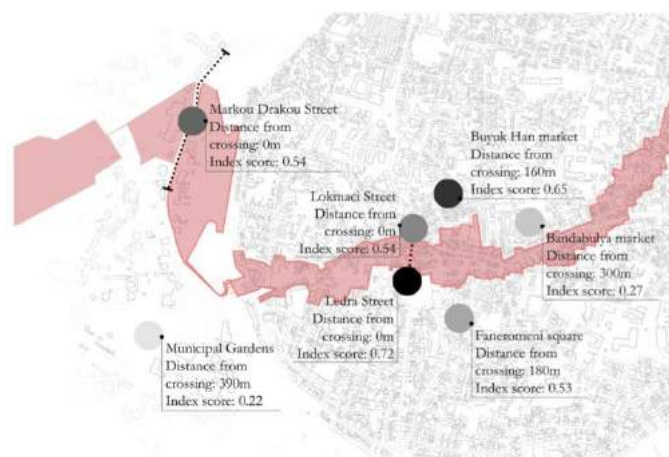


Figure 2 Graduated map of the results of the index for the public spaces.
 Source of base map: University of Cyprus, 2016.

Figures 3 to 5 show the results of the standardized values, from 0 to 1. Figure 3 illustrates the physical and social dimensions of occupant density. The public space with the biggest standardized value of the surface area indicator has the lowest occupant density, both for walking and static visitors.

Figure 4 shows which of the public spaces are visited by both members of both communities and members of all age groups. Figure 5 presents activities in public space. We can see that the pattern of activities and events does not vary extremely in the public spaces analysed.

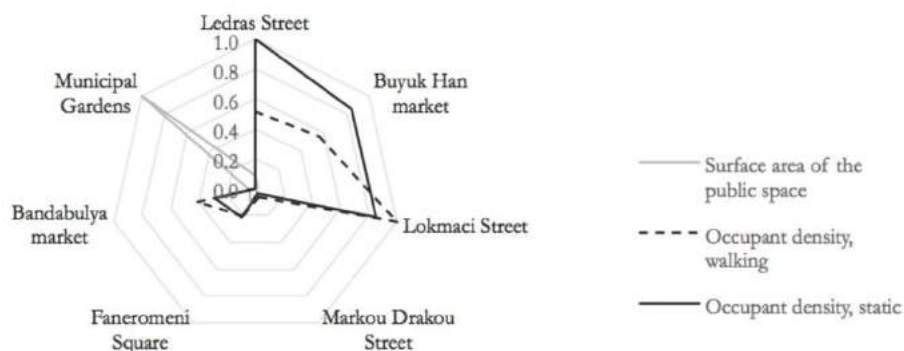


Figure 3. Standardized values of the indicators for the physical and social dimensions of occupant density of public spaces

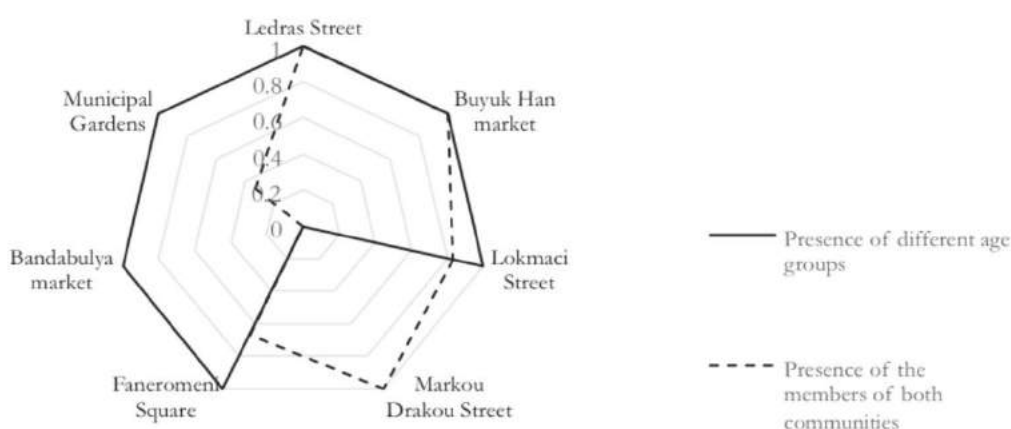


Figure 4. Standardized values of the indicators for the social dimension of diversity in public spaces

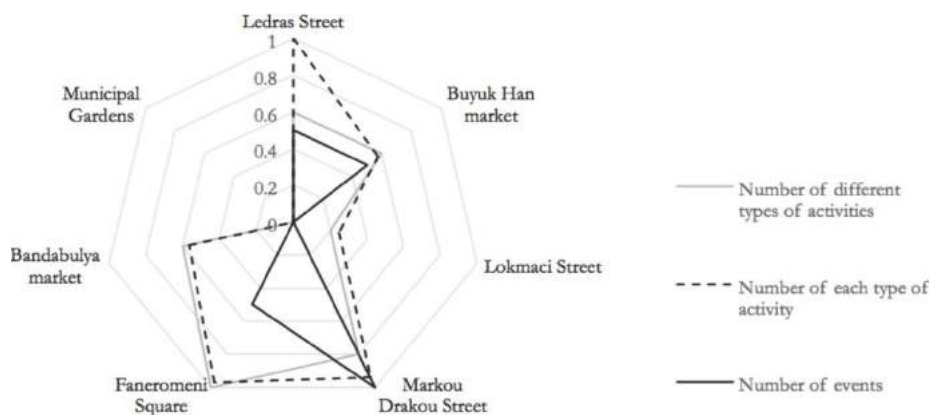


Figure 5. Standardized values of the indicators for the activity dimension of public spaces

We will present only the public spaces with the highest and lowest score in the social interaction index: Ledras street and the Municipal gardens. The results for the Ledra Street are dominated by the fact that the area has the highest number of shops and cafés and restaurants among all the analysed public spaces, both local and brand owned. There is also a high number of people occupying the public space, standing or sitting, considering its size, as seen in Figure 3. This can be related to the high concentration of cafés and restaurants, most of which have a sitting area outside, therefore making the outside area of the café a part of the public space, in the functional sense (figure 6).

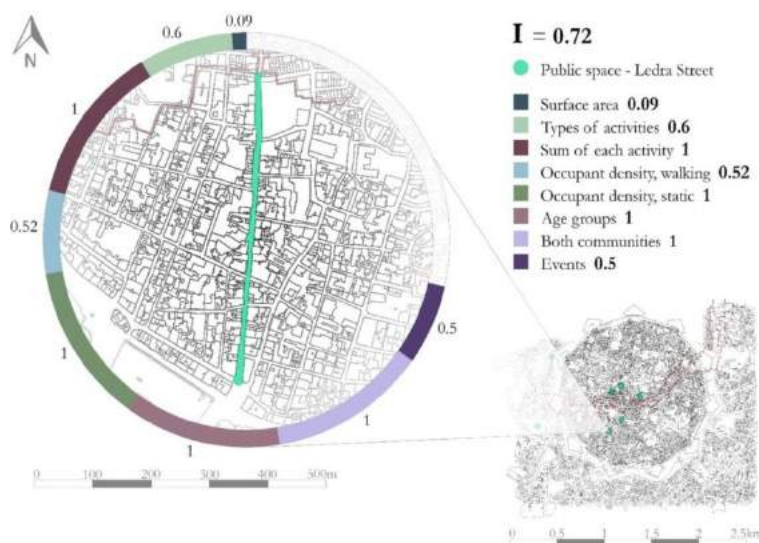


Figure 6 Result of the index of Social Interaction for Ledras Street. Source of base map: University of Cyprus, 2016

The results of the index of social interaction for the Municipal Gardens are shown in Figure 7. In most of the indicators the public gardens score 0. However, this does not mean that the occupant density for visitors that are walking or spending time in the Municipal Gardens is 0 people per square meter, it simply means that the value of these indicators was the lowest among all of the public spaces before they were standardized. Some of the experts mentioned events that happen in the Municipal Gardens, but due to the low frequency of these events, this indicator also had a low score.

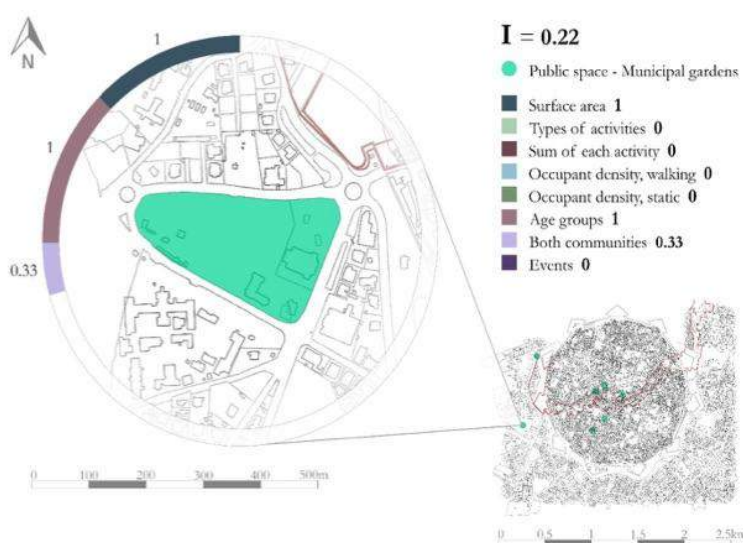


Figure 7 Result of the index of Social interaction for the Municipal gardens. Source of the base map: university of Cyprus, 2016

5 DISCUSSION AND CONCLUSION

This paper analysed the social interaction in public spaces of divided cities. An index of social interaction was designed and used as a tool to quantify the ability of public spaces to promote social interaction, and applied to the divided city of Nicosia. Different public spaces have different characteristics and qualities that attract visitors, therefore making it harder to compare them. The results of this index were confronted with the input of experts, to better understand why the characteristics of the analysed public spaces might enable or hinder social interaction.

All public spaces analysed are publicly owned areas and properties, with free access. The majority of these spaces are located within and around the center of the city, and in the vicinity of the crossing points. Until the opening of the Ledra Street crossing, this area was heavily militarized. Even though the area was used, it became significantly more visited and lively after the crossings opened. Some of the public spaces in this area were also revived and reopened. For the newer generations of Cypriots, frequenting and sharing these spaces with the community from the other side of the divide is still a new concept. People are going back to using, or learning to use the area of the walled city and the public spaces within it for social and civic life, as opposed to having these spaces used for militarized, border defining purposes. “Infrastructures of peace”, like the “Home for Cooperation”, are being built around and replacing “infrastructures of conflict” (Till et.al. 2013) namely the militarized area. One of the main streets and public spaces in the pre-conflict era was the Ermou Street. Now, the UN buffer zone passes through the majority of the Ermou Street, restricting access to it. However, the citizens of Nicosia still remember the cooperation and sharing the spaces of the city, and commemorate it through a festival called “Ermou 1900”, organized by the “Centre of Visual Arts and Research”, an example of events happening in public spaces that evoke memories of conflict and division, but also of reunion and peace: “Greek and Turkish Cypriot craftsmen, peddlers, come here in Ermou Street, and we dress up people as they were in the 1900s, and they sell their products, as they used to in the 1900s at Ermou Street.” (Interview 12). Ermou street is an example of a public space that vanished with the division. Others emerged from it, like Markou Drakou Street that hosts the “Home for Cooperation”.

According to the experts testimonies, the role of public spaces as places of social interaction is significant because these are the rare spaces where the two communities come in contact and have the opportunity to interact. This implies that the city is acquiring new “places of contact” (Abu-Ghazze, 1999; Farida, 2013; Talen, 1999) between the two communities, the challenge now is how to turn these casual interactions into occasions to overcome the city’s divide: “I think that public spaces help people to come together, and be active, instead of being individuals. They become part of a team. It’s a place to connect. [...] I think it’s a great way to have people in an open space and react with each other” (Interview 9).

The qualities that influence the ability of the public space to promote social interaction are incorporated in three dimensions: physical, social and activity in the public space. It is the representation of these dimensions and their combination that determines the ability of public spaces to promote social interaction. The physical dimension includes the size and the accessibility of the public space. Size was considered as beneficial due to the increased surface area available for hosting various activities such as shops, cafés, events and festivals, hence more people. However, the public space with the largest surface area is the one with the lowest score of the index of social interaction. This finding concurs with the study of Abu-Ghazze (1999), who found that, in the context of residential areas, smaller open spaces felt more inviting and intimate to residents. Residents also preferred smaller public spaces because its users were then more recognizable. Even though that study was applied to public spaces in residential areas, it lends some insight into why in Nicosia, it is the smaller public spaces that have a bigger role in promoting social interaction and instigate the stronger connections between their users.

The social dimension of public spaces included the indicators of occupant density walking and static, and diversity (of age groups and communities). The public spaces with the highest score are the ones with the highest occupant density and presence of different age groups, except for Markou Drakou Street. Activities included the different types of activities, their individual number and the number of events in the public space, important aspects in Nicosia’s relationship with public spaces as seen from the expert interviews. Markou Drakou Street has the single highest score in the indicator of events in public spaces, and significantly high scores of the different types of activities and each type of activity.

The social interaction in Nicosia is place-dependent. The majority of experts agree that the form of interaction between the Greek and Turkish Cypriots depends on the place where it’s happening. However, it is present to a certain degree, especially in cafés and in areas with high concentrations of both communities.

Experts’ testimonies on the use of public spaces and their role in Nicosia acknowledge that they are not used to their full potential. There is a tendency for inhabitants to use public spaces where semi-public activities develop outside, in the street or in the square. This is the case of cafés and restaurants, via their esplanade areas, but also shops or events that “spill over” into the public street. The public spaces which had a larger number of such activities had a higher ability to promote social interaction. This might be

related to the fact that the area where most of these spaces are located is close to the buffer zone, and only recently became available. “I think the role of public spaces is not very prominent in the Cypriot culture. It’s not particularly visited or populated. It’s not a major element in the city. Of course it’s there, and people put chairs and they sit there and they have coffee, but people go to the restaurants, they go to cafés. If you go to any part of Nicosia, you find people in cafés, rather than in a square.” (Interview 11)

“I think these are the spaces which were previously the border areas that people had common memories of those spaces, and now they have been opened up. And because they are spaces gluing the city together, or linking the city together, they are available for interaction. It is also convenient because they are accessible. People who live for example in the north, they come to the area near the border, near the buffer zone, it’s the same with the Greek Cypriots.” (Interview 11).

BIBLIOGRAPHIC REFERENCES

- Abdelmonem, M. G., & McWhinney, R. (2015). In search of common grounds: Stitching the divided landscape of urban parks in Belfast. *Cities*, 44, 40–49.
- Abu-Ghazze, T. M. (1999). Housing Layout, Social Interaction, and the Place of Contact in Abu-Nuseir, Jordan. *Journal of Environmental Psychology*, 19(1), 41–73.
- Amin, A. (2002). Ethnicity and the multicultural city: living with diversity. *Environment and Planning A*, 34(6), 959–980.
- Aratani, Y. (2010). Public housing revisited: Racial differences, housing assistance, and socioeconomic attainment among low-income families. *Social Science Research*, 39(6), 1108–1125.
- Aziz, A. A., Ahmad, A. S., & Nordin, T. E. (2012). Flats outdoor space as a vital social place. *Asian Journal of Environment-Behaviour Studies*, 3(7), 13–24.
- Bevan, R. (2007). *The destruction of memory : architecture at war* (1st ed.). London, UK: Reaktion Books.
- Bicommunal. (2017). Retrieved February 12, 2017, from <https://www.merriam-webster.com/dictionary/bicommunal>
- Bollens, S. A. (2006). Urban planning and peace building. *Progress in Planning*, 66, 67–139.
- Drucker, S., & Gumpert, G. (1998). Public Spaces and the Right of Association. *Free Speech Yearbook*, 36(1), 25–38.
- Dymnicka, M. (2010). The end of place as we know it? Attempts at conceptualization. *Human Geographies— Journal of Studies and Research in Human Geography*, 4, 53–65. Retrieved from www.humangeographies.org.ro
- Farida, N. (2013). Effects of outdoor shared spaces on social interaction in a housing estate in Algeria. *Frontiers of Architectural Research*, 2(4), 457–467.
- Gaffikin, F., Mceldowney, M., & Sterrett, K. (2010). Creating Shared Public Space in the Contested City: The Role of Urban Design. *Journal of Urban Design*, 15(4), 493–513.
- Grajewski, T., & Vaughan, L. (2001). Space syntax observation manual. In “Space Syntax” Observations procedures manual (pp. 1–18).
- Hickman, P. (2013). “Third places” and social interaction in deprived neighbourhoods in Great Britain. *Journal of Housing and the Built Environment*, 28(2), 221–236.
- Holland, C., Clark, A., Katz, J., & Peace, S. (2007). *Social interactions in urban public places*. Bristol.
- Kliot, N., & Mansfeld, Y. (1999). Case studies of conflict and territorial organization in divided cities. *Progress in Planning*, 52(3), 167–225.
- Low, S. M. (2000). *On the plaza : the politics of public space and culture*. Austin: University of Texas Press.
- Lynch, K. (1960). *The image of the city*. Massachusetts: Joint center for urban studies .
- Madanipour, A. (2010). *Whose public space? : international case studies in urban design and development*. Taylor & Francis.
- Marcinczak, S., & Sagan, I. (2011). The Socio-spatial Restructuring of Lodz, Poland. *Urban Studies*, 48(9), 1789–1809.

- Marcus, C. C., & Francis, C. (1998). *People Places: Design Guidelines for Urban Open Space*. New York: John Wiley & Sons, Inc.
- Marcuse, P. (1993). What's so new about divided cities? *International Journal of Urban and Regional Research*, 17(3). Retrieved from <http://neighbourhoodchange.ca/wp-content/uploads/2011/06/Marcuse-1993-Whats-so-New-about-Divided-Cities-IJURR.pdf>
- McCann, E. J. (1999). Race, protest, and public space: Contextualizing lefebvre in the U.S. city. *Antipode*, 31(2), 163–184.
- Mitchell, D. (1995). The End of Public Space? People's Park, Definitions of the Public, and Democracy. *Annals of the Association of American Geographers*, 85(1), 108–133.
- Nagle, J. (2009). Sites of Social Centrality and Segregation: Lefebvre in Belfast, a “Divided City.” *Antipode*, 4(2), 326–347.
- O’Leary, B. (2007). Analysing partition: Definition, classification and explanation. *Political Geography*, 26, 886–908.
- Provisional guidelines on standard international age classifications. (1982). New York.
- Pullan, W., Anderson, J., Dumper, M., & O’Dowd, L. (2012a). Rethinking Conflict Infrastructure: How the built environment sustains divisions in contested cities (21 No. 2). London.
- Pullan, W., Anderson, J., Dumper, M., & O’Dowd, L. (2012b). Sharing Space in Divided Cities: Why everyday activities and mixing in urban spaces matter (21 No. 4). *Conflict in Cities*. London. Retrieved from www.conflictincities.org/workingpapers
- Shaftoe, H. (2008). *Convivial Urban Spaces, Creating Effective Public Places*. Sterling,VA: Earthscan.
- Talen, E. (1999). Sense of Community and Neighbourhood Form: An Assessment of the Social Doctrine of New Urbanism. *Urban Studies*, 36(8), 1361–1379.
- Till, K. E., Sundberg, J., Pullan, W., Psaltis, C., Makriyianni, C., Zincir Celal, R., ... Dowler, L. (2013). Interventions in the political geographies of walls. *Political Geography*, 33, 52–62.
- UN Habitat. (2013). *Streets as public spaces and drivers of urban prosperity*.
- Van Deusen, R. (2002). Public space design as class warfare: Urban design, the ‘right to the city’ and the production of Clinton Square, Syracuse, NY. *GeoJournal*, 58(2), 149–158.
- Van Kempen, R. (2007). Divided cities in the 21st century: challenging the importance of globalisation. *J Housing Built Environmet*, (22), 13–31.
- Webster, C., & Timothy, D. J. (2006). Travelling to the “Other Side”: the Occupied Zone and Greek Cypriot Views of Crossing the Green Line. *Tourism Geographies*, 8(2), 162–181.
- Whyte, W. H. (1988). *City: rediscovering the center*. Philadelphia: University of Pennsylvania Press.
- Woolley, H. (2003). *Urban open spaces* (1st ed.). London: Spon Press.

ID 1332 | THE COLLECTIVE SPACES SYSTEM IN COASTAL AREAS PLANNING – THE IMPORTANCE OF BUILDING A THEORETICAL FRAMEWORK OF EVALUATION OF THE APPROACH OF DIFFERENT TOOLS

Marta Aldrabinha¹

¹Faculdade de Arquitetura da Universidade de Lisboa
marta.aldrabinha@gmail.com

ABSTRACT: The specialised literature links the collective spaces system (SEC, in its Portuguese abbreviation) to: the foundation that structures the urbanized areas; the network that coordinates the different aspects of urbanisation, relating them to each other; the set of spaces the individual travels and from which he interprets and understands the city; the grid which organizes the building and which endures beyond it; an urban value, able to trigger, on its own, other economic or cultural processes,