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A Comparative Analysis of Heidegger's Approach of "Place" and Space Syntax Method in Public Spaces

Kamusal Alanlarda Heidegger'in "Yer" Yaklaşımı İle Mekan Dizim Yönteminin Karşılaştırmalı Analizi

Buse Açık Etike[1]

öz

Kentler, kullanıcıların yaşamlarında önemli bir deneyim üretim alanını oluşturmaktadır. Bu deneyimler ile kent parçasının kullanımı da değişmekte, çevresel ve ekonomik sonuçlar oluşturmaktadır. Bu nedenle deneyim üretiminin kaynağı hakkında pek çok çalışma yapılmaktadır. Bu çalışmaların temelde 2 yönü bulunmaktadır. Bunlardan ilki kent parçalarını oluşturan mekanların kullanıcılarda deneyim üretimi sonucunda "yer" kavramına dönüşmesidir. İnşa ve iskan kavramlarının sırasını tersine çeviren bu görüş, kullanıcıların iskan ettikleri yerlerde inşa ettiklerini savunmaktadır. Bu alanda yapılmış çalışmaların diğer yönü ise kent morfolojisi gibi fiziksel ögelerden elde edilen objektif veriler ile deneyimin yoğunluğunu yani bölgenin sosyal potansiyelinin tahmin edilmesine dayanmaktadır. Bu, bilimsel yönü kuvvetli bir araştırmanın temelini oluşturmakla birlikte, önce inşa daha sonra iskan etmeyi savunan bir görüş oluşturmaktadır. Bu çalışmada bahse konu iki görüş, Heidegger'in felsefesi ve Space Syntax yöntemleri kullanılarak alan çalışması üzerinden incelenmiştir. Çalışmada metotların altında yatan felsefenin derinliklerine inmek ve güvenilirliklerini test etmek amaçlanmıştır. Araştırmada her ne kadar bilimsel bir yöntem olarak tanımlanan metotların güvenilirlikleri yüksek olsa da, kullanıcı deneyimlerinin ölçümlerinde insan deneyimlerinin öznel olduğu, fiziksel çevre önemli olsa da başka etmenlerin de kullanıcı deneyimlerini etkilediği tespit edilmiştir. Sonuçta, insan deneyimlerinin sonucunda yer deneyiminin oluştuğu, fiziksel çevrenin bu deneyimlerin bir parçası olarak değişime uğradığı göz ardı edilmemelidir.

Anahtar Kelimeler: Heidegger, mekan dizimi, kamusal alan, yer, kent deneyimi

ABSTRACT

Cities constitute an important experience production area in people's lives. With these experiences, the utilization of the city parts also changes, resulting in environmental and economic consequences. Therefore, there are many studies on the source of experience production in cities. These studies have two aspects. The first of these is the transformation of the spaces that form the city into the concept of "place" with the production of experience for the users. This view, which reverses the order of the concepts of construction and dwelling, argues that the users build in the places they inhabit. The other aspect of the studies conducted in this field is based on the estimation of the intensity of the experience, that is, the social potential of the region, as a result of objective data obtained from physical elements (such as urban morphology). While this forms the basis of strong scientific research, it also constitutes an opinion that advocates first construction and then settlement. This study examines these two views through fieldwork using Heidegger's philosophy and the Space Syntax method. The study aims to go deeper into the philosophy underlying the methods and to test their reliability. Although the reliability of the methods defined as a scientific method in the research is high, it has been determined that human experiences are subjective in the measurement of user experiences, and although the physical environment is important, other factors also affect user experiences. In conclusion, it should not be ignored that the place experience is formed as a result of human experiences, and the physical environment changes as a part of these experiences.

Keywords: Heidegger, space syntax, public space, place, urban experience

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INTRODUCTION

Public spaces reveal the spirit of the place (genius loci), its people, and culture tangibly and intensely (Miao, 2001). Carr et al. (1992) defined the public space as a common ground where functional or ceremonial activities can be carried out, open and accessible to the public, either as a group or individually. In this respect, the public sphere not only constitutes the spatial order of multifaceted social phenomena but also represents an abstract area of freedom of activities and thoughts that take place or are allowed to take place due to the meaning of publicity (Ruppert, 2006). Every activity (sitting, resting, speaking, walking, announcing, etc.) carried out in this space of freedom brings along the opportunity of a unique experience that is special to the space. Therefore, public spaces can be defined as urban spaces that are between buildings, streets, and spaces that constitute our daily experiences (McGlynn, 1993).

Individuals experience countless impressions, perceptions, and reactions that make up the experience while performing activities in public spaces. Poldma et al. (2014) argue that this experience is at two levels: personal life-world experiences and ways of social interactions with others. Thus, experiences in the real world (Whyte, 1980; Habermas, 1989) also affect social communication through social activities. So that while the lifeworld is the place where the action takes place, the action state becomes the lived experience of the individuals. The map studies prepared by the Common Ground (URL 1) organization constitute an important example of the subjective existence and personal experience in the city. Streets emerge as very visible features of these maps, making the street a familiar organizer of local knowledge (Bourdieu, 1984; Crouch and Matless, 1996). In this case, the streets trigger memories; it represents an area where events take place, intersect, separate, spill (Crouch, 1998). Then the public space becomes the forefront in the production of the interactive experience of social and physical coexistence.

The way the public space produces experience is possible by defining the space as a "place". The concept of "place", which started with Philoponus in the sixth century AD and reached its peak in fourteenth-century theology and seventeenth-century physics, was assimilated to space (Casey, 1998). This place phenomenon, which degrades the space where the movements of physical objects occur, has also caused the real meaning of space to be hidden. Thus, factual data in the physical world came to the fore and excluded the subjectivity in the existential structure of human beings. Indeed, the relationship of place with space, time, and other concepts and the way these concepts are structured have rarely been the subject of detailed philosophical research (Malpas, 2006). For this reason, Heidegger's work, which is an important part of this research, has been an important tool that provides a continuous inquiry into the history of Western thought (Malpas, 2006).

The most widely used scientific method, which connects space experiences with factual data, is Space Syntax. This method argues that the structure of society exists within spatial systems and that information is transmitted through the space itself and its organization (Dursun and Saglamer, 2003; Dursun, 2007). Besides providing the desired scientific support for design interventions, this theory is also capable of describing the problems in urban projects and the reasons behind their failures, and socio-spatial theory which is often caught between scientific immaturity, descriptive inadequacy, and normative imposition and is often limited to theoretical discussions (Netto, 2015). As a reflection of the objective view, its contribution to the scientific literature has been quite high in recent years.

As a result, two different views emerge in understanding the social relations of the society in urban spaces. The problem underlying these two views is the order of formation between building and dwelling. While Heidegger defines the building as the recording of dwelling, the space syntax method implies that there is dwelling after the construction activity.

Different expressions of both views have been subjected to much criticism in the world or, on the contrary, have created various groups of fanatics. This dilemma, the conflict between the objectivity of science and the subjectivity of philosophy, and the underlying problem of these constitute the subject of this study. In the study, the degree to which the measurement of personal experiences and perceptions of people with objective tools reflects reality is evaluated.

1. Heidegger, Space and Place Experience

In 1950, Heidegger focused on the precondition of existence and the difference between the object and thing with the text titled "The Thing (Das Ding)" that he presented at the first conference he attended since his retirement. In the text titled "Building, Dwelling, Thinking (Bauen Wohnen Denken)" he later presented, he etymologically sought "place" and "experience" in the origins of building and inhabiting (Sharr, 2010). While revealing the ignored facts about human life by mathematics and science, he emphasized the relationship of the built with Dasein. For this reason, the content of Dasein gains importance in the subject-object-place relationship.

In his earlier works, Heidegger tried to find an answer to the question of what existence is, a myth that has not been questioned since Plato and Aristotle (Demirtas, 2014). While criticizing the concept of being in Greek thought, in which man is the subject and the others are objects, in the questioning phase, he explained the basis of human existence with the concept of "dasein". With the concepts of "Being" and "Time", which he refers to etymologically, Dasein expresses the human existence that is formed and shaped by time, space, language, and others (being with others/ being in time) (Gündüz, 2005). This definition, which is based on relationships, has been the pioneer of establishing other objects and things above relations again. What is important here is to discuss the meaning that the guiding understanding of Being and Time (where "Being" essentially means presence) is not a conceptual abstraction but an experience of the realization of place and the interrelationships of beings on the ground (Ryan, 2009).

In the article called "The Thing" (Heidegger, 1950), he focused on the relationship of the existent with the being. In his text, he first asked the question of what proximity is by questioning people's perception of distance through the transportation and communication opportunities provided by technology today. He stated that proximity is perceived as reaching things rather than paying attention to the nearness of things around them (Heidegger, 1971). At this point, the question of "what is a thing" draws attention. Heidegger interpreted the word thing as familiar and known objects used in daily life, which Daseins find close to themselves. He emphasized that the daily life experience of the human on the object has a place in human life as something due to the physical and mental relationship on the human rather than the visual properties of the object (Sharr, 2010). In short, Heidegger argued that the spatiality of the object is determined by the concepts of closeness (Niihe) and directionality (ausgerichtete) rather than primarily geometry and measurable distance in our encounters with equipment (Elden, 1999).

Heidegger gave the example of a jug becoming a thing to strengthen the ground of his thought and started with the definition of a jug. He made the definition of the jug based on the human experience.

> *[…]a vessel, something of the kind that holds something else within it. The jug's holding is done by its base and sides. This container itself can again be held by the handle. As a vessel the jug is something self-sustained, something that stands on its own. This standing on its own characterizes the jug as something that is self-supporting, or independent. As the self-supporting independence of something independent, the jug differs from an object. An independent, self-supporting thing may become an object if we place it before*

> *us, whether in immediate perception or by bringing it to mind in a recollective re-presentation. However, the thingly character of the thing does not consist in its being a represented object, nor can it be defined in any way in terms of the objectness, the over-againstness, of the object (Heidegger, 1971, s. 164-165).*

The jug was able to have meaningful usefulness with the emptiness inside it and be a thing as a jug. The potter shapes not only the clay in his hand but also the cavity where the liquid is located. However, the space defined by Heidegger for the inside of his jug scientifically consists of a mixture of air, and the liquid-filled in the jug can be a gift (in Heidegger's words) to people by replacing the air already present in the jug. Heidegger thinks that science has made two big mistakes at this point: first, the misconception that science is superior to all other experiences in reaching the real in its own reality, the other is the illusion, which assumes that they once had full possession of existence, despite the scientific investigation of reality. Human experiences filling and then emptying the jug, but science fails to measure it.

The concept of place, which is another dimension in the relationship of the subject with the object, is also discussed in his article "Building, Dwelling, Thinking". Heidegger (2004) started his text with two basic questions to find the connections between building and dwelling (Bauen und Wohnen). The answer to the first question, "What is a dwelling?" is directly related to the etymological origin of the words. The second question, “How much does building belong to dwelling”, is explained directly with the concepts of place, boundaries, and experience (Heidegger, 2004).

Heidegger thinks that the tool-purpose relationship that is thought to exist between building and dwelling (building to dwell) disrupts the substantive bonds between the two concepts. Heidegger explained etymologically the origins of the relationships between actions or concepts, stating that words reveal ancient meanings of actions such as archaeological remains. He also used this method when discussing the meaning of resettlement. In German, the verb Bauen, that is to build, was used in Old German with the same origin as the verbs buan, buri, buren, beuren, beuron, meaning to settle, to sit. One of the most important proofs of this is that the word Nachbar (neighborhood) contains traces of the past with the word Nachgebauer (living nearby). The transformations of the words bauen / buan /bhu / beo over time indicate the most general meaning of the word bin. The phrase “Ich bin”, that is, I exist, has the meaning of being on earth/dwelling in it. The verb Bauen also means to look after and to cultivate the field or vineyard.

Comparing the verb wohnen, to dwell in Contemporary German, with the Old Saxon verbs wuon and Gothic wunion, he drew attention to their meanings to stay and to reside. The verb wunion also draws attention not only to the action of the verb but also to how the action is, due to its meanings such as being at peace, attaining peace, and staying in peace. Heidegger claims that the verbs build and dwell come from the same origin, but today they are separated by the deterioration of the balance between them (Heidegger, 2004).

While explaining the relationship between building and dwelling, Heidegger focused on the bridge example. The bridge united the shores, marked the shores as shores, and made the river, shore, and land neighbors, and ultimately brought the earth together. The bridge, as a thing, gathered the quartet of existence and achieved reconciliation between mortals. The "place" where the bridge is located does not exist before the bridge but forms a bridge place among the potential areas along the river.

As the perception of "things", places are perceived, defined, and engraved through experience. The point where the bridge is built on the riverbank is an area previously experienced, chosen, or

determined, with specific contexts. From that moment on, the settlement activity started, and the construction process ensured that the settlement was recorded in that place.

Heidegger, on the other hand, explained the space phenomenon created by the concept of place, with boundaries. The German word raum / rum, which means space, essentially means an area opened for settlement/accommodation. In Greek, peras is defined as the space where something begins, within a border. In other words, space takes its essence from the concept of place in the sense of being within the boundaries.

As soon as the experiences of mortals give meaning to the objects, the definition of a place also changes depending on the experiences. Sharr (2017) presented the example of the slope while explaining Heidegger's experience phenomenon. In the coordinate plane, when the movement in the Z-axis is compared to the movement in the Y-axis, no difference is observed other than orientation. But he stated that there are big differences in human experience between walking on a straight path and walking up/downhill. Heidegger argued that mathematics, and science at the same time, are insufficient at this point.

2. A Morphological Evaluation: Space Syntax

Space Syntax is an understanding that focuses on providing certain movement and encounter patterns of the spatial configuration of the axes, and the way these patterns contribute to and change the spatial appearance of the axis over time (Seamon, 2007). More specifically, the theoretical framework of Space Syntax (Hillier and Hanson, 1984; Hillier and Iida, 2005) provides an analytical approach to conceptualizing and quantitatively measuring the layout of built spaces or places. Space Syntax proposes to describe how the artificial environment (especially buildings and urban street networks) is structured, in particular the way they are articulated into discrete. This definition of configuration has been proposed to explain various aspects of the environmental psychology of places, such as how people will experience the place, where they will likely move within the place, and what they will notice and remember (Montello, 2007).

This theory, which was first put forward by Bill Hillier and his team, is based on examining the configuration of the urban object, that is, the interrelationship of the parts that form and shape the urban whole, and the collective effects (Hillier, 2002; Major, 2018). Hillier et al. argue that configuration is the key to both the social meaning of the space and its social consequences (Hillier and Vaughan, 2007).

Although the space syntax method is a theory that has emerged in the field of urban and architectural science, it is used by many different fields today.

Table 1. Examples of areas where Space Syntax is used (adapted from Karimi, 2018)

Researcher	Research area
De Koning et al. 2017	Transport planning and public transport systems
Maureira and Karimi 2017	Resilience and urban planning for hazards and disasters
Shen and Karimi 2016	Social media and co-presence
Dalton 2003; Marcus, Giusti ve Barthel 2016	Environmental and spatial cognition
Dhanani, Tarkhanyan, and Vaughan 2017	Urban sprawl and regional planning, walkability studies
Raford, Chiaradia, and Gil 2007; McCahil and Garrick 2008	Cycling studies
Karimi and Parham 2012	Urban regeneration and slum upgrading
Dwimirnani and Karimi 2017	Transport-Orientated Design (TOD) and other majör infrastructural studies, urban lighting, and night economies

Researchers have also had many critical views on the space syntax method, as its approach is largely analytical and depends on various topological and mathematical concepts and procedures that transform the lived wealth of environmental and architectural experiences, actions, and situations into concrete, measurable indicators that can be easily seen and compared numerically and graphically (Seamon, 2007).

The space syntax method usually digitizes the layouts of spaces using a set of spatial descriptors based on the concept of the 'axis map'. An axis map consists of the longest and least lines that cover and connect all open areas in a settlement (Koohsari et al., 2014). In addition, axial lines also represent the longest lines of visibility in urban environments (Liu & Jiang, 2012) and are assumed to be lines of sight for people moving within a spatial network. The numerical values arising from the relations of these axes with each other indicate some outputs in the social context.

These values give information about the social life of the place through the morphology of the city. The reciprocal relationship between social life and experience reveals place experience.

3. Method

The study aims to test two theories that explain place experience with different methods. Therefore, the study compared the output of these methods by using a combination of two simultaneous steps.

In the first stage, a qualitative approach was established. Quantitative methods are supported by the positivist or scientific paradigm that leads us to see the world as a phenomenon composed of observable and measurable facts. In contrast, qualitative methods are often supported by the interpretative paradigm, which describes a world in which reality is socially constructed, complex, and constantly changing (Glesne & Peshkin, 1992). For this reason, a simplified mind map method has been adopted to measure users' place experiences. Mind map questions were directed to 30 users selected by random sampling method in the public space.

First of all, in the method used, users were asked to answer 2 questions by painting over the sketch of the research area. These are (1) the axles that the user uses the most, and (2) the axles that the user remembers the most. The third question is which activities they perform most in these axes.

The maps collected from the users overlapped each other by layering and transparentizing in the digital environment. In this way, a grading system has been created from the most used axles to the axles that are never used. According to this system, the darkest parts on the map represent the most used or remembered axes, while the light-colored parts represent the axes that are never used or little used.

The second method is to determine the integration and intelligibility of the city with the Space Syntax method. For this, an axial map of the study area was created. Then, the values investigated with the DepthMapX program were obtained.

There are some values to be considered in the Space Syntax method. The first of these is depth. It refers to each node or link to be crossed from one axis to reach the other. It refers to each node or link to be crossed from one axis to reach the other. Regarding this, the integration value is formed from the correlation of the depth of the system. If the number of connections to an axis is high, its depth is low and its integration is high (Koohsari et al., 2014). For this reason, spaces with high integration value are easily accessible spaces and therefore places where individuals encounter the most. Integration values consist of two values, global and local. The value of the depth of an axis to the axles in the whole system is called global integration (R-n), while it shows the probability and mobility of pedestrians and vehicles in the system. Three steps depth of an axis is called local integration. This value shows the mobility and encounters of pedestrians on a local scale. In both values, the more integrated a space is, the higher the chance of it being occupied more intensely by people who move (Peponis, Ross, & Rashid, 1997).

The intelligibility value, on the other hand, is the degree to which what can be seen and experienced locally in the system allows learning of the large-scale system without conscious efforts (Hillier, 1996). In short, the concept of intelligibility measures the relationship between the general urban system and the local system. This value gives an idea about the degree of probability of users understanding the area, getting lost, and finding direction. Value is determined by a correlation between connectivity and global integration (Hillier, 1996). At the same time, this value indicates that the space has a high imaginability and an identity (Gündogdu, 2014). This concept can be interpreted with a scatterplot. The fact that the values in the graph are together and form a linear equation at 45 degrees indicates that the intelligibility value is high. The connectivity value, which is used in the creation of the intelligibility value, is a value for determining the first-order easily accessible axes regarding the integration value.

In the last stage of the method, the deviations in the data from these two studies were determined and the reasons were revealed.

The study was carried out in Adana province Seyhan district. The study area is in the historical and new city center of Seyhan district, which is one of the central districts of Adana province. The historical city center is an organic and densely textured area. The new city center, on the other hand, is an area organized with a grid system as a product of planned construction in the Republican period. The first reason for choosing this area is that the diversity of activities in the region provides user diversity and thus creates a diversity of experiences. The second is that this study area attracts visitors from Adana in general and a generalizable result can be obtained.

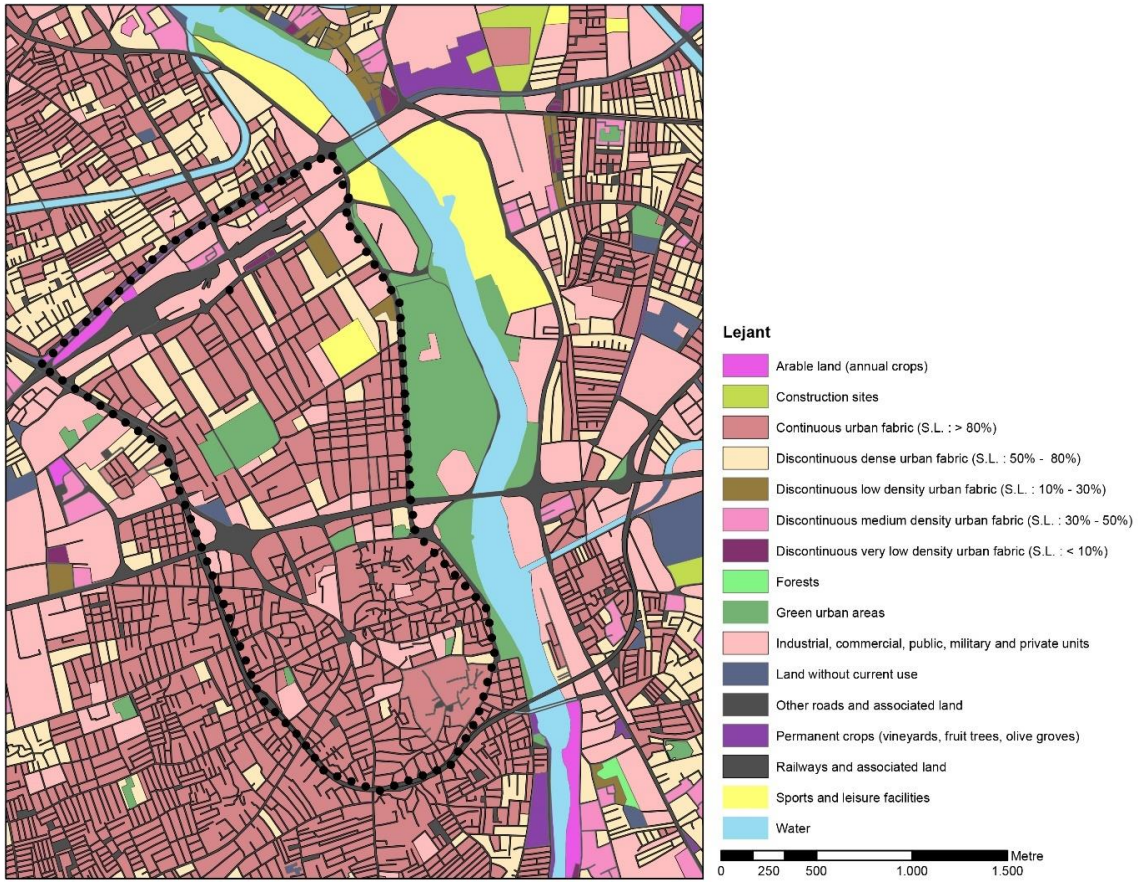

Figure 1. The urban texture and overview of the study area (edited from Urban Atlas, 2018, URL 2)

4. Results

4.1. Findings of Questionnaire

The survey was completed with 30 people in the study area. 56.66% of the interviewees are men and 43.33% are women. 40% of these people are single and 60% of them are married. Finally, the age range varies between 20 and 52, with an average of 35.

In the first question asked within the scope of the study, they were asked to mark the axes they use most in social life (Figure 1a). The answers given were layered and superimposed and Ziyapasa Ave.., Atatürk St., Gazipasa Ave., and Toros St. were found to be the most frequently used axles. In addition, Cumhuriyet St. is used medium frequently, while Abidinpasa St., Ali Münif St., Atatürk St., and Cakmak St. are less frequently used axes.

In the second question, they were asked to paint the axles that they remember or know best. In this section, the most known axles of users are Ziyapasa Ave., Atatürk St., Gazipasa Ave., Stadyum St., and Cumhuriyet St. It has been determined that the middle-level known streets by participants are Cakmak St., Abidinpasa St., Ali Münif St., and Kizilay St. Finally, little-known axles are Saydam St. and Sefa Ozer Street.

Users answered the activities they did in this area, sitting in a cafe, eating, and drinking, shopping, walking, traveling, and working.

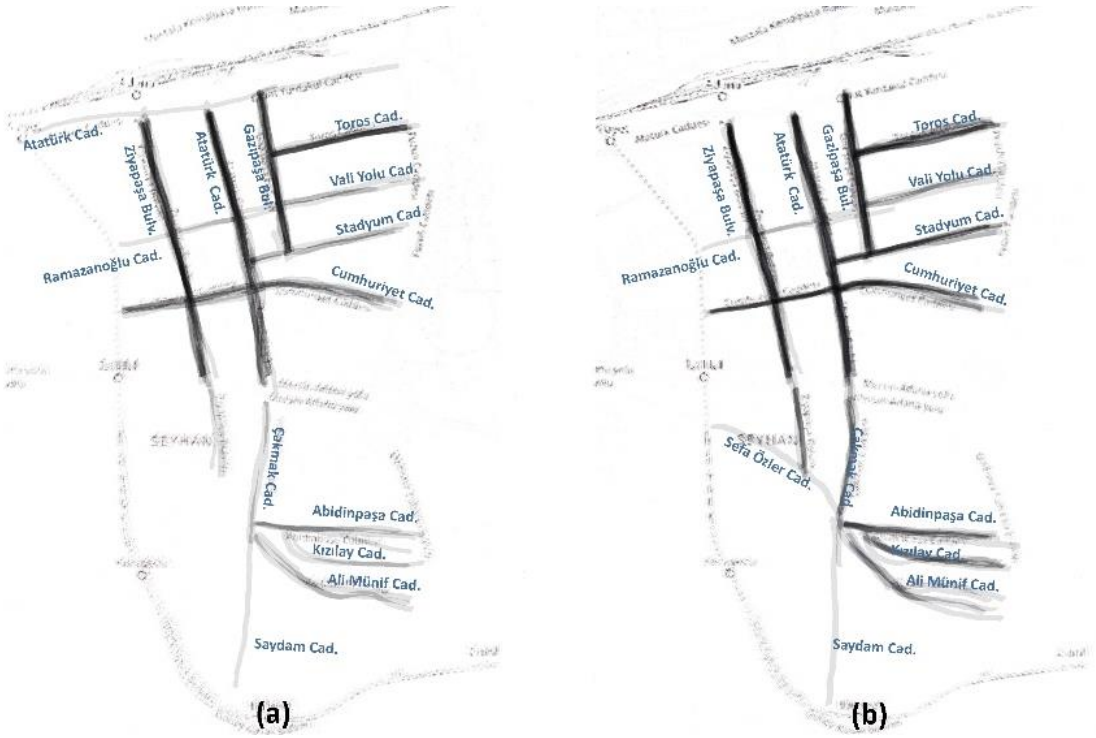

Figure 2. Analysis of responses from users

4.2. Findings of Space Syntax Analysis

Within the scope of the study, global integration (Rn), local integration (R3), connectivity, and intelligibility values were measured to comprehend the social relations of the region.

The average integration value in the study area was determined as 2.35001 and it varies between 0.996346 and 3.94011. The streets with the highest value are Ramazanoglu Cad. (Rn=3,94011), Mehmet Nuri Sabuncu Bul. (Rn=3,78428), Ziyapasa Cad. (Rn=3,76251), Ataturk Cad. (Rn=3.93706) and İnönü Street (Rn=3.73764). At the same time, these streets are the axes where the highest accessibility in the system is provided. This shows that the mobility of the visitors coming to the streets and the probability of encountering each other is high. In addition, it has been determined that the planned residential areas of the city part are more integrated with the city than the organic residential areas.

The local integration (R3) value of the whole system was determined as an average of 4.87852. The axles with the highest local integration values detected are Ramazanoglu St., Ziyapasa Ave., Atatürk St., M. Nuri Sabuncu St., Stadyum St., Fuzuli St., Turhan Cemal Beriker St. and Mustafa Kemal Pasha St. In this respect, these streets are frequently visited at the local level and it shows that locals form a common identity in this environment.

Connectivity with an average value of 125.2 is located at Ramazanoglu St., Ziyapasa Ave., Atatürk St., Mehmet Nuri Sabuncu Ave. entrance and Mustafa Kemal Pasha Ave. have taken their highest values. In this study, the connectivity value was used as a tool to determine other values.

Table 2. Examined space syntax values

SS value	Minimum	Average	Maximum
Global integration (Rn)	0.996346	2.35001	3.94011
Local integration (R3)	1.47249	4.87852	8.18635
Connectivity*	2	125.2	824

* The axial map was not converted into the fewest line map.

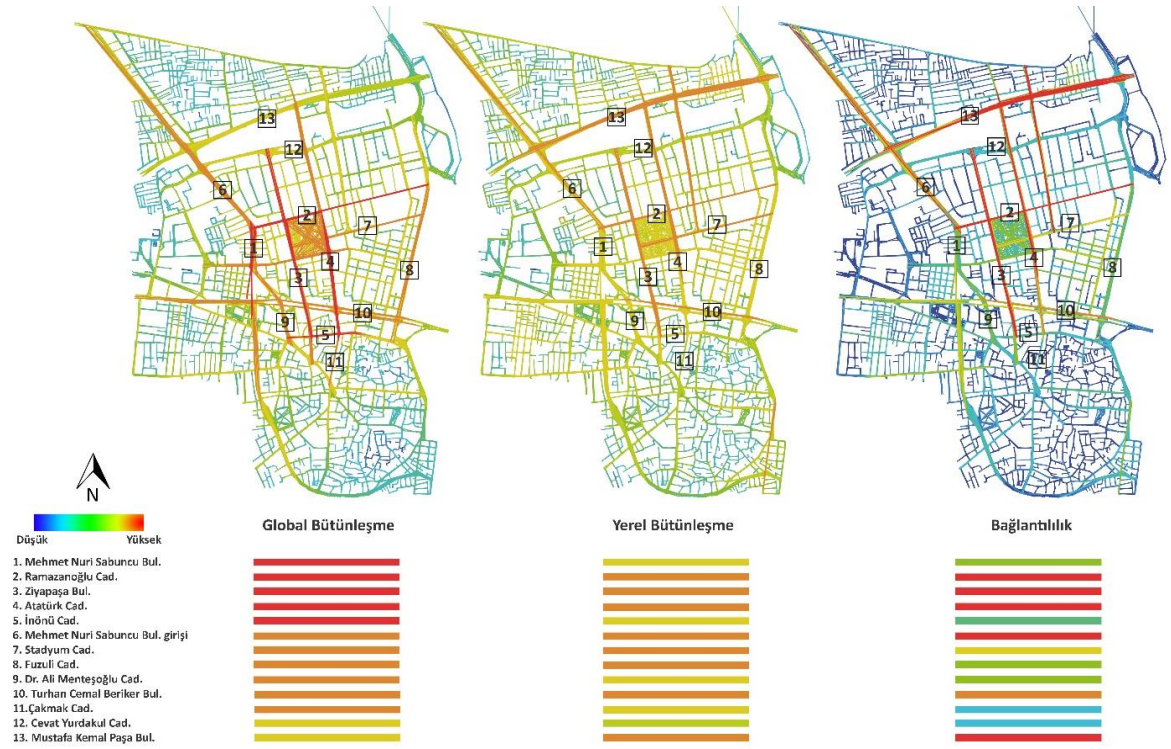

Figure 2. Ranking of the global integration, local integration, and connectivity values of the study area (created by the author with the DepthMapX program)

To measure the intelligibility value of the region, the correlation between the connectivity and global integration values was employed. The high correlation between these two values indicates high intelligibility. The intelligibility value (R^2=0.44854) according to the scatter plot demonstrates that the parts in the region do not give enough information to describe the whole. This shows that the understanding or comprehension of the region by the users coming from outside is sufficient for a part of the region or at a moderate level for all of them.

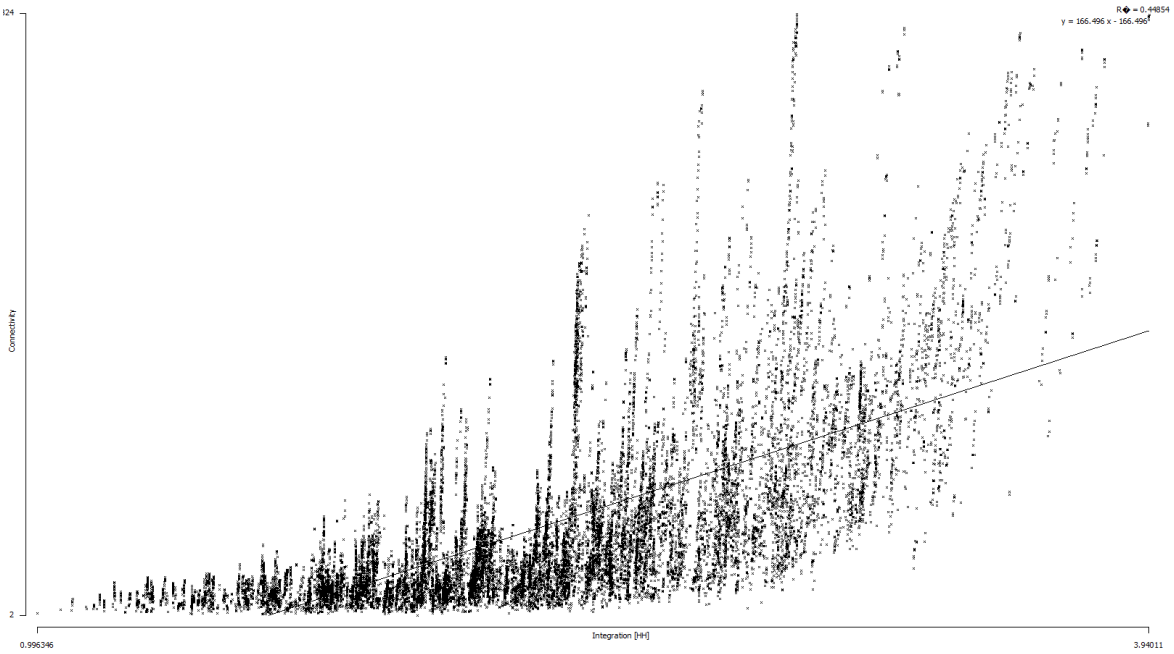

Figure 3. Scatter diagram of intelligibility value.

4.3. Comparing the Results

It has been determined that there are many differences in Space Syntax (SSx) and the simplified mind maps (SMM) when the two maps from the participants are overlapped. Axes with this difference are presented in Table 3.

Table 3. Differences between user reviews and Space Syntax data in the workspace

Axis	SMM		SSx	Observation and interpretation
	Frequency of use	Memorability	Social potential	
Gazipasa St.	++	++	-	It is a shopping-oriented street. Residential and commercial functions coexist.
Cumhuriyet St.	+	++	-	There are public structures such as schools and religious facilities. It is an important transit route.
Ali Münif St.	+	+	-	It is the route that includes some of the historical buildings. Various festivals are held here. It focuses on traditional bazaars and eating and drinking activities. It has a high commercial function. Housing is scarce. There is a narrow and dense street texture.
Kızılay St.	+	+	-	It is the route that includes some of the historical buildings. It has a high commercial function. Housing is scarce. It has the characteristics of a bazaar. It is a narrow and dense street texture. There is heavy traffic.
Abidin Pasa St.	+	+	-	It has the characteristics of a bazaar. It has a high commercial function. Housing is scarce. It is a narrow and dense street texture. There is heavy traffic.
Mehmet Nuri Sabuncu Ave.	-	-	++	It has a predominantly residential structure. It consists of wide streets and high-rise residences. Pedestrian density is low. Vehicle density is high.
Turhan Cemal Beriker Ave.	-	-	+	It is a ring road. The road is arranged with underpass and overpass systems to regulate the traffic. Therefore, the right and left sides of the road are divided into two by a vehicle underpass. There is visual continuity between the two sides, but pedestrian continuity is poor.
İnönü St.	-	-	++	It has a trade-oriented structure. There is a narrow and dense urban texture. It has an important public building on it.
Dr. Ali Mentesoglu St.	-	-	+	There is a vehicle overpass arrangement on the axle. There is heavy vehicle traffic and partial pedestrian traffic. It is a trade-oriented axle.

CONCLUSION:

Areas with high integration values according to their SS values can also be considered as areas with high socialization values or potentials in theory. These are areas that are expected to attract a high number of visitors. Accordingly, it can be predicted that there is heavy user activity. Since these areas are easily accessible by users, they can also be considered as areas that should be given priority in planning. However, according to KD data, users identified weak experience values in some areas with high integration values. There are several reasons why these values, which differ in theory and practice, do not overlap.

First of all, other variables in the axes have not been taken into consideration during the evaluation of social potentials based on the morphology of the city. The physical restraints on the axles and the deficiencies of the arrangements for pedestrians reduce the frequency of use of the area by the visitors. In short, some areas with good connectivity and integration values in the study attracted fewer visitors due to other factors included in their content.

Another factor is the presence of mixed land use. In regions with mixed land use, the frequency of visits by local and global visitors increases, and these regions are more memorable. In some of the regions where mixed land use is not supported, the historical identity provides the advantage of mixed land use to the region. Thus, mixed land use causes the social potentials of the region to change regardless of the integration, connectivity, and intelligibility values.

The regions that attract the most visitors are the areas where eating-drinking, shopping, and living activities come together. Apart from this, activities such as festivals held at certain times of the year increase the awareness of the axles. Although the space syntax (SSx) values of the organic structure of urban parts were lower compared to the planned regions, the activities and historical texture on them increased the visitor attraction and awareness of that region.

As a result, in studies where human experience is measured, data obtained from a single plane (urban morphology) may not provide sufficient information. People have various experiences in their region based on more than one factor. When this experience takes place in the memory, they begin to use that area. The regions, whose social potential is revealed by the space syntax method but does not have a place in the user experience, have not been in the minds of the users, although they have been built, activated and the necessary pedestrian arrangements have been made. For this reason, the physical and social formations of the regions should be taken into consideration in addition to one-way mathematical models in the measurement of the social potential of the regions.

Consequently, this situation supports Heidegger's idea which is first dwelling and then building. The act of building takes place as the spaces used gain a place in the memory of individuals. So, human perception of the environment overtakes mathematical assumptions and gives a subjectivity that is difficult to predict. This situation also constitutes the theory that enables an urban space with low SSx potential to be used by individuals as a social space. Therefore, it turns out that measuring people's personal experiences and perceptions with objective means do not reflect the facts in life. This indicates that people's active use of a region is related to the place of that region in the perception of individuals. Relatedly, as people use that region, they also contribute to the social infrastructure of that region.

Compliance with Ethical Standard

Conflict of Interests: There is no conflict of interest.

Ethics Committee Approval: Ethics committee approval is not required for this study.

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