

# Evaluation of Residential Areas with Different Spatial Patterns through Defensible Space Concept

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## Abstract

*There are some differences in terms of spatial form in our cities that constantly change and grow with the developing technology. While some neighbourhoods develop with an organic and spontaneous urban texture, some neighbourhoods may have a grid or radial form. This study aims to examine the relationship between the crime rates and socio-spatial formation of the settlements. In this context, the adjacent Akşemsettin and Hırka-i Şerif Neighbourhoods, which are located in the Fatih District of Istanbul, Turkey and differ in spatial textures, have been selected as the study area. The former one has a grid form that was planned after a big fire that destroyed the traditional organic urban form. The latter one still exists with its traditional organic urban form with dead-end streets. The study area is examined through Oscar Newman's concept of "Defensible Space" and "Space Syntax method" developed by Bill Hillier & Julienne Hanson. The street networks of the grid and organic forms are analysed by the Space Syntax method in terms of axiality, intelligibility, connectivity and integration. Increasing crime rates and safety concerns as a result of rapid crowding of cities affect local and central governments' policy, planning and design decisions. This research forms an important basis for these decisions to create safer spaces in our cities and ensure that all public places of the city, such as streets and parking areas, provide a safe environment to the users. At the end of the study, it is expected that important results will be determined on how urban texture affects crime rates and sense of safety and what kind of factors should be taken into consideration in line with the city planning criteria.*

## Keywords

*Defensible Space, Space Syntax, Urban Crime, Neighbourhoods, Istanbul*

## 1. Introduction

The city is a reflection of the moral values and community life that gives it meaning. Spatial forms include social processes, and social processes are essentially spatial (Carey and Harvey, 1975). The need for city streets to provide a prosperous environment to its residents at all hours of the day and night is inevitable in terms of the sustainability of social life. Public spaces such as streets, avenues and squares of cities can be open to pedestrian use as safely as private-semi-private spaces, only if the urban space can be made into permanent safe spaces. At this point, the important thing is that it allows the place where they are located to create a safe environment rather than the feeling that the members of the society are protected. In order for the social life and activities to progress in a healthy way, it is important for individuals to have control over the space, and this can be achieved through the design of the urban space. In Newman's words, for a group to determine the norms of behaviour and the nature of the activity possible in a particular place, it must have clear and undisputed control over what might happen there. The design may enable both residents and outsiders to identify when an area is under the undisputed influence of a particular group, dictating the activity taking place in it, and who its users are (Newman, 1996).

The individual has a sense of belonging to the place at the level he has control over the urban space and becomes sensitive to his environment. Social coexistence is inevitable for individuals who protect their space by being responsible, and in this respect, neighbourhood awareness can be formed in the society. According to Colquhoun (Colquhoun, 2004), creating a healthy society, generating an environment where people think they belong and considering security as a need in this environment are indicators of a civilized life.

The aim of this study is to examine whether the phenomenon of crime differs according to the texture of the urban space that the residential areas have, and whether the urban texture is a factor in creating a safe space. This research covers two neighbourhoods, Akşemsettin Neighbourhood and Hırka-i Şerif Neighbourhood, which are located in Fatih District of Istanbul province, with different spatial forms but socio-economically similar. While the study deals with the phenomenon of crime in the theoretical framework, it also examines the relationship between the spatial textures of these neighbourhoods in terms of morphology. The spatial form of both neighbourhoods is examined in terms of 5 main components (territoriality, natural surveillance, image, milieu, and safe adjoining areas) that make up Oscar Newman's Defensible Space. In addition, the morphological structure of both study areas is examined with the axiality, connectivity and integration analyzes of the Space Syntax method, and street usage densities are correlated with the Gatecount method.

## 2. Literature review: Spatial and Criminological Approaches

Many theories have been put forward in order to understand the correlation between space and crime and to prevent crime by using design effectively on human behaviour in many disciplines such as city planning, urban design, architecture, psychology, sociology and criminology. In this context, the first studies examining the connection between crime and space emerged in the 1960s. The studies of Wood, Jacobs and Angel examining the impact of urban design on crime constitute the first studies in this field. Jacobs's "Death and Life of Great American Cities" and Angel's "Crime Deterrence through Urban Planning" are the first works that put forward in which the basic concepts of space and crime. Later, the theories put forward by Wilson and Kelling in 1969, Jeffery in 1971, Newman in 1972, Cohen and Felson in 1979, Brantingham in 1982 and Clarke and Cornish in 1985 emerged as theories that complement or improve their predecessors. These advocated theories generally aim to build a self-controlled environment by designing the built environment to reduce the motivation of a potential criminal, make crime more difficult, and minimize the benefit that can be obtained.

The Theory of Broken Windows aims to reveal the relationship between the disorder of urban space and the formation of crime. According to this theory, any disorder in the urban space plays an important role in the realization of the crime. "Broken windows" is an indication of disorder and lack of belonging in urban space (Wilson and Kelling, 1982). According to the theory, when one of the windows of a building is broken and not repaired, it is inevitable that other windows will be broken or damaged by potential criminals. Considering that the place is uncontrolled, the extent of the damage will gradually increase and it may become an environment suitable for crime. In this respect, the damaged, unrepaired, neglected and dysfunctional conditions of the buildings and their facades in the urban space are seen as unattended, unclaimed and uncontrolled areas of that space within a certain time frame. Therefore, it is foreseen that these areas have a potential function in terms of enabling crime.

Routine Activities Theory deals with the time and space of the crime have taken place (Cohen and Felson, 1979). According to this theory, the reason for the formation of crime stems from the daily activities of people outside their homes. According to this theory, crime only occurs when a motivated criminal and a suitable target meet in a place where there is insufficient control and within the same time frame (Clarke and Eck, 2005). With this theory, Cohen and Felson add the time dimension to the crime-space relationship in the classical sense. It can be a person or an object specified as a target in the theory. A suitable target is determined by the criminal by this four factors: Value (Value of the property), Portability (Valuables that can be easily transported), Visibility (Visibility of the Target), Accessibility (Accessibility of the Target) (Felson, Clarke and Webb, 1998). What is meant by the lack of guards is the security guards, technical equipment and the design of the space.

Rational Choice Theory is based on the assumption that crime is based on reasoning and logic. The theory explains how the criminal makes sense of the space in case of committing a crime and what kind of opportunities he sees in the space. It basically predicts that committing a crime is based on the benefit-harm calculation and that a criminal will make a rational and logical choice whether to commit a crime or not (Clarke and Cornish, 1985). The potential benefit and potential harm a criminal will receive before committing the crime is one of the most important factors. According to the theory, a criminal does not choose to commit a crime when the gains are less than the risk to be taken. In the decision-making phase, the potential criminal's previous experiences, moral values, self-perception and foresight as well as the current conditions are effective. At the next stage, if a crime is to be committed, the type of crime is decided (Doğan and Sevinç, 2011).

Crime Pattern Theory examines the victims of people with the potential to commit crimes and the reasons for choosing the space where the crime will be committed (Brantingham and Brantingham, 1982). According to the theory, crime usually occurs where the activity areas of offenders and victims intersect (Felson, Clarke and Webb, 1998). The theory is essentially concerned with how people and objects in motion in space and time are involved in crime. As in the routine activity theory, this theory examines the space where the crime takes place over the areas where routine activities occur and argues that the occurrence of the crime is determined by the routine activities of the potential criminals (Justice, 2005).

People who are prone to commit crimes generally prefer city centres and nodal points in the city to commit crimes (Beavon, Brantingham and Brantingham, 1994). In this respect, actively used areas of the city such as bazaars, markets, shopping centres, and streets where pedestrian use is intense, become common intersection spaces where criminals and victims can carry out their activities. The spaces where the victims actively perform their routine activities are the areas where the probability of crime is high. Beavon and Brantinghams (1994) argue that crime can be prevented by examining the spatial distribution and timing of crime types.

The Defensible Space Theory, put forward by Oscar Newman in 1973, is based on an approach to preventing crime through design in residential areas. In essence, the theory states that a space functions

as a natural barrier against potential crimes that may occur through its design and ownership by a certain number of users. In order for this to happen, it is important that the space is designed according to certain criteria and that it gains functionality. Strengthening the relations of the residents with each other, being in social solidarity, creating a sense of belonging in the space, the active use of streets and other public spaces are among the important components of this theory besides the physical design measures such as good lighting, reducing secluded spaces, increasing the visibility of public spaces with less-story construction, and the effect of housing types on the street control of the residents.

According to Newman's Defensible Space Theory, the following 5 components are important to understand that space is defensible (Newman, 1972);

- Territoriality means that residents have a sense of integrity and inviolability in their home. Houses should figuratively resemble castles – shelters outside should be accessible and usable only by residents.
- Natural Surveillance, where constant surveillance by space users is assumed to effectively prevent people from committing a crime because their actions will be easily observed and identified.
- Image means that users' sense of security is affected by the condition and appearance of the space. A neat, tidy, easy-to-understand space indicates that it has an active owner and is therefore cared for and controlled. Broken windows, ubiquitous graffiti or ramblingly leftover rubbish on streets indicate that the area lacks adequate control.
- Milieu should be understood as all external factors that create a vacuum in terms of security. An important factor in the safety of the neighbourhood is the presence of public and semi-public spaces (shops, restaurants, etc.) in the neighbourhood. Users of such areas may enter the private residential area, violating the privacy of residents and creating a potential threat. Another important factor is the distance from police stations, fire stations and various other public security agencies.
- Safe Adjoining Areas means that it is possible to control not only a person's private area, but also the gateways to it. In this way, it is possible to identify a potential attacker even before the privacy violation occurs. Newman's suggestion is to design the passages so that they can be seen from inside the circles.

Apart from the 5 main components in Newman's Theory, it is also important how he defines the housing structure in terms of a space being defensible. Newman divides residential buildings into three categories and examines the design criteria accordingly. The 3 main types of housing that Newman defines as housing units are (Kowalczyk, 2017);

- Detached houses (detached, semi-detached and row houses),
- Buildings without elevators
- High-rise buildings

It is important that these housing types are different in terms of their area sharing. Since the number of housing units is very high in high-rise buildings, common area sharing is more than building structures with elevators and detached structures. According to Newman, the more people share a space, the lower the sense of ownership and responsibility for that space and, as a result, the lower the level of control exercised over it. This means that foreigners, who potentially pose a threat to residents, have easier access to buildings with a large number of residential units. Newman argues that the level of crime in a residential area depends on:

- The height of a building (and consequently the number of residential units sharing an entrance)

- Number of flats in a building
- Number of other residences in the neighbourhood

The main purpose of the Defensible Space method is, in Oscar Newman's definition, "to reconfigure the physical order of communities to allow residents to control the areas around their homes" (Newman, 1996). The subject of defensible space refers to the spatial structuring itself in relation to neighbourhood relations. The structuring of the space is such that the space itself is another factor that preserves neighbourly relations. Neighbourhood relations automatically assume a protective role in the naturally built environment that develops in organic form. Another factor that strengthens the neighbourhood is its protective role. It is a fact that organically formed living spaces are designed to maximize what Newman calls *Defensible Space* (Abu-Lughod, 1987).

**Table 1. Spatial and Criminological Approaches**

Theory	Scope	Problem	Spatial Feature
<i>Broken Windows</i>	View	<ul style="list-style-type: none"> <li>➤ Buildings/areas that are neglected, unrepaired, derelict</li> <li>➤ Small problems that are overlooked pave the way for bigger problems</li> <li>➤ Irregularity and lack of belonging, lack of control in urban space</li> </ul>	<ul style="list-style-type: none"> <li>➤ Negligible and dysfunctional buildings and areas</li> <li>➤ Broken, outdated, urban furniture and lighting elements</li> <li>➤ Uncollected garbage, broken glass building</li> </ul>
<i>Defensible Space</i>	Belonging, sense of ownership	<ul style="list-style-type: none"> <li>➤ Residents do not own their living spaces, have no ties of belonging</li> <li>➤ Weakness in social interaction, poor neighbourly relations</li> <li>➤ Avoiding using a place that feels unsafe makes it more unsafe</li> <li>➤ Inability to distinguish residents</li> </ul>	<ul style="list-style-type: none"> <li>➤ Spaces with / without public / semi-public / semi-private / private space distinction</li> <li>➤ Blind and secluded spaces formed by wrong planning and positioning of buildings</li> <li>➤ Well-maintained, tidy places that give the impression of control or vice versa</li> <li>➤ Space users have constant surveillance</li> </ul>
<i>Rational Choice</i>	Profit/loss analysis in committing a crime	<ul style="list-style-type: none"> <li>➤ Lack of a motivated offender/appropriate target/protector</li> <li>➤ The offender's gain while committing a crime is higher than the loss</li> </ul>	<ul style="list-style-type: none"> <li>➤ Any public space that is improperly arranged to allow the criminal to be anonymous, such as city centres, commercial streets</li> <li>➤ Unlocked door, broken windows, parked car in the street</li> <li>➤ Derelict, unclaimed and gang-occupied areas</li> <li>➤ Streets and squares that are poorly lit and feel desolate</li> </ul>
<i>Routine Activities</i>	Instant crime in areas where daily activities take place,	<ul style="list-style-type: none"> <li>➤ The existence of an appropriate, unprotected target against the offender motivated by the opportunity in daily activities</li> </ul>	<ul style="list-style-type: none"> <li>➤ All spatial properties in rational choice theory</li> <li>➤ Hot spots where crime reports come most frequently</li> </ul>

<i>Criminal Pattern</i>	hot spots	➤ Availability of places and situations that will give the offender an opportunity	
	Map creation of hotspots where crime was committed	➤ Presence of a criminal and a vulnerable target creating opportunities for him to commit crimes ➤ Determination of potential areas where criminals can commit crimes and formation of cognitive maps in this direction	➤ All spatial properties in rational choice theory ➤ Hot spots where crime reports come most frequently

All these approaches, which are considered within the framework of spatial and criminological approaches, are in the triangle of space, crime and residents/target. In Table 1, all approaches are summarized in terms of scope, problem and spatial characteristics. As can be seen in the table, each theory complements, enhances or resembles with each other. There are many studies in the context of crime and space in the scale of city planning and urban design through the spatial and criminological theories in the table. Among these studies, the studies by Nubani L. & Wineman J. (2005) and Chisun Yoo & Sugie Lee (2017) are important in terms of syntactic analysis and statistical data. In the first study, crime data covering a period of 12 months for the city of Ypsilanti Michigan (USA) were mapped using GIS, and an axial map was prepared using Spatialist, a program developed by Peponis and Wineman. Syntax measures of street accessibility and visibility features were examined in relation to criminal behavior patterns by controlling factors such as neighbourhood socio-economic status (Nubani and Wineman, 2005). The analysis results showed that both local integration and connectivity were highly correlated with overall crime counts and subsequent density. In the second study, he examines the morphological transformation of the city centre of Barcelona, which has an organic urban form surrounded by a grid form, using the space syntax method. The research shows that the grid form and organic form are not opposite urban forms, on the contrary, they are complementary to each other (Yoo and Lee, 2017).

### 3. Methodology

In this study, Space Syntax Analysis is used to determine the settlement pattern of both neighbourhoods, spaces with potential density of use, nodal points and intersection axes. Space Syntax Analysis is a space reading method developed by Bill Hillier and Julienne Hanson (Hillier and Hanson, 1984). The theory of the analysis explained in the book *Social Logic of Space* in 1984 is based on the idea that the social structure that makes up the space can be predicted through the physical construction of the space. The purpose of space syntax analysis is to understand the potential of physical space to bring people together. Space syntax is a numerical technique that can provide concrete expression and analysis of the abstract characteristics of space, which plays the most important role in the formation of knowledge based on experiences, as a "reflection of space" in the human mind (Hillier and Hanson, 1997).

In order to analyze the city pattern, the longest line that can be drawn to all areas outside the buildings is drawn by traversing the maximum area it can pass through. These lines, drawn by intersecting each other, are, in a sense, the potentially farthest eye level of the person moving in the urban space. Drawn lines or "lines of sight" (axial lines) is a form of representation in which movement areas and potential sight areas overlap (Çil, 2006).

The purpose of this analysis is to establish the hierarchy of streets in the settlement from the most frequented open spaces to the least used spaces. Streets and areas that are passed a lot are called "integrated", and those that are less passed are called "isolated". At the end of the analysis, a new map emerges, color-coded from the most integrated axes of view to the most isolated. The most integrated streets are the most public channels of a settlement, the channels through which the most people are likely to pass, even to get from one place to another. The most integrated streets are considered as the "integrated core" (heart of the settlement) of a settlement in the context of the organization of the movement. Isolated streets, on the other hand, are used only to go to a special place on that street (Çil, 2006).

Akşemsettin and Hırka-i Şerif Neighbourhoods in Fatih District, which have socio-economically similar but spatially different urban forms, were determined as the study area (Figure 1). Another important factor in the selection of these neighbourhoods is that they are adjacent to each other. Being close to each other and having similar socio-economic levels will make the profile of the person using the space largely similar. For this reason, it is thought that the differentiation of the crime phenomenon in these two neighbourhoods will be more affected by the spatial form than the socio-economic factors.



Figure 1. Akşemsettin (Red colored area) and Hırka-i Şerif (Blue colored area) Neighborhoods

#### 4. Findings

First, we made a comparison between two neighbourhoods in terms of demographic and spatial characteristics. Second, we examined the spatial patterns via Space Syntax Analysis. In Table 2, demographic data and crime data of both neighbourhoods are shared. It is seen that both neighbourhoods have similar demographic characteristics except for education level. Despite the education level of those living in Akşemsettin District is high, the number of crimes per thousand people in Akşemsettin District is twice that of Hırka-i Şerif District. This indicates that the spatial characteristics of both neighbourhoods can be effective in the number of crimes.

Table 2. Akşemsettin and Hırka-i Şerif Neighborhoods Demographic Indicators and Crime Per Capita

	<i>Akşemsettin District</i>	<i>Hırka-i Şerif District</i>
<i>Population (2020)</i>	22.263	22.464
<i>Population growth rate (2010-2015)</i>	0,0022	0,0037
<i>Population growth rate (2015-2020)</i>	-0,0086	0,0129
<i>Population density (2020, people/km<sup>2</sup>)</i>	64.168	57.416
<i>The share of high school graduates and above in the total population (2020)</i>	52%	40%
<i>Household Size (2020)</i>	3,5	3,25
<i>Annual number of crimes per thousand people (2015-2019, avg.)</i>	35,81	17,22

Akşemsettin and Hırka-i Şerif Neighborhoods are located in the middle of the 2 main arteries. These main arteries are Adnan Menderes Boulevard and Fevzi Paşa Street, which have dense vehicle usage. Another big street that divides these two neighborhoods in the middle is Akşemsettin Street. Apart from this, Akdeniz Street, one end of which extends to Yenikapı, also passes through Akşemsettin District. Keçeciler, Melek Hoca and Eski Ali Paşa Streets in Hırka-i Şerif Neighborhood, and Balipaşa and Sarıgül Streets in Akşemsettin Neighborhood are the arteries that are used less relatively to the main arteries. While the streets and avenues in the Hırka-i Şerif District are more suitable for pedestrian use due to the urbanization fabric, the streets and avenues in the Akşemsettin District seem more convenient in terms of vehicle use (Figure 2a).

When the urban fabric of both neighborhoods is examined, it can be seen that the construction is progressing with different texture types (Figure 2b). While Akşemsettin District developed as "grid texture", Hırka-i Şerif District developed as "organic texture" in traditional form. The differentiation of urban textures also brings about the differentiation of the use of space. While a place suitable for pedestrian use comes to the fore in an organic urban urbanization structure, it is seen that an order more suitable for vehicle use prevails in an urbanization with a grid texture. As a matter of fact, the biggest factor in the realization of this situation is the urbanization structure that started when vehicle use was not common. With the widespread use of vehicles, wider and more planned roads were needed and the morphology of the city has evolved in this respect.





Figure 2. a) Transportation Axes, b) Neighborhood Texture

If the context plan analysis is examined, it can be seen that there are differences in terms of neighbourhood structure, settlement typology and space formation (Figure 3). While the housing pattern in Akşemsettin District offers a more organized and easily observable area, the housing pattern in Hırka-i Şerif District seems much more complex and untraceable. In terms of open space formation, it is obvious that there are areas that are not allocated for active use in Hırka-i Şerif Neighbourhood and that contain free fields spatially. When the floor heights of both neighbourhoods are examined, it is seen that the buildings in Akşemsettin District are more multi-storey than the buildings in Hırka-i Şerif District.

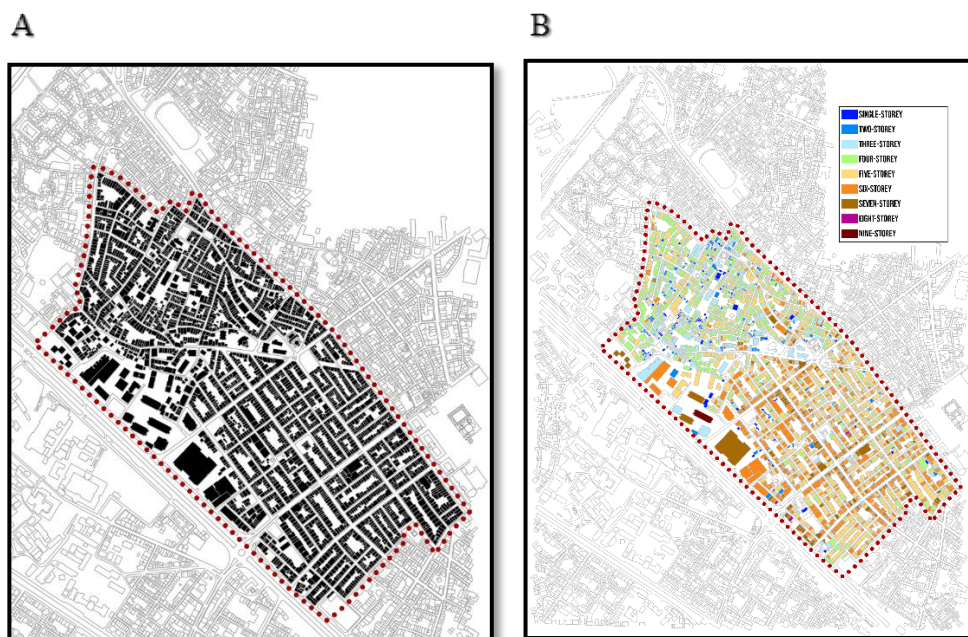


Figure 3. a) Solid-Void Analysis, b) Building Height Analysis

When the building usage characteristics of both neighbourhoods are examined, it is seen that their proximity to public buildings is the same, but in terms of active commercial area density, the buildings in Akşemsettin District are relatively higher than those in Hırka-i Şerif District (Figure 4). When the transportation axes in the neighbourhoods are examined, it is seen that there are dead ends in many streets in Hırka-i Şerif Neighbourhood. When Hırka-i Şerif Neighbourhood is considered as a whole, it is understood that it has approximately 25 dead-end streets. It can be said that there is no dead-end street structure that can restrict transportation in Akşemsettin District.

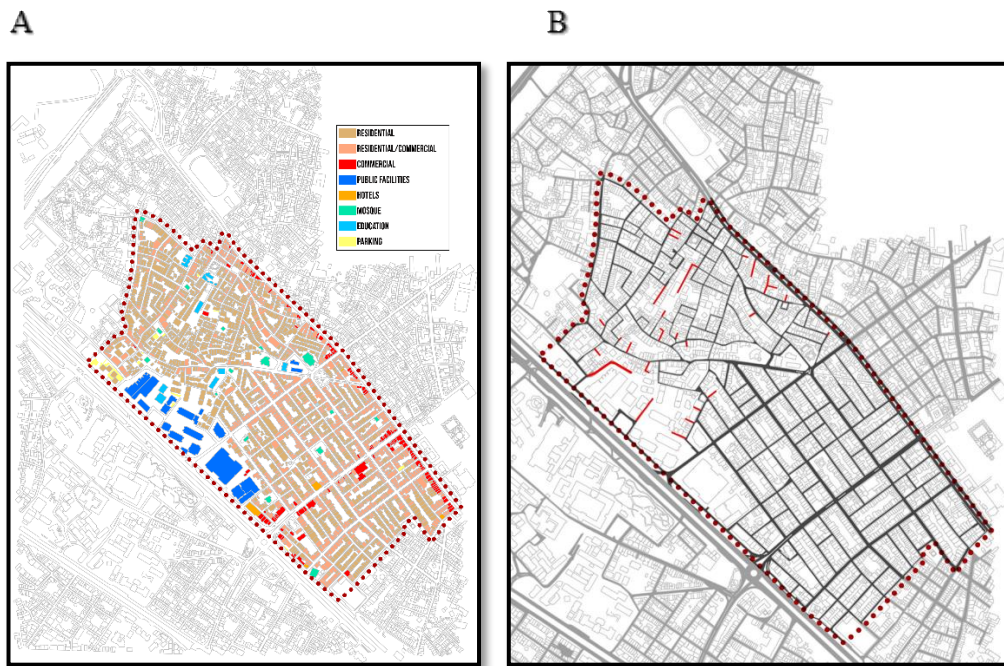


Figure 4. a) Building Use, b) Culde-sac Analysis

When both neighbourhood structures are examined in terms of building usage density, it can be seen that commercial use is concentrated on Akdeniz Street, which is located within the borders of Akşemsettin District (Figure 5). Considering the use of housing, in terms of building usage characteristics in Hırka-i Şerif Neighbourhood, residential use is intense. The result of the analysis shows us that the density of residential + commercial use is much higher in Akşemsettin District. Official institutions, public institutions, etc. The buildings with special use are located at the common intersection points of the two neighbourhoods.



Figure 5. a) Commercial Areas, b) Residential Areas, c) Housing+Trade Areas

Space Syntax analysis is created by importing the axial map drawn on the current map to the DepthMapX program (Figure 6). One of the basic logics in this method gives the possibility that the more axes a street or avenue has, the more intense its use will be. The intensity criterion here is indicated by colouring from red to blue (from the most intense to the least). When the study area is considered as a whole, Akşemsettin Street, which is in common use of both neighbourhoods, Keçeciler Street in Hırka-i Şerif Mahallesi and Sarıgül and Balipaşa Street located in Akşemsettin District stand out as routes that can use intensively.



Figure 6. Potential Usage Density of Transportation Axes as a result of Space Syntax Analysis

If the axial map prepared is evaluated specifically for Akşemsettin District, Balipaşa Street, Sarıgüzel Street, Akdeniz Street and Halıcılar Street stand out as the routes that can have the most intensive use. However, it can be seen that the roads with less connections to other transportation axes are side streets or interconnection roads. The fact that the interconnection roads are straight and less connected in Akşemsettin District can be interpreted as restricting the mobility within the space and access from the shortcut roads. Although the visibility on the roads planned in this way appeals to a wider area, when you enter a street in terms of walking, you must have walked that long street completely in order to go down to a lower street.

If the prepared axial map is evaluated in terms of Hırka-i Şerif Neighbourhood, it is seen that Keçeciler Street, Eski Ali Paşa Street, Melek Hoca Street, Ahsap Minare Street and many other streets have the potential to be used extensively in terms of pedestrian access. Many streets throughout the neighbourhood seem to be heavily used in terms of pedestrian transportation. The main implication/assumption here is that the number of streets/links that can be used is much higher. Street connections in this neighbourhood are intertwined and optionally more. Since the possibility of a route that can be drawn from one point to another point is higher than the other, the number of streets that can be used intensively is relatively higher than the other.



Figure 7. Aksemsettin and Hırka-i Şerif Districts Axial Maps

As a result of the Space Syntax analysis, pedestrian counts were made on Akdeniz, Sarıgüzel and Balipaşa Streets within the borders of Akşemsettin District and Eski Ali Paşa, Keçeciler and Melek Hoca Streets within the borders of Hırka-i Şerif District, as well as on Fevzipaşa and Akşemsettin Streets, which are the main transportation axes of both neighbourhoods (Figure 8). As a result of these pedestrian counts, it is seen that the results obtained as a result of the Space Syntax analysis are matched.



**Figure 8. Usage Status of Transportation Axles as a Result of Pedestrian Count**

Street/Avenue usage intensities are important for detecting/determining the profile of people entering and leaving a neighbourhood. In this respect, no matter how intensely a street is used, it can also be used by foreigners other than the residents of the neighbourhood. This situation confronts us as a great difficulty in identifying/recognizing the residents of the neighbourhood. However, the less it is used, the more it can cause an unsafe environment.

## 5. Conclusion

The study area was examined through both with socio-spatial comparisons and space syntax analysis used for reading the urban space. First, the demographic and spatial characteristics of the neighbourhoods were compared. Then, streets and avenues that can be used intensively by pedestrians in neighbourhoods were determined by space syntax analysis. These axes are important in terms of the density of use of the space and the determination of the areas where daily activities take place. The determined axes are also supported by the result of pedestrian counts. According to the data obtained as a result of the space syntax analysis, the axes with high usage potential and the areas where daily activities and pedestrian use are intense overlap with each other. The key point here is the level of crime in the axes (axes with potential or high pedestrian use) that are revealed as a result of space syntax analysis and pedestrian count despite the different neighbourhood textures. When these data are evaluated with the points that crime take place in the neighbourhoods and interpreted through the spatial structures of the neighbourhoods, it will be possible to obtain the status of the urban texture as a factor on the crime phenomenon.

If both neighbourhoods are evaluated in a general framework in terms of Newman's 5 basic principles and other evaluation criteria, it can be said that both neighbourhoods are at the same level in terms of regionality, natural environment and social area characteristics. While Akşemsettin District may be seen in better condition in terms of image, dead-end streets and active commercial area, Hırka-i Şerif District may provide better neighbourhood relationships since the physical distance between the buildings is close and the area is used by certain people. Based on the number of crimes in both neighbourhoods, it can be said that the settlement pattern of the neighbourhoods plays an effective role in the commission of the crime. However, in order to reach such a conclusion, it is essential to conduct a more detailed field study including surveys and interviews with inhabitants. Therefore, the further step for this study will be a field survey that will be conducted with the inhabitants of both neighbourhoods.

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