

# THE METHOD OF DEFINING THE FRAME OF THE STREET

## AZ UTCA TERÜLETI MEGHATÁROZÁSÁNAK MÓDSZERE

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### ABSTRACT

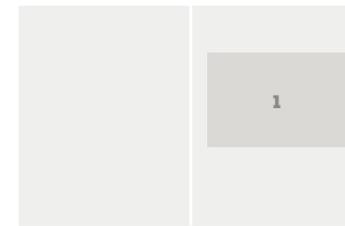
The paper is about defining the boundary of the street. Most of the literature define the facades of the buildings as the boundary of the street dividing the space into internal and external, separating the private from the public area. Furthermore, reduce the street only to the public areas.

The paper analyzes if the street is strictly limited to the public areas or it includes more. It is ascertained that the area of the street extends beyond the physical frame. To determine the exact area of the street the different ways of experiencing the environment were analyzed. It is said that including the human factor into the street analyzes is necessary. Therefore, different

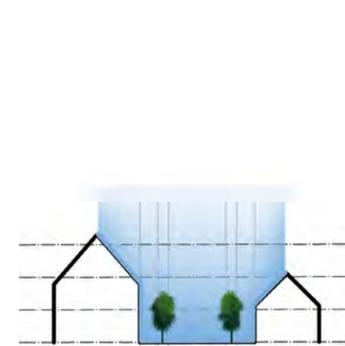
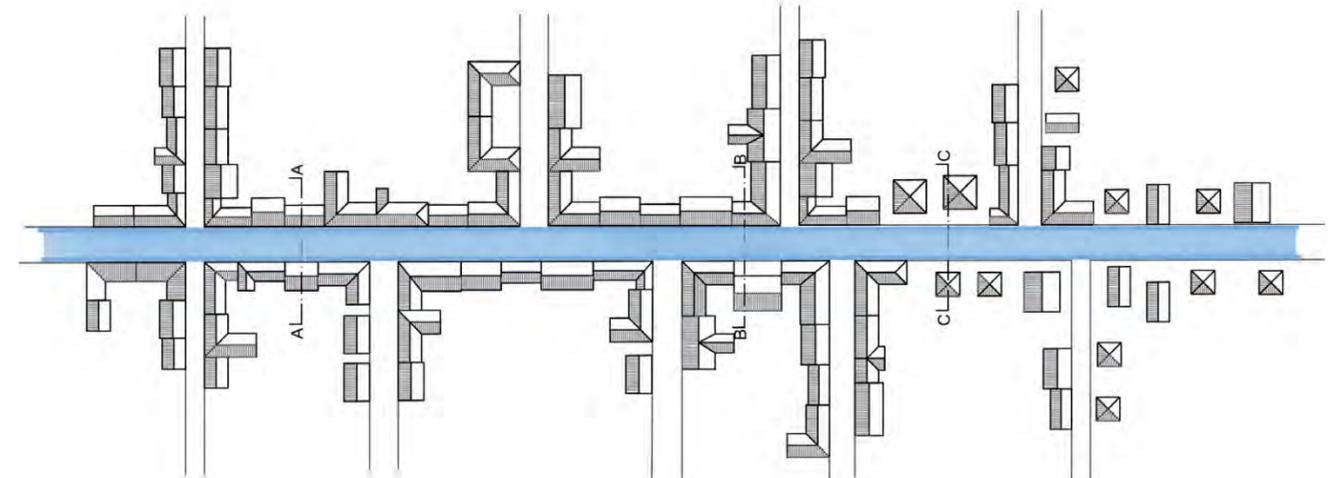
perception methods are used. These are dynamic, static, objective or subjective method. Thereby it is established that the frame of the street goes beyond the physical boundary and contains the areas that observer perceives.

To sum up the paper is giving a base for establishing a new methodology of urban-architectural researches saying, that the subjective perception of the street gives even more relevant facts about the settlement as with traditional research can be achieved. It includes the human factor, making possible to involve subjective experience into the research.

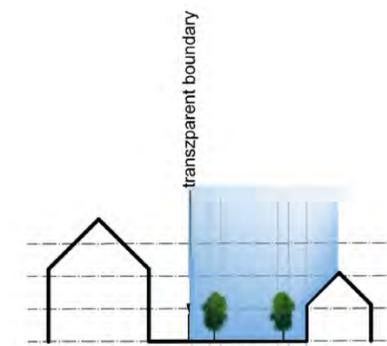
Defining a new method of urban-architectural analyzes of the main streets, but at the same time finding a framework which will allow that research become effective, is the fulcrum



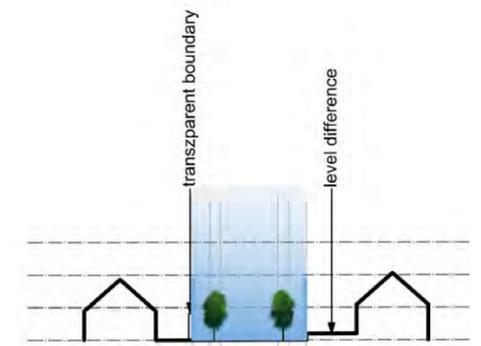
**Fig. 1:** The physical boundary of the street  
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section A-A



section B-B



section C-C

of this paper, which will be elaborated in the Ph.D. in progress of the author.

*Keywords: main street, perception, subjective experience of the surrounding, senses*

### 1. THE AREA OF THE STREET

Defining the area of the street is a complex process. The literature defines the street based on different theories.

According to Tamás Meggyesi, the street is a wider space, bounded by a row of buildings on both sides.<sup>1</sup> Jan Gehl in his book *Cities for People*, writes that the street is bounded by borders, separating the outdoor and the indoor, the private and the public.<sup>2</sup>

*"The streets, like squares, need walls..."<sup>3</sup>* to differentiate the original, infinite space into internal and external space.

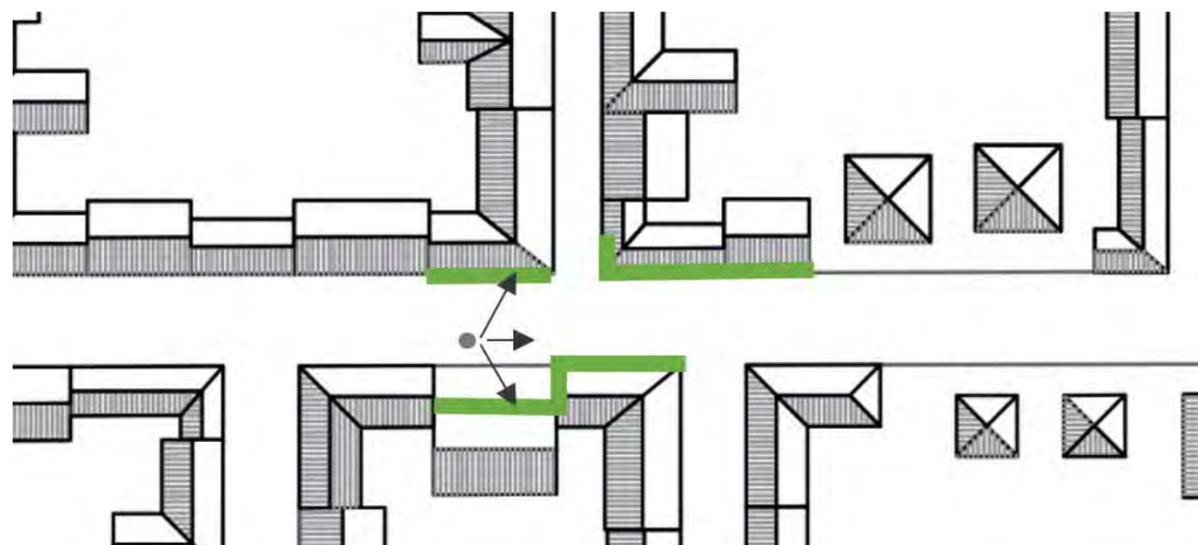
To sum up, according to most literature, the street is framed by elements that define the outer and inner space, separating the private from the public space. These are mainly the walls that surround the street, namely the facades of buildings.

That kind of definition of the area of the street is not completely complete. Gordon Cullen in his book *The Concise Townscape* defines different physical boundaries that differentiate the space which are linking and joining the different characters of space. Cullen defines these boundaries as hazards, despite of differentiate the spaces of different character they maintain the

<sup>1</sup> Meggyesi Tamás (2006): *Városépítészet, Egyetemi jegyzet, Budapest*  
<sup>2</sup> Gehl, Jan (2010): *Élhető városok, TERC, Budapest*  
<sup>3</sup> Tóth Zoltán (1997) *A települések világa, Ponte Press Kiadó, Pécs, 116*



**Fig. 2:** The way of experiencing the street from one point  
(MADE BY AUTHOR)



visual connection. Cullen lists the following elements: grid, vegetation, hidden obstacle and level difference.<sup>4</sup>

A question appears if the street is strictly limited to the public areas or it includes the areas that have only visual connections with it. In order to find the answer, the research analyzes the different ways of experiencing the environment in order to include the human factor into the street analyzes.

## 2. THE DIFFERENT WAYS OF EXPERIENCING THE ENVIRONMENT

Edward Hall in his book, *Hidden Dimensions* studies the relationship between the person and the environment on a physiological, social and cultural level,

as the relationship between the person and the environment is largely determined by their culture and education. He writes that "... people of different cultures speak not only different languages but ... perceive the world in a different way."<sup>5</sup>

In the process of sensation information are taken by sensory organs: skin, eyes, nose, mouth, and ear. Juhani Pallasmaa in his book *"The Eyes of the Skin"* emphasizes the importance and domination of understanding the environment by touching. He says that vision is a kind of scanning or touching the surrounding with our eyes. The relationship between people and the environment was also studied by Pallasmaa. He came to realize that one of the strongest connection between the people and their environment come from the nature of the

<sup>4</sup> Cullen, Gordon (1961): *The Concise Townscape*, The Architectural Press, Oxford (Serbian Edition: 2007); 123

<sup>5</sup> Hall, Edward T. (1966): Anchor Books, Doubleday, New York; 25

peripheral vision. For example, "a forest or a detailed building provides a sufficient stimulus for peripheral vision and thus places us in the center of the space."<sup>6</sup>

From Pallasmaa's point of view vision is the most complex and most sensitive information provider from the human senses.

Pallasmaa defined the relationship between the observer and his environment as: "I come into contact with the city through my body; my steps measure the length of the arcade and the width of the square; ... the mass of my body crashes in the severity of the cathedral gate and my hand seizes the large handle before going into the dark silence that lies behind it." (Pallasmaa, 2018; 56)

One of the biggest deficiencies in urban research is the fact that it is analyzing the settlement from outside, focusing only on the sighted ones. That is why it does not really reveal to the subjective part of it. It does not analyze the spirit of space, how people live and how they are related to their environment.

To sum up, to understand the environment means not just gathering informations but a real experience of the surrounding, by skin, eyes, nose, mouth, and ear. Thereby a complex picture of our environment can be received. Since vision is the most complex and most sensitive information provider, it does not surprise dominating the other senses. But vision cannot substitute, for example, the information that can be obtained by touch or smell. With

the information got only using the eyes the personal contact and attachment to the environment is going to be lost. Thereby instead of experiencing our surroundings and becoming part of it, we look at it from the outside, degrading ourselves as a mere viewer.

## 3. TYPES OF PERCEPTION

The aim of the research is to include the human factor into the analyzes. Since each person senses the surroundings in a unique way. It is necessary to involve subjective point of view, which the research calls the subjective aspect. The way we perceive our environment is always subjective, always personal.

According to professor Meggyesi, our environment exists in three ways: "Firstly, it exist as an independent reality, as objective, scientific research and description. Secondly, it exists during the course of the journey, in the time of the experiences, ... and finally, for the third time, in our memories as a mental image that can be recalled at any time."<sup>7</sup>

Since the environment exists in three different views, three ways of analyzes exists, too. It is determined that the objective reality of the environment cannot be completely defined by one observer, on the other hand it excludes the human factor the research is not analyzing it.

The research is focusing on the other two views of perceiving the environment

<sup>6</sup> Juhani Pallasmaa (2018): *A bőr szemei: Építészet és érzékek*, Typorex, Budapest; 15

<sup>7</sup> Meggyesi Tamás (2011): *Promenadológia: Fejezetek a séta és a lineáris látványelemzés elméletéhez*, Budapest; 5

that are including the human factor. In other word, the research analyzes the so-called soft aspect of the environmental studies, that are based on the fact how the person feels the environment.

The soft aspect has two types. The static and the dynamic aspect of experiencing the environment.

### 3.1. THE STATIC ASPECT OF EXPERIENCING THE ENVIRONMENT (PERCEPTION)

By perception taking up stimuli through the receptors in our senses and turning them into a stimulus, namely into an electrical impulse is meant. "The process of perception is the mechanism by which the sensory organs transform environmental information into the experience of objects, events, sounds, tastes, and more."<sup>8</sup>

There are two main types of perception: constructive perception and direct perception.<sup>9</sup> According to direct perception, the subject obtains information from the surrounding world in a way that is optimal, without time for complex cognitive processes.

According to the constructive perception theory, "perception is not objective because the perceptual person builds up the perception based on the perceived stimuli ... add their own experiences and expectations".<sup>10</sup>

During the perception process, the stimuli are picked up by the senses: skin, eyes, nose, mouth, ears. In Juhani

Pallasmaa's book, *The Eyes of the Skin*, the tactile perception as we experience our environment is emphasized. Pallasmaa states that "all our senses, including the vision, are an extension of the tactile sense; our senses are the branches of the skin tissue, and any sensory experience is a form of contact, that is to say, touch. This sense is the starting point from which others have differentiated."<sup>11</sup>

One of the greatest results of the method described by the research is that it does not look at the settlement as an outsider, it focuses not only on what has been seen, but also on the internal relationships that make the settlement unique.

Merleau-Ponty's philosophy puts man at the center of the world. He claims that experience is unified through the body. "To some extent, every place can be remembered, partly because it is unique and partly because it affects our body and evokes enough association to be preserved in our personal world."<sup>12</sup> So, in order to get a real image of the environment, the interaction of the senses is required. The senses are not only used to convey information, but also to activate the imagination and thinking.

However, the image of our environment changes in our heads based on the person's individuality. This kind of experience of the environment changes by time in our head. Exactly the time is that makes the subjective aspect of perception really important.

<sup>8</sup> Roth, Ilona, Frisby, John (1986): *Perception and Representation: A Cognitive Approach (Part II: An introduction to object perception)*, Open University Press, Michigan IN Oláh and Bugán: *Fejezetek a pszichológia alapterületeiből*, ELTE Eötvös Kiadó, Budapest, 2006; 38

<sup>9</sup> Oláh and Bugán: *Fejezetek a pszichológia alapterületeiből*, ELTE Eötvös Kiadó, Budapest, 2006

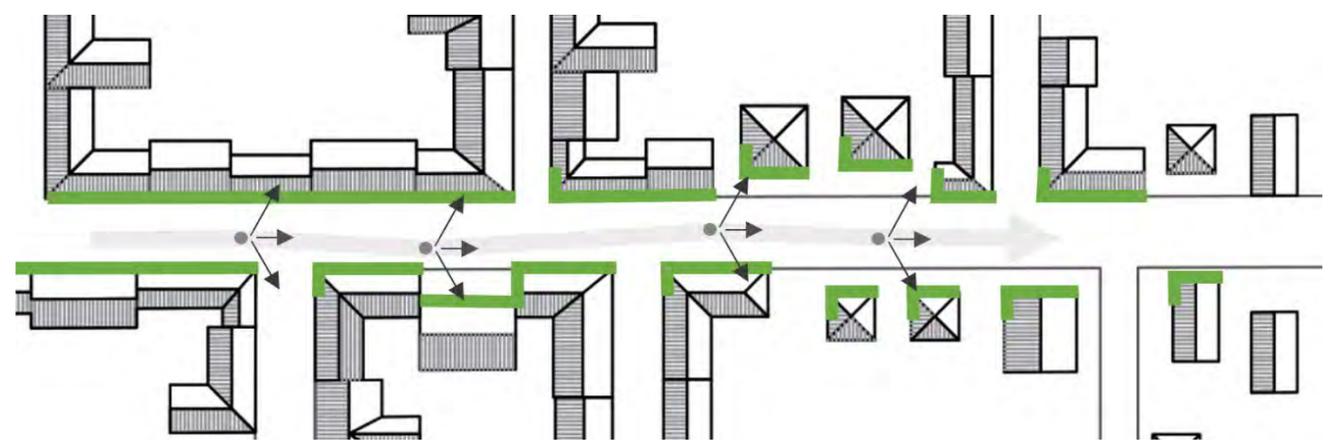
<sup>10</sup> Oláh and Bugán: *Fejezetek a pszichológia alapterületeiből*, ELTE Eötvös Kiadó, Budapest, 2006; 51

<sup>11</sup> Juhani Pallasmaa (2018): *A bőr szeméi: Építészet és érzékek*, Typorex, Budapest; 12

<sup>12</sup> quoted in Bloomer, Kent (1977): *Body Memory Architecture*, Yale University Press; 107



**Fig. 3:** The way of experiencing the street during a walk along the street (MADE BY AUTHOR)



It is always formed by person added extra informations (emotions) or not.

To sum up, it can be said that the individual's personality and social position have fundamental impact on the image of the environment.

The view of the environment is not only the aesthetic experience but the image of our identity and relationship with the place. This is what we call the genius loci.

In order to interpret the concept of the genius loci, the difference between space and place must be determined.

### 3.2. THE DYNAMIC ASPECT OF EXPERIENCING THE ENVIRONMENT (PROMENODOLOGY)

Promenadology is the rediscovery and interpretation of the urban image by moving. The "precursor" of the method is serial vision which concept was made by Gordon Cullen in 1961. Serial vision formes connection between

dynamic and static perception as it consists static views of a moving person along a given path. Cullen said that should "apprehend urban environments through kinesthetic experience"<sup>13</sup>

Dynamic experience of the surrounding requires the concept of distance to be experienced. There is nothing better than walking. After all, "our body and movement are in constant interaction with the environment".<sup>14</sup> On the other hand, the sense of space and distance is not static. "... The perception is dynamic because it is bound to actions, that is, what can be done in a given space, not what can be seen through static viewing."<sup>15</sup> Lucius Burckhardt, urban sociologist, is considered the founder of the new "science". Since then, several conferences have been held on the topic, and university courses have been launched. In Hungary it is familiar as sightseeing or walking tours.<sup>16</sup>

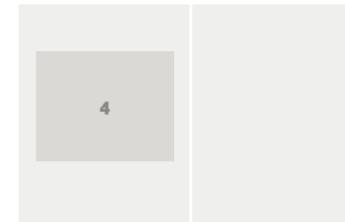
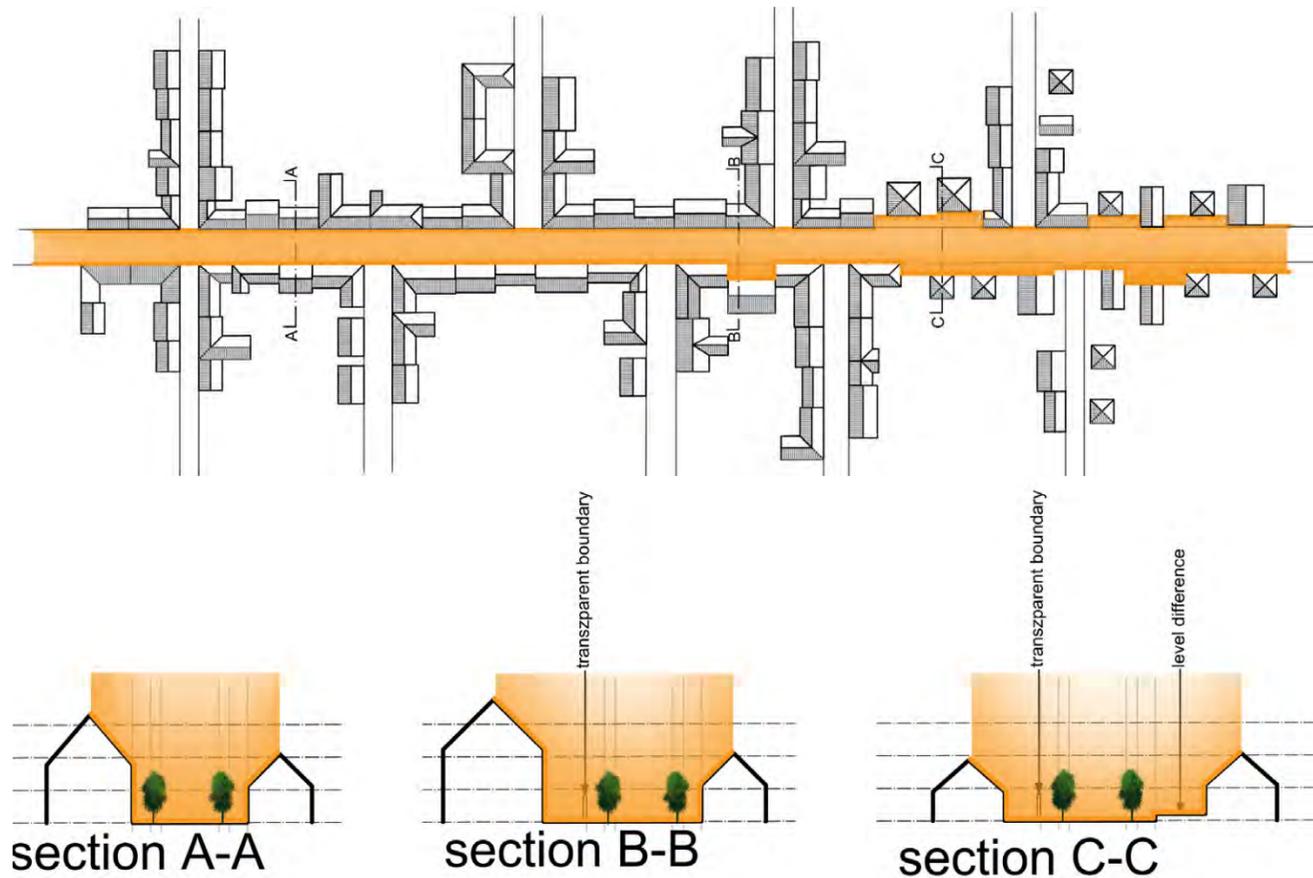
Rediscovering the walk is the key because the speed has blocked us from experiencing space and landscape. This

<sup>13</sup> Cullen, Gordon (1961): *The Concise Townscape*, The Architectural Press, Oxford (Serbian Edition: 2007), 118

<sup>14</sup> Juhani Pallasmaa (2018): *A bőr szeméi: Építészet és érzékek*, Typorex, Budapest; 56

<sup>15</sup> Hall, Edward T. (1966): *Anchor Books*, Doubleday, New York; 162

<sup>16</sup> Burckhardt, Lucius (2006): *Warum ist Landschaft schön?*, Martin Schmitz Verlag, Berlin



**Fig. 4:** The perceptual boundary of the street  
(MADE BY AUTHOR)

is what promenadology deals with, it can also be called the "science of walking".

"For now, promenadology is not a science, but an approach."<sup>17</sup> Its aim is the focused and conscious perception of the environment, and to transforming mere vision into perception.<sup>18</sup>

The promenadological approach has only qualitative expectations, the goal is to analyze the whole view and in the light of this, identify the identity of the place. The biggest disadvantage of a static street view is that it is presented from one perspective. Even if multiple images are taken from different perspectives, they remain only mosaic pieces. The complex image of the surrounding cannot be got.

According to Lucius Burchardt, only walking gives direct sense of the

environment. Promenadology can be a spatial experience not only for the sighted but also for the blind - although they use a completely different sense to understand their environment. For them, space is perceived through the sensation of touch, sound and its reflection, sense of heat, and fragrance. This creates a dynamic picture of the environment.

Walking can be seen as the source of the spatial experience. The usual static street views highlighting just a few moments, but the person is moving constantly, stop only stations that must be surpassed sooner or later. For this reason, it is essential to involve movement in settlement research.

During the walk people get in direct contact with the environment. If you are in a settlement for the first time,

<sup>17</sup> Meggyesi Tamás (2006): *Városépítészet, Egyetemi jegyzet, Budapest*; 2

<sup>18</sup> Burchardt, Lucius (2006): *Warum ist Landschaft schön?*, Martin Schmitz Verlag, Berlin; 87

perhaps your first impressions are the most important: then all our senses are active, and our impressions leave a lasting imprint in our memory.

To sum up, one of the key points in the experience of space is the relationship between space and time. To understand the essence of a dynamic spatial experience, we need to clarify the relationship between time and space. In order to experience the time, we have to move around in space.

According to Szentkirályi, the length of the route is not calculated in meters, but in time "... we perceive a space as the sum of the motions; a distance between objects is required, measured by the content of a motion overview or the amount of time that can be experienced."<sup>19</sup> In other words, continuous motion involves the change of the environment by the time, that is, the subjective realization of space: as if we were experiencing the interference of time and space.

In contrast to the experience of a static view during the movement everything changes: the viewer who is walking and the environment through which they pass, while they interact with each other so that the two can no longer be separated. It is nothing more than a lively, moving collage or a piece of music where themes like "acoustic event spaces" unfold over time. But we could liken it to narration: it is no coincidence that we know many literary descriptions of a street.

#### 4. THE METHOD OF USING THE DIFFERENT ASPECTS OF PERCEPTION IN THE DEFINING THE AREA OF THE STREET

The most common way of defining the area of the street is based on dividing it on outer and inner, public and private areas, that in most of the cases means the physical boundary of the street that is created by the facades of the buildings.

As it can be seen in both static and dynamic aspects of experiencing, more from the public spaces of the street can be perceived. According to Giambattista Nolli it can be said that the street as a public area does not stop at the physically enclosed building line. As it is visible on the map of Rome made in 1748 the inner blocks and the semi public spaces, are indeed part of it.

The "urban solid-empty" morphology follows similar approach. The "urban solid" category includes the constructions, that are the border-defining buildings. However, the "urban empty" defines the entrances, the inner blocks, the network of streets and squares, parks, gardens and other linear elements.<sup>20</sup>

The urban open space is a free from above external space explored and shaped for human use.<sup>21</sup> In other words the urban open spaces are parts of an uninhabited urban space ("urban empty") that have been explored for human use by landscape architecture.<sup>22</sup>

<sup>19</sup> Szentkirályi Zoltán (1980): *Az építészet világtörténete I-II., Képzőművészeti Alap Kiadóvállalata, Budapest*; 190

<sup>20</sup> Lukovich Tamás (2001): *A posztmodern kor városépítészetének kihívásai*, Pallas Kiadó, Budapest

<sup>21</sup> Jámbor Imre (2000): *Kertépítészeti tér, szabad tér, zöld tér - TÁJÉPÍTÉSZEZET* 2000/1

<sup>22</sup> Balogh P. I. (2004): *A szabadterek szerepváltozása a nagy európai városmegújításokban*, Doktori értekezés, Budapest

To sum up, it is obvious that the area of the street extends beyond the physical frame. To determine the exact area of the street getting a complete image of it the research involved the different ways of experiencing the environment. Thereby included the observer into the process.

Owing to the new method of defining the frame of the main street it becomes possible to analyze them including the individual factor, how the people feel and understand their surrounding. The result of the new method is visible on the figure below.

## 5. CONCLUSION

To sum up, the subject of the paper is about defining the area of the street. According to the most of the literature, the street is framed by elements that define the outer and inner space, separating the private from the public area. These are mainly the walls that surround the street, namely the facades of buildings. In this case the street is strictly limited to the public area. However, the observer senses more of the street. The research was made to find the method of defining the boundary of the street including the subjective aspect, the human factor in it.

According to professor Meggyesi, our environment exists in three ways: as an independent reality, and as a subjective image perceived by moving and in our memories.<sup>23</sup> The research is

focusing on the two subjective methods of perceiving the environment that are including the human factor. Therefore, the different ways of experiencing the environment were analyzed. These are the dynamic and static aspect. According to both the area of the street contains all the areas that have visual connections with the observer.

To sum up, the base of defining the frame of the street is given by the different methods of experiencing the environment. It is based on the space that the observer sees being on street or walking along the street.

The paper is giving a base for establishing a new methodology of urban-architectural researches saying, that the frame of the street defined by subjective perception contains much more relevant attributions about the settlement than the public area of the street can give. It includes the human factor, making possible to involve subjective experience and the different social inter actions into the research.

Defining a new method of urban-architectural analyzes of the main streets, but at the same time finding a framework which will allow that research become effective, is the fulcrum of this paper, which will be elaborated in the Ph.D. in progress of the author. Owing to the new method of defining the frame of the main street it becomes possible to analyze them including the individual, subjective factor, how the people feel and understand their surroundings. ©

**23** Meggyesi Tamás (2011): *Promenadológia: Fejezetek a séta és a lineáris látványelemzés elméletéhez, Budapest*

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## AZ UTCA TERÜLETI MEGHATÁROZÁSÁNAK MÓDSZERE

Az utca területének lehatárolása összetett feladat. A legtöbb szakirodalom szerint az utca keretét a külső és a belső teret határoló, a magánt a közterülettől elválasztó elemek képezik. Ezek elsősorban az utcát határoló térfalak, azaz épületek homlokzata. A szakirodalom szerint a szakirodalom szerint az utca fizikai keretét tehát azok az elemek alkotják, amelyek fizikai határt képeznek a különböző karakterű és használatú terek között. Az efféle lehatárolás egyik fő hiánysága, hogy a bejáratok és a földszintek szerepe elvész. Hiszen a magán és közterület határa korántsem egyezik azzal, amit az egyén érzékel az utcából.

Ennek megfelelően ki kellett egészíteni az utca lehatárolásának definícióját.

Meggyesi szerint környezetünk háromféle módon létezik: először az egyéntől független objektív valóságként, másodsor a végigjárás során, harmadszor pedig emlékekben, mentális kép formájában.

Ezek alapján a kutatás az utca keretének meghatározásánál az egyén által érzékelt teret vagyis a szubjektív teret vette alapjául és bevezette az utca percepció kerete fogalmát. Gordon Cullen a *The Concise Townscape* című könyvében a fizikai határokat akadályként (hazards) definiálja, amelyek célja, hogy egyértelműen elválassza a különböző karakterű tereket úgy, hogy a vizuális kapcsolat megmaradjon.

Mivel az ember a környezetet térbeli és időbeli mivoltában érzékeli, két fajta térérzékelési módot különböztet meg a kutatás, az alapján, hogy az ember miként fogja fel a teret és az időt, illetve miként reagál rá: a dinamikus (promenadológia) és a statikus (percepció) érzékelési módot. Ezek az álló helyzetben, illetve a mozgás során szerzett információkat foglalják magukba. Ez azonban nem pusztán az információk begyűjtését jelenti, hanem valódi élményt is, mely által komplex képet kaphatunk környezetünkről.

Összefoglalva, az utca percepció keretének meghatározása során a környezet személyes megtapasztalása kulcsfontosságú szerepet játszik. Az utca percepció kerete ugyanis azt a

területet határolja, amelyet az egyén érzékel az utcából. Ezáltal az utca nem korlátozódik pusztán a szűk értelemben vett közterületre. Magába foglalja a félprivát és privát tereket illetve a köztük lévő interakciókat, ezáltal magába foglalja az utcán zajló életet.

A kutatás alapot biztosít a városépítészeti kutatások új módszertanának kidolgozásához, mely a szerző folyamatban lévő PhD kutatásának témája. A módszer alapja, hogy a szubjektív térérzékelés alapján lehatárolt utca segítségével komplex képet kaphatunk magáról a településekről. Hiszen az efféle lehatárolás magába foglalja az emberi tényezőt, lehetővé teszi a szubjektív tapasztalatok és a különböző társadalmi interakciók bevonását a vizsgálatokba. ©