ACCESSIBLE URBAN SPACE – CASE STUDY OF THE CITY OF SHTIP

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ABSTRACT

Accessibility and mobility in the urban environment are dictated by the design and location of facilities and road infrastructure. Urban space planning is a very important segment in modern society in the direction of creating an inclusive environment. The daily movements of people take place within that space, so accessibility is analyzed here in terms of the ability to get from one location to another, facing architectural barriers, access to pedestrian and transport systems. In that context, barriers include absence of parking place with special purpose, low-floor buses, sloping curbs, lighting, audio and visual information and road signs.

This paper provides a brief overview of the elements of accessibility in urban space, their implementation and location problems, through an analysis of a part of the city of Shtip. The purpose of this paper is to give recommendations for the improvement of the urban space in terms of architectural accessibility and inclusive planning.

INTRODUCTION

One of the main human needs is free and unhindered movement within urban space and in the buildings, that is, in the entire built environment. Creating urban environments that prioritize accessibility and diversity is essential to fostering inclusive communities and ensuring equal opportunities for all residents. The way cities facilitate accessibility through their urban forms and transportation systems has a direct impact on human well-being. Inclusive urban planning strategies cover a range of activities, from community engagement and participatory design to inclusive infrastructure and transport planning.

Planning urban environments that meet the need for free movement of people with disabilities is one of the main goals of modern society today. The development of urban areas in the past and today moves in a very different way, but always with the same goal, facilitating people's needs and enabling free manipulation in space. Although in the past awareness of the needs of people with disabilities, as a vulnerable category, which is limited in movement within the entire built environment, was at a very low level, today that topic is more and more relevant and is supported by legal regulations and already implemented practices to improve accessibility and overcome architectural barriers.

By 2050, an estimated 6.25 billion people are expected to live in urban centers. Urbanization has the potential to be a driver for achieving sustainable and inclusive development for all. The current lack of accessibility that people face within the built space is a major challenge today. (United Nations, Good Practices of Accessible Urban Development, 2016)

BUILT PHYSICAL ENVIRONMENT

Looking at architecture as a field that deals with the shaping of space for people's needs, we see the connection of accessibility with architecture. The architect and urban planner, with his professional abilities, during the design process, should anticipate accessibility problems and find an appropriate solution for creating an accessible space or facility. Overcoming existing architectural barriers in the built environment is a challenge for any modern society.

Meeting the needs for a sustainable and inclusive urban environment requires strong commitments including regulatory norms and standards, planning an access based on the principles of universal design, locating necessary resources and engagement of all community members, including persons with disabilities.

In Macedonian legislation, accessibility and availability in the physical environment is regulated by several laws. The *Law on construction*[1] regulates the right to physical accessibility and availability to public facilities and public areas. Article 11, paragraph 1 of the same law, indicates that: *„building for public and business purposes and buildings with the purpose of housing in residential buildings, as well as buildings with residential and business purposes must be designed and built so that the persons with disability will allow them unhindered access, movement, stay and work to and in the building."* In addition to the new amendments to the *Law on construction*[2], article 11, paragraph 3, re-regulates the issue of accessibility and availability of public areas by designing and placing footpaths for the movement of persons with physical disabilities and persons with visual impairment. (Попоска Ж., 2015)

The right to parking spaces is regulated by the *Rulebook on Standards and Norms for Urban Planning*, which stipulates that *"3% of group parking spaces shall be provided for the „disabled" while parking spaces with less than 20 spaces are provided with at least one parking space for the disabled. The parking place for the disabled is located and clearly marked closest to the entrance of the building and to the pedestrian area".*

Within the same Rulebook, Article 76 defines the characteristics that pedestrian paths, sidewalks and squares should have. To overcome height differences, ramps with appropriate slopes must be provided.

In addition to the existing legislation and policies, the conducted research shows that people with disabilities within our country, however, feel limited in the ability to move through city streets (61%), in access to and in public facilities (52%), toilets (65%) and services (74%). (Коробар В., 2006)

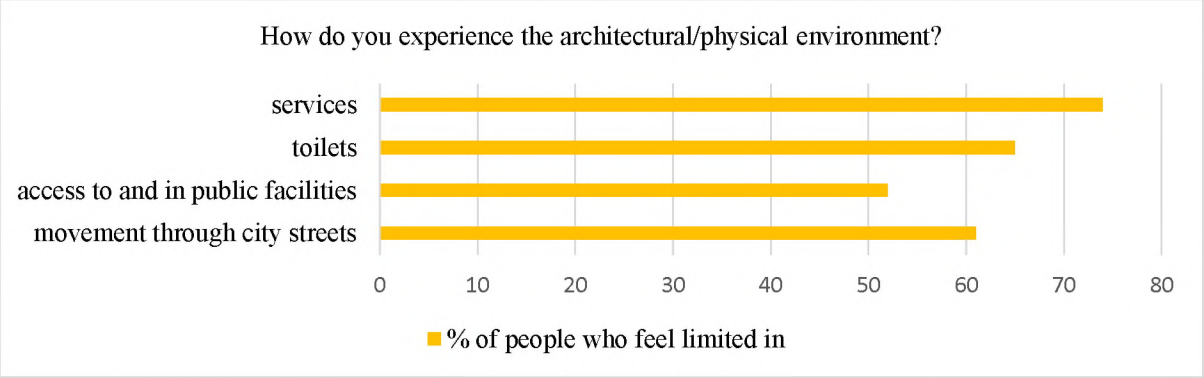


Chart 1. Graphic display of a survey conducted by "Polio Plus", February 2006 Skopje;

[1] Закон за градење (Сл.весник на РМ бр. 130/09, 124/10, 18/11, 36/11, 54/11, 13/12, 144/12, 25/13, 79/13), член 11, став 1
[2] Закон за изменување и дополнување на законот за градење (Сл.весник на РМ бр.115/14), член 11, став 3

INCLUSIVE ENVIRONMENT AND UNIVERSAL DESIGN

Inclusion develops by increasing the rise in participation of the number of people with different individual preferences and is constantly growing. It means the development of the community in a broader sense, where the conditions in the entire community are promoted through the cooperation of several entities. Inclusion is achieved through three interrelated dimensions, namely, creating an inclusive culture, creating an inclusive policy and implementing an inclusive practice. (Booth T., 2002)

Inclusive urban planning strategies aim to create cities that embrace and support people's diversity, fostering a sense of belonging and inclusion for all. This includes designing infrastructure to be adapted for free movement and manipulation by individuals of different abilities and ages. This can be achieved by implementing the principles of universal design in urban space planning, which will enable equal access to necessities and comforts to all individuals within a society.

The definition of universal design is included in the text of the United Nations Convention on the Rights of Persons with Disabilities. In that text, universal design is defined as the design of products, environments, programs, or services for use by all people to the greatest extent possible, without the need for customization or specialized design. (United Nations, Convention on the Rights of Persons with Disabilities and Optional Protocol, 2006) Although there are more terms and definitions related to universal design, the goal is the same, to make the world around us as accessible as possible for the largest group of users.

The main goal of universal design in architecture is to create objects and urban environments that will be in accordance with human dimensions, provide comfort in use, understandable use, a healthy environment, and a sense of social integration to all people equally. Some characteristic architectural elements that can be included in universal design are access ramps, lowered curbs, automated doors, elevators. In this way, universal design tries to make the built environment more accessible and functional for the whole community.

Very often, when it comes to disability, only people with physical or mental disabilities are thought of, but when talking about accessible architecture and an accessible built urban environment, the structure of the population that is limited by its physical abilities must also be taken into account, for example the age group, as well as a temporary condition in a different period of a person's life when he feels limited in movement. Considering the different needs and preferences of people in a society, a major aspect of inclusive urban planning is community engagement. It involves the active involvement of all community members in making decisions, enabling them to contribute their insights and perspectives to the development of urban design.

Considering the impact of built environments on social equity is imperative in the pursuit of creating inclusive and accessible urban spaces for all members in a modern society. The implementation of universal design aims to address the needs of individuals in all areas of life, ensuring that no one is marginalized or excluded due to physical, social or economic barriers.

In this context, it is important to involve the entire community in overcoming the challenges of architectural barriers and adapting the urban space to the needs of all its members equally. This approach will enable them to actively participate and advance in society.

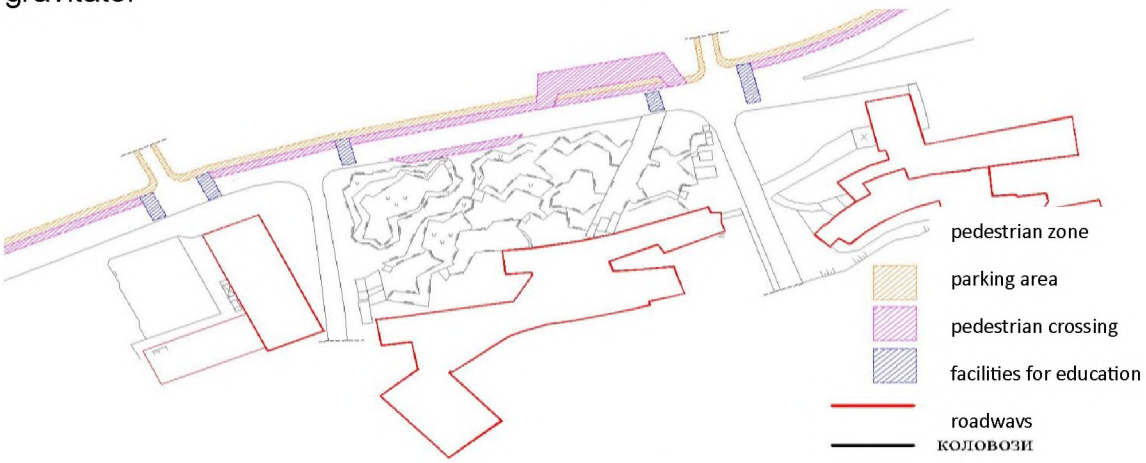
ANALYSIS ON THE URBAN PART OF THE CITY OF SHTIP

The key challenges in overcoming architectural barriers in urban space mainly relate to the lack of awareness and understanding of the real problems of accessibility and diversity, financial limitations, limited regulatory support, resistance to changes and insufficient involvement of concerned parties.

Picture 1. Map of the analyzed part of the city of Shtip

In this context, an analysis was made of a part of the urban area of the city of Shtip in terms of the accessibility of the urban space, which includes part of the course of the Otinja river, where are located three schools (one primary and two secondary schools).

The accessibility of the urban space in this part of the city has been analyzed in terms of footpaths, sidewalks, ramps for overcoming height differences, audio and light signaling and access to the school yard. This location is the subject of analysis because it is one of the most frequented parts of the city of Shtip, located in the very center, where a large number of people of different ages and with different abilities gravitate.



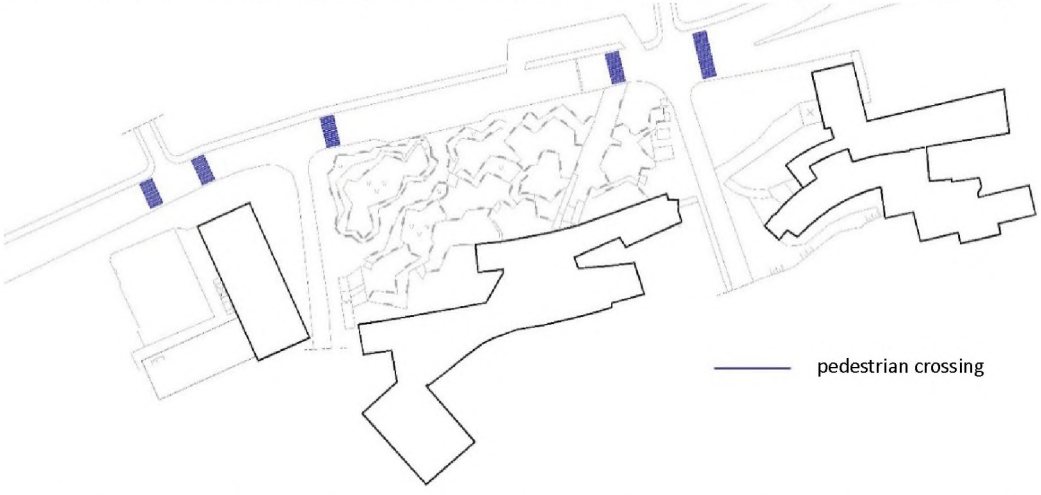
Picture 2. Map of the zones of an analyzed part of the city of Shtip

In this part of the city, footpaths and sidewalks are provided for the movement of pedestrians, which have a non-slip and flat surface, with a continuous level, but with existing level differences in the transition between the roadway, sidewalk, and access to the school yard. Within the pedestrian zone, urban equipment (trash bins,

billboards and information boards) has been placed that do not obstruct the movement of people. On the sidewalk itself, there is urban greenery (tree line) that partially meets the requirements of the *Rulebook on Standards and Norms for Urban Planning, Article 80*, with places for seedlings in a square shape whose horizontal protection is not at the same level as the pedestrian area, such as is provided by law. It is one of the architectural barriers located within the analyzed urban space, which represents a problem for free and unhindered movement in that part of the city.

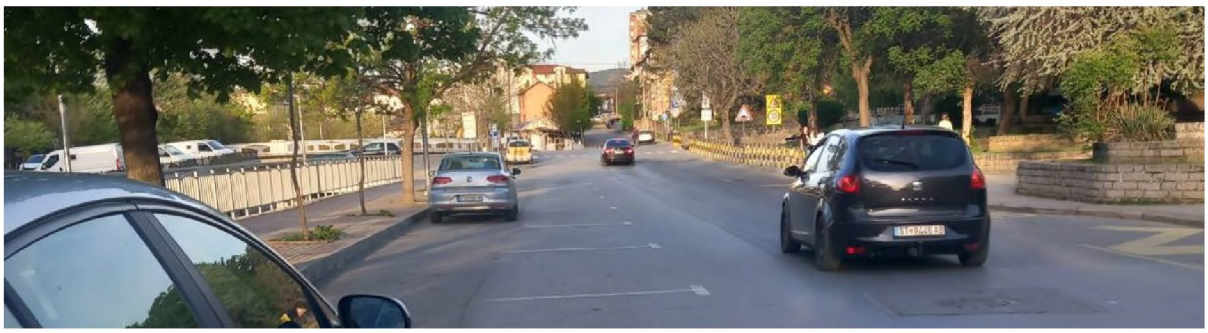
Picture 3. Pictures of the analyzed part of the city of Shtip

To slow down the traffic, there is one transverse obstacle on the roadway in front of the elementary school to slow down the speed of movement of vehicles in that section, in order to increase the safety of children when crossing the roadway. For the movement of pedestrians across the roadway, several pedestrian crossings have been installed that meet the needs of people who use this part of the city as pedestrians. To increase the inclusiveness of this urban space and increase the level of accessibility for people with different abilities, there is a lack of auditory and light traffic signs that would meet the needs of people with impaired or reduced sight and hearing.



Picture 4. Map of pedestrian crossings in the analyzed part of the city of Shtip

Except pedestrian zones, parking zones are also located in this urban space, next to the roadway and on a platform specially built for that purpose. This satisfies the growing need for parking spaces around schools. In addition to public parking lots, there is also a bus stop for temporarily stopping vehicles for transporting students and passengers from intercity transport.

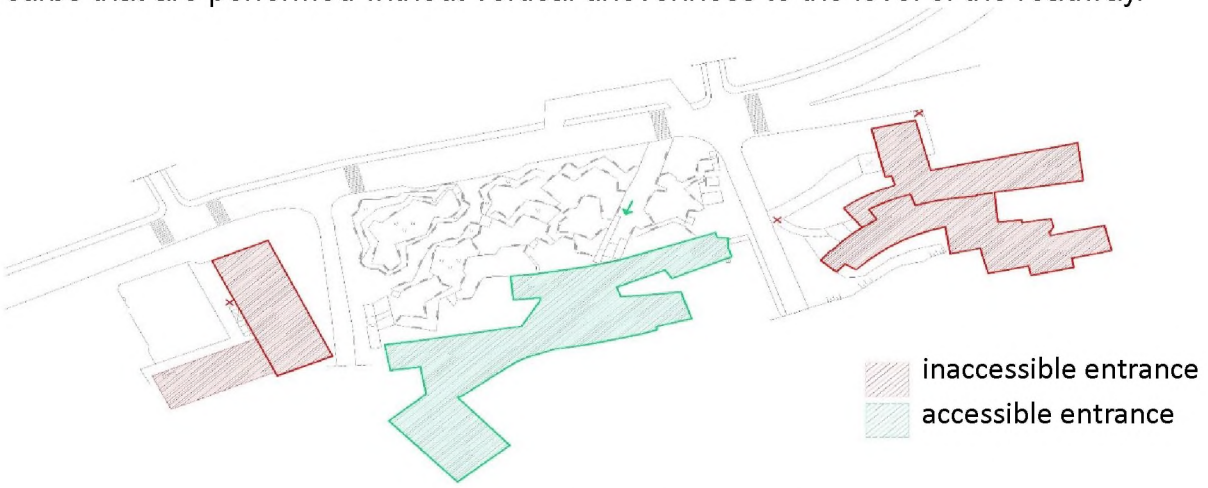


Picture 5. Picture of the analyzed part of the city of Shtip

Picture 6. Picture of parking platform from the analyzed part of the city of Shtip

The analysis of the parking zone from the aspect of accessibility and inclusive urban planning shows that there is a lack of parking spaces for people with disabilities, as provided for in the legislation (cited in the text above).

In the urban area where the analysis was made, a lack of ramps to overcome the existing level differences between the sidewalks and the roadway was noticed. This segment concerns all people who face physical disabilities and are wheelchair users, as well as parents with baby strollers, the old people and all those who feel restricted in their movement in this part of the city. This element of accessibility in the analyzed urban space is partially implemented in places where there are pedestrian crossings, which is in accordance with Article 193 of the Urban Planning Rulebook. The implementation of this element of accessibility is carried out by placing slanted curbs that are performed without vertical unevenness to the level of the roadway.



Picture 7. Map of accessibility of public facilities in the analyzed part of the city of Shtip

Picture 8. Picture of accessibility of public facilities in the analyzed part of the city of Shtip

In terms of accessibility to buildings for public use from the Rulebook on Urban Planning, Article 190, which also includes the schools that are part of the analyzed part of the city of Shtip, it is provided that "*access ramps should be built for height control of uneven surfaces for communication at the entrances of the buildings*", with a minimum width of the ramps of 120 cm. (Сл. весник на РСМ бр. 225, 2020) In this context, the analysis shows that the primary school has been adapted to improve accessibility to the facility itself, but this is not the case in the two secondary schools, where access is provided through stairs leading to the main entrance, which makes them completely inaccessible for people with disabilities or persons with limited mobility.

STRATEGIES FOR OVERCOMING PROBLEMS

Overcoming accessibility problems in urban areas requires the engagement of the entire society in overcoming existing problems and creating an inclusive built environment. This can be achieved by implementing awareness-raising campaigns and educational programs within the framework of urban planning education from that aspect, financial resources for integrating effective inclusive design solutions, cooperation with various associations and organizations for the needs and requirements of people with disabilities and inclusion of all individuals to encourage a collective commitment to create an inclusive environment.

Inclusive urban spaces should be accessible and usable for all people with different abilities, that is, they should respond to the needs of different groups in society, such as people with disabilities, the old people, children, and people with temporary movement restrictions. For this purpose, it is necessary to integrate universal solutions that allow equal access and design for all. From that aspect, it is important to implement the principles of universal design in the process of designing and planning the entire built environment. This includes barrier-free urban space, clear walkways, entrances, seating, signage, and comfort that will allow free and unobstructed use of urban space by all persons equally.

In the implementation of such practices, the role of architects and urban planners is important, who with their professional engagement can improve the urban space from that aspect, by implementing the principles of universal design, i.e. building ramps, placing sloping curbs, placing tactile paths, placing of adapted urban equipment, construction of inclusive playgrounds and installation of appropriate signage that will improve the orientation and accessibility of the urban environment.

Urbanization in recent years has led to a significant increase in the percentage of constructed areas with visible neglect of green areas. Today's practice shows that green areas are not a priority of investor urbanism, where plans for greening are not

realized, and existing fragments of greenery are not properly maintained. From that aspect, in every modern urban environment, it is important to plan and implement the largest possible green area, which will increase the comfort and aesthetic value of the urban space, and at the same time will contribute to an ecologically sustainable environment and environmental protection. Urban greenery is an important catalyst for local climate and air pollution levels.

CONCLUSION

Accessibility can be viewed from two angles, the easy way people can get to certain places or opportunities, or the characteristic of places and opportunities in terms of how easily they can be reached. The accessibility of urban space plays a fundamental role in shaping the environment that directly affects people's ability to move to reach their jobs, schools and homes.

The development of technology and social attitudes are the main drivers of the idea of inclusiveness in future urban planning and architectural design. Inclusive urban planning is conditioned by the engagement of the community in the planning process, the inclusion of different members in planning, integrating sustainable infrastructure, implementing new technologies and practices to create ecological spaces accessible to all.

These factors provide an opportunity to transform the way of approach in arranging the urban space, laying the foundation for the creation of an inclusive modern society, in which there are no restrictions on the mobility of all its members equally. The shaping of the built environment and buildings without architectural barriers are a theoretically complex but possible concept, in contrast to its implementation, where a bigger problem can be noticed. Perhaps those adaptations and deviations from the traditional can be an obstacle to the rapid integration of the concept of accessibility in society today. That is why it is extremely important to raise awareness of accessibility in the built environment among all relevant instances, and especially awareness of the huge number of people affected by this problem, so that solutions would be more easily accepted and implemented.

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АНАЛИЗ НА НАВИЦИТЕ НА УСПЕШНИТЕ ЛИДЕРИ: ПРИМЕРИ ОТ ИСТОРИЯТА

П. Джандармов

През последните 150 години изследователите разработват най-различни модели, посветени на това да обяснят ефективното лидерство.

Един от първите модели на лидерство в исторически план е свързан с **качествата**, които правят един лидер успешен и ефективен.

И тъй като "качества", "характеристики" и "черти" на лидера са сходни понятия, в литературата тези модели стават известни като **"теории за характерните черти"**.

Като основоположници на теорията на характерните черти на лидерството се считат Карлайл и Галтън. Техните идеи са публикувани за първи път още в средата на XIX век (1869 г.) и остават на практика непроменени чак до средата на XX век, когато се появяват нови течения в лидерството, най-вече в лицето на бихевиористките теории на лидерство, а след това и ситуационния подход за лидерство.

Развива се теорията за "Великия човек" (Great Man) – популярно схващане до 30-те години на XX век, според което лидерските качества са вродени, а не придобити. Считало се е, че лидери като Александър Македонски, Наполеон Бонапарт, Джордж Вашингтон и др. са "велики хора", защото са имали вродени способности да управляват и влияят.

Според тази теория съдбата на една организация (в т.ч. фирма) е в ръцете на силен, могъщ човек, който е роден за ръководене и господство.

До 50-те години на XX век се провеждат стотици изследвания на характерните черти на успешния лидер. Всички те определят набор от отличителни характеристики на успешните лидери и стигат до сходни изводи, че **най-добрите лидери се раждат, а не създават**. Ако един човек не притежава "правилните" лидерски качества, той няма да може да ръководи ефективно или най-малкото няма да може да ръководи така ефективно, както родените лидери. Обучението и развитието могат да подобрят лидерските способности в известна степен, но това, което е наистина важно е дали човек притежава подходящите качества или личностни характеристики да бъде лидер[1-4].

Лидерът играе ключова роля в създаването на благоприятна работна среда във всяка организация. Той е този, който определя мисията на компанията и утвърждава нейните основни ценности. Лидерът следи за това как вътрешните процеси вървят ръка за ръка с външните обстоятелства и постоянно поддържа мотивацията на своя екип.

Освен това, един добър лидер винаги гледа напред. Той оценява настоящето и на базата на това прогнозира какво може да се случи в бъдеще, като по този начин формира очакванията за предстоящи събития.

Ефективното лидерство се изразява в способността да се анализира настоящето и да се създадат ясни планове за бъдещето, които целият екип може лесно да последва.

В крайна сметка, главната задача на лидера е да осигури такава организационна среда, където всеки може да бъде продуктивен. Това изисква добри управленски умения, способност да мотивира и да води организацията напред.