RECOMMENDATIONS FOR URBAN REVITALIZATION OF THEATER LOCATIONS: A CASE STUDY – REPUBLIC OF SERBIA

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Abstract. Theater location quality is researched according to a pre-formed model with the aim to improve quality in the functioning of theaters in settlements of the Republic of Serbia. An omnipresent process of globalization has led to significant changes in the field of culture, and thus a reduction in interest for classic theater performances has occurred. The poor condition of theater buildings in architectural and structural terms as well as their immediate environment, in urbanistic sense, is the result of neglecting the field of culture on a national level for many years. By summing up the total scores for specific urban aspects obtained on the basis of the conducted research and previously collected data, it was found that the average score of the location quality of theaters is 6 of maximum 10, based on the established scoring and evaluation of the determined aspects within the research. Since the active functioning of the theaters at the local level is important for the development of the traditional culture of the population, it is justified to propose specific measures transformation of the theater immediate environment and to implement them as soon as possible for 30 existing theaters in the Republic of Serbia.

Key words: theater location evaluation, urban revitalization, theaters of Serbia

1. INTRODUCTION

The main objective of this study is to determine the quality of existing theater locations from urban aspects and point to the possibility of remodelling their immediate surroundings, in order to improve their functioning, and therefore increase the attendance at theater performances. "The global economy and technology condition the typification of lifestyles, behavioural culture and formal norms". [1] The impact of globalization on the theater culture can be viewed as increase in competition, physical deterioration of theater buildings, weakening of operation and closure of certain cultural establishments. "It has been observed
that the theaters in Serbia, despite the unenviable conditions around them throughout their existence are in fact institutions that will not disappear, because they are places that nurture and preserve the profound tradition, symbolism and culture of the society throughout the centuries." [2] As Dinulović [3] said "the quality of performance of a theater play is a crucial, but not the only functional and technological process of a theater either as a building or as an institution" it is necessary to carry out specified interventions on their surrounding in order to rise their functioning to a higher level. [4] Considering the phases of urban transformation of Barcelona, Degen and Garcia [5] mentioned, among the other things, the provision of new public spaces and renovating theaters. “Exactly this architectural domain of the theater is of importance here, even more so than the formal characteristics of the medium of the theater.” [6] Due to the social inertness, the immediate environments of the theaters have gradually deteriorated. Since it is known that the significance of the urban area for the functioning of a facility is very high [7], refurbishment of a theater's environment must represent a priority task for society and city administration. "Theater presents one of the most distinct spatial formations embedding the collective organizations of social practice. It instates a spatial form of utterly legible and powerful identity and proposes straightforward resources of order and identification." [8] As cultural structures represent an integral part of every settlement “social instrument” within its urban context [8] and its most representative element, it is important to preserve their quality, as well as alter the space around them in a manner that elevates them to a level worthy of the culture of every society. Theaters transform the culture and thus influence the development of entire regions and each individual member of the society has a guaranteed right to culture. [9]

2. ANALYSIS OF THE QUALITY OF THEATER LOCATIONS

2.1. Model of research

In order to determine the quality of the theaters’ locations, the following urban aspects have been analyzed:

- the existence of other theaters or facilities of a similar purpose,
- distance between adjacent theater facilities,
- gravitational area of the theater,
- number of residents in the gravitational area of the theater,
- transportation accessibility of the theater,
- ecological conditions around the theater,
- artificial conditions around the theater,
- belonging to structural elements,
- accessibility to separate theater entrances,
- representation of stationary traffic and
- important numerical indicators.

A research model which can easily determine the quality position of each theater has been developed. The evaluation criteria and parameters as well as the scoring system are listed in the table. (Table 1) [10]
### Table 1: Model of evaluation of the location quality of theaters

| Criterion                                      | Parameter                                      | Value |
|------------------------------------------------|------------------------------------------------|-------|
| **The basic numerical indicators of the theaters** | Capacity of the auditorium (number of seats)   | No.   |
| Numerical indicators                           | Size of the plateau                            | m²    |
|                                                 | Number of parking spaces for automobiles       | No.   |
|                                                 | Number of parking spaces for bicycles          | No.   |
| **Evaluation of the location quality of theaters** | Facilities in the surrounding area             |       |
|                                                 | There are several similar facilities.          | 1     |
|                                                 | There is one similar facility.                 | 2     |
|                                                 | There are no similar facilities.               | 3     |
| **Mutual distance between theater facilities in the surrounding area** | In the immediate vicinity (< 1 km).             | 1     |
|                                                 | At a smaller distance (1 km to 10 km).         | 2     |
|                                                 | At a greater distance (10 km to 50 km).        | 3     |
|                                                 | At a great distance (> 50 km).                 | 4     |
| **Gravitational area of the theater facility**  | $r < 0.5$ km                                   | 1     |
|                                                 | $0.5$ km $< r < 5$ km                          | 2     |
|                                                 | $5$ km $< r < 25$ km                           | 3     |
|                                                 | $r > 25$ km                                    | 4     |
| **Population in the gravitational area of the theater facility** | Up to 20,000 residents.                        | 1     |
|                                                 | Between 20,000 and 50,000 residents.           | 2     |
|                                                 | Between 50,000 and 100,000 residents.          | 3     |
|                                                 | Between 100,000 and 250,000 residents.         | 4     |
|                                                 | Over 250,000 residents.                       | 5     |
| **Theater’s location in relation to traffic elements** | Presence of 1 or 2 modes of transport.          | 1     |
|                                                 | Presence of 3 or 4 modes of transport.          | 2     |
|                                                 | Farther away from transportation facilities.    | 1     |
|                                                 | Close to transportation facilities.             | 2     |
|                                                 | Farther away from a major street.              | 1     |
|                                                 | Close to a major street.                       | 2     |
|                                                 | Presence of public city transp. lines.         | 1     |
|                                                 | A bus line in the vicinity.                    | 1     |
|                                                 | Bus and other stops in the vicinity.           | 1     |
|                                                 | Presence of a taxi service.                    | 1     |
| **Ecological conditions**                      | The facility is near a body of water.          | 1     |
|                                                 | The facility is on flat terrain.               | 1     |
|                                                 | The facility is protected from the wind.       | 1     |
|                                                 | The facility is shaded.                        | 1     |
|                                                 | The facility is isolated from noise.           | 1     |
|                                                 | The facility is protected from air pollution.  | 1     |
|                                                 | The facility is safe.                          | 1     |
| **Historical ambience of the settlement**      | Located farther away from the historical part. | 1     |
|                                                 | Located in the historical part or in its vicinity. | 2     |
| **Significant landmarks and areas**             | In the vicinity of landmarks.                 | 1     |
|                                                 | In the vicinity of gathering places.           | 1     |
|                                                 | In the vicinity of residential areas.          | 1     |
| **Part of structural elements**                 | The facility is part of a street or block.     | 1     |
|                                                 | The facility is part of a square.              | 2     |
| **Accessibility of the facility** (separation of entrance)** | A separate economic entrance.                 | 1     |
|                                                 | A separate entrance for staff.                 | 1     |
|                                                 | A separate entrance for the participants.      | 1     |
|                                                 | A separate entrance for visitors.              | 1     |
Evaluation of the location quality of theaters

| Criterion                  | Parameter                          | Point |
|----------------------------|------------------------------------|-------|
| Stationary traffic         | For automobiles                    | 1     |
|                            | For bicycles                        | 1     |
|                            | For commercial vehicles             | 1     |
| Numerical indicators       | Area of plateau per visitor > 0,5 m²/v. | 1     |
|                            | Parking spaces (automobile) per visitor > 0,03/v. | 1     |
|                            | Parking spaces (bicycle) per visitor > 0,02/v. | 1     |

Total number of points 0 - 50
Location’s quality (%) (0% - 100%) - 2 x total number of points
Location quality score (0 - 10) - 0,1 x % of the location’s quality
Score of location quality (0 - 10) - whole number

2.2. Research of theaters in Serbia

According to the formed model location quality from an urban aspect was investigated and verified for 30 theaters1 in 12 cities from the Republic of Serbia (see Fig. 1):

- in Belgrade – 1. National Theater, 2. Yugoslav Drama Theater, 3. Belgrade Drama Theater, 4. Terazije Theater, 5. Zvezdara Theater, 6. Atelier 212, 7. Bitf Theater, 8. "Boško Buha" Theater, 9. Theater "Duško Radović", 10. Little Theater "Puž", 11. "Slavija" Theater, 12. "Dah Theater" and 13. "Pan Theater";
- in Novi Sad – 14. Youth Theater, 15. Serbian National Theater and 16. The Novi Sad Theater;
- in Kikinda – 17. National Theater;
- in Sremска Mitrovica – 18. Theater "Dobrica Milutinović";
- in Sombor – 19. Sombor National Theater;
- in Vršac – 20. National Theater "Sterija";
- in Zemun – 21. Madlenianum Opera and Theater and 22. Puppet Theater "Pinocchio";
- in Šabac – 23. Šabac Theater;
- in Niš – 24. National Theater and 25. Puppet Theater Niš;
- in Subotica – 26. National Theater, 27. Children’s Theater of Subotica and 28. "Kosztolányi Dezső" Theater;
- in Užice – 29. National Theater and
- in Zrenjanin – 30. National Theater "Toša Jovanović".

Fig. 1 Settlements location in the Republic of Serbia where the studied theatres are situated
(Source: authors’ drawing)

1 The paper emerged from a research conducted within the project entitled “Technical and technological condition and potentials of architectural buildings for theatrical events in the Republic of Serbia” (project’s register number - 16010), approved and funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia in the period from 2010 until 2014 at the Faculty of Technical Sciences in Novi Sad, Serbia.
The choice of theater was based on the availability of data and the ability to record the current situation. A detailed survey of 30 theaters in the Republic of Serbia according to the aforementioned model of research is given in Supplemental Data (Table I, II, III, IV and V). Supplemental Data is accessible through the following link:

3 COMPARATIVE ANALYSIS OF THE QUALITY OF THEATER LOCATIONS IN THE REPUBLIC OF SERBIA

In this research, a comparative analysis and valuation of theater location from numerous urban aspects was carried out, which was used to determine the overall values and disadvantages of theaters in the Republic of Serbia, as well as the specific potentials and negativities of individual buildings.

3.1. Facilities of a similar purpose

It has been observed that in the presence of several similar facilities in the region or in the settlement, among the other things, there is a functional specialization. Thus, e.g. in Belgrade, there are theaters that differ in size, repertoire (musicals, avant-garde performances, international festival "Slavija", children's performance) and audience. Subotica, Novi Sad, Niš and Zemun have much fewer theaters than Belgrade, but they are different from one another. In contrast, in cities in which there is only one theater, it has the function of organizing all kinds of performance for all categories of visitors. These theaters have regional significance and because of their monumental expression, these facilities have become "the primary visual association of the city" [11].

3.2. Mutual distance between theater facilities in the surrounding area

It has been observed that smaller distance between the theaters, has bigger influence on the development of competition between them, as well as on the reduction in the number of visitors to each of the facilities, due to a decrease in their gravitational areas. People are oriented towards the theater that is closest to them and they visit it more frequently. A much greater distance between theater facilities influences a more even distribution of visitors, but sometimes leads to lower attendance, due to the necessity to use transportation when visiting a theater play. In some cases, the distance between theaters in the same settlement is not as important as the distance between theaters with the same characteristics in the two different settlements. Thus, for example, performances that take place in Subotica, in "Kosztolányi Dezső" Theater and in The Novi Sad Theater in Novi Sad are in Hungarian language, while in other theaters plays are usually performed in Serbian language.

3.3. Gravitational area of a theater facilities

Theaters are destinations with a gravitational force that invites, receives and assimilates people [8]. The approximate² sizes of the gravitational areas of theater facilities were established.

² The assessment of the size of the gravitational areas is based on an assessment of employees in the theater facilities as well as the researchers themselves, since such official data do not exist, which is why they must be
The National Theater in Belgrade has more than one radius of inhabitants’ gravitation. One is the radius ranging from 0.5 km to 5 km, which is within the walking distance. The second radius ranges from 5 km to 25 km, if we observe the availability to the theater through a public and private motorized traffic, i.e. the gravitational field of the territory of the entire city and its immediate surroundings. The third radius of gravity is conditioned by a large variety of the repertoire and alluring power of the theater. This way, the radius of gravity is greater than 500 km, or more precisely, the gravitational area covers the entire Republic of Serbia. The situation is similar for the other theaters in Belgrade as well. Unlike the National Theater in Belgrade, theaters in Kikinda, Sremska Mitrovica, Sombor, Vršac, Šabac, Užice and Zrenjanin are the only ones in their surroundings, and their gravitational areas are larger than the territory of the cities themselves.

This can be considered as basic, but not the only data. Namely, some theaters occasionally have a much larger area of gravity, which depends on the level of quality of the play, the premiere or the language of the performance. In addition, it is important to point out that many theaters have visiting performances in other settlements, thus completely changing the gravitational areas.

3.4. Population in the gravitational area of the theater facility

To determine the number of residents in the gravitational field of theaters it is important to know the total number of inhabitants in the municipalities: Belgrade 1,639,121, Novi Sad 335,701, Kikinda 59,329, Sremska Mitrovica 79,773, Sombor 85,569, Vršac 51,217, Zemun 166,292, Šabac 115,347, Niš 257,867, Subotica 140,358, Užice 78,018 and Zrenjanin 122,714.

Based on the number of theaters in the region, as well as on the gravitational areas of the individual theaters, the approximate number of residents in the gravitational area has been determined for all representative theaters. National Theater in Belgrade and SNP in Novi Sad have a greater gravitational area (territory of the Republic of Serbia), and therefore the higher number of visitors, thus they developed into theaters with national significance. The number of residents who visit theaters varies. In cities which have gravitational areas that cover several smaller settlements in their surroundings, the number of visitors in the gravitational area is greater than the population of these cities. In smaller towns, which have only one theater, the gravitational area is the surface area of this settlement, and the population in the gravitational area is the total population of this town. Residents who gravitate towards The Novi Sad Theater and "Kosztolányi Dezső" Theater in Subotica are a specific population group, part of the Hungarian population, so they make up a slightly smaller number.

3.5. Theater’s location in relation to traffic elements

Each type of transport enables arrival to the city and availability to the theater, so it is extremely important for the quality of the theaters’ location, and their functioning. In all of the 12 settlements whose theaters have been studied in this paper, road (pedestrian,
bicycle and motor) and rail (train and tram) transport modes are represented. Water (river) traffic exists in 7, and air traffic is present in 3 settlements. Most of the theaters are away from traffic facilities and near the main road and bus stops. Organized public transport exists in 7, and does not exist in 5 cities.

3.6. Ecological conditions

Based on the research it was concluded that all theaters studied are located away from a water surface or that it neither exists in the settlement nor in its vicinity. Most of the theaters are on the flat ground. Most of the theaters have a favorable location in relation to the effect of the wind. Wind does not interfere with the functioning of theater facilities, but its impact can be very unfavorable for people who spend time on the plateaus in front of the theaters. The nearness of a park or avenue in front of certain theaters contributes to the quality of environmental conditions representing means of protection for visitors from the influence of the wind. Greatly built environment of a few theaters reduces the adverse effect of the wind. Vegetation is the most commonly used element of protection against too strong insolation of theaters. Certain theaters are shaded by tall buildings located nearby. Insolation is not essential for the functioning of theaters, but it is very important for people who spend time on the plateaus in front of them. The most important requirement for visitors staying at the entrance plateau in front of the theater is security. It is estimated that 43% theaters are safe, isolated from noise and protected from air pollution. The hazard for visitors mainly originates from traffic. People visiting theaters that are located next to the pedestrian area are completely protected from motor vehicle traffic.

3.7. Historical ambience

Most of the theaters are located either in the historical centre or in its immediate vicinity. It is necessary to point out that certain buildings in the historical parts of the settlement are themselves presenters of historical and ambient values of both the region and the city.

3.8. Significant landmarks and areas of the settlement

Most of the facilities are located in the vicinity of significant buildings and places of gathering. The most important areas, parks and squares, increase the attractiveness of theaters and enable their better perception.

3.9. Part of structural elements of the settlement

Facilities were also analyzed as parts of structural elements: streets, blocks, paths, banks and squares. A problem of access to a theater may occur when the theater buildings are embedded in a block, especially if they are part of the old city core or lie alongside narrow streets or frequented pedestrian areas. Thus, e.g. difficulty in an economic access to the SNP in Novi Sad is observed, since the facility is located in a well built downtown in the pedestrian zone. Theaters that are parts of squares (e.g. "Boško Buha" Theater) have the problem of the economic access, because it has to be done across attractive and constantly

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4 Data on the represented forms of transport in residential areas, available at http://www.mojgrad.rs/Beograd/Transport-i-saobracaj (04/02/2015)
visited areas. Here we must emphasize the importance of the overlapping of urban factors, which are in collision when it comes to a good location, attractive, accessible and visited, on one side, and an adequate and easy operation as well as the preparation of theatrical performances (access to all entrances to the building), on the other.

3.10. Accessibility of the facility

In most theaters there are separate accesses to entrances: economic, employee, actors and visitors. Ten (33%) facilities have all four accesses to entrances, 6 (20%) theaters have three, 7 (23%) theaters have two and also 7 (23%) theaters have only one access to entrance.

3.11. Stationary traffic

Most theaters have parking for cars. It is unfavorable that only two theaters have a sufficient number of parking spaces. Some of the theaters do not have a single provided parking space. The problem of individual theaters that do not have their own parking lots for visitors' needs is mitigated by the existence of easily available and relatively close organized public parking with a large number of parking spaces, as well as the proximity of stations for public transport and the existence of a taxi service in the city.

3.12. Numerical indicators

Numerical indicators such as seating capacity, size of the plateau in front of the entrance of the building, the already mentioned number of parking spaces express the quality of the functionality of theater facilities in mathematical terms. The information on the capacity of the auditorium is important from the aspect of theater development and achieving local, metropolitan, regional, national or global significance. A larger seating capacity exists in SNP in Novi Sad (1400 seats), National Theater in Belgrade (900 seats), National Theater in Subotica (900 seats), Šabac Theater in Šabac (700 seats) and National Theater in Niš (700 seats). They already have a high reputation at the national level. For good functioning of theater facilities, it is necessary to harmonize the number of seats for visitors and the size of the plateau in front of the building. Based on the criteria that one person who is standing requires 0.5 m², it was found that the most of theaters have plateau for gathering of the visitors but they are not of sufficient size or do not have the one at all. National Theater in Belgrade has a plateau of only 30 m², but the Republic Square can be used for the purpose of gathering people prior to the show. The disadvantage is that the plateau of the theater and the area of the square are separated by a busy street. Square is the only area for gathering visitors of the "Boško Buha" Theater in Belgrade and the theater "Dobrica Mihutinović" in Sremska Mitrovica. The National Theater in Subotica has large free areas in its immediate surroundings that can be used as a plateau to assemble 900 visitors. The specific form of the basics of The Zvezdara Theater in Belgrade, which is shaped like the letter "L", allows the formation of a smaller plateau for gathering of visitors before the show.
4. Evaluation of the Location Quality of Theaters

By summing up the scores for the individual aspects of urban development and according to a defined model of research of theater’s location quality, it was found that the location of:

- 1 theater has a rating of 8;
- 11 theaters have a rating of 7;
- 13 theaters have a rating of 6 and
- theaters have a rating of 5.

The Terazije Theater in Belgrade is located on a site that has the best conditions for the functioning, and the "Pan Theater" and "Dah Theater" in Belgrade, The National Theater in Sombor, The Novi Sad Theater in Novi Sad and the "Kosztolányi Dezső" Theater in Subotica are in locations that have very poor conditions. By summing up the total scores for specific urban aspects, it was found that the average score of theater locations is 6. (Table 2) This indicates a justification to propose specific measures transformation of the theater immediate environment and to implement them as soon as possible.

Table 2 Summary score of the quality of theater locations

| Criterion                                      | Parameter                          | No. | %  |
|------------------------------------------------|------------------------------------|-----|----|
| Facilities in the surrounding area            | There are several similar facilities. | 24  | 80 |
|                                                | There is one similar facility.      | 3   | 10 |
|                                                | There are no similar facilities.    | 3   | 10 |
| Mutual distance between theater facilities in the surrounding area | In the immediate vicinity (< 1 km). | 18  | 60 |
|                                                | At a smaller distance (1 km to 10 km). | 6   | 20 |
|                                                | At a greater distance (10 km to 50 km). | 1   | 3  |
|                                                | At a great distance (> 50 km).      | 5   | 17 |
| Gravitational area of the theater facility    | r < 0,5 km                          | 0   | 0  |
|                                                | 0,5 km < r < 5 km                   | 6   | 20 |
|                                                | 5 km < r < 25 km                    | 5   | 17 |
|                                                | r > 25 km                           | 19  | 63 |
| Population in the Gravitational area of the theater facility | Up to 20.000 residents. | 2   | 7  |
|                                                | Between 20.000 and 50.000 residents. | 4   | 13 |
|                                                | Between 50.000 and 100.000 residents. | 2   | 7  |
|                                                | Between 100.000 and 250.000 residents. | 5   | 16 |
|                                                | Over 250.000 residents.             | 17  | 57 |
| Theater's location in relation to traffic elements| Presence of 1 or 2 modes of transport. | 6   | 20 |
|                                                | Presence of 3 of 4 modes of transport. | 24  | 80 |
|                                                | Farther away from transportation facilities. | 24  | 80 |
|                                                | Close to transportation facilities.  | 6   | 20 |
|                                                | Farther away from a major street.    | 6   | 20 |
|                                                | Close to a major street.             | 24  | 80 |
|                                                | Presence of public city transportation lines. | 25  | 83 |
|                                                | A bus line in the vicinity.          | 22  | 73 |
|                                                | Bus and other stops in the vicinity.  | 22  | 73 |
|                                                | Presence of a taxi service.          | 30  | 100 |
| Criterion                        | Parameter                                                                 | No. | %    |
|---------------------------------|---------------------------------------------------------------------------|-----|------|
| Ecological conditions           | The facility is near a body of water.                                     | 0   | 0    |
| Ecological conditions           | The facility is on flat terrain.                                          | 22  | 73   |
| Ecological conditions           | The facility is protected from the wind.                                  | 24  | 80   |
| Ecological conditions           | The facility is shaded.                                                   | 18  | 60   |
| Ecological conditions           | The facility is isolated from noise.                                      | 12  | 40   |
| Ecological conditions           | The facility is protected from air pollution.                             | 11  | 37   |
| Ecological conditions           | The facility is safe.                                                     | 13  | 43   |
| Historical ambiance of the settlement | Located farther away from the historical part.                           | 9   | 30   |
| Historical ambiance of the settlement | Located in the historical part or in its vicinity.                        | 21  | 70   |
| Significant landmarks and areas of the settlement | In the vicinity of landmarks of the settlement.                          | 26  | 87   |
| Significant landmarks and areas of the settlement | In the vicinity of gathering places.                                      | 26  | 87   |
| Significant landmarks and areas of the settlement | In the vicinity of residential areas.                                     | 19  | 63   |
| Part of structural elements     | The facility is part of a street, block or shore.                         | 19  | 63   |
| Part of structural elements     | The facility is part of a square.                                         | 11  | 37   |
| Accessibility of the facility    | There is a separate economic entrance.                                    | 22  | 73   |
| Accessibility of the facility    | There is a separate entrance for staff.                                   | 18  | 60   |
| Accessibility of the facility    | There is a separate entrance for the participants.                       | 14  | 47   |
| Accessibility of the facility    | There is a separate entrance for visitors.                                | 25  | 83   |
| Stationary traffic              | for automobiles                                                           | 21  | 70   |
| Stationary traffic              | for bicycles                                                               | 0   | 0    |
| Stationary traffic              | for commercial vehicles                                                   | 5   | 17   |
| Numerical indicators            | area of plateau per visitor > 0.5 m²/v.                                   | 11  | 37   |
| Numerical indicators            | parking spaces for automobiles per visitor > 0.03/v.                      | 2   | 7    |
| Numerical indicators            | parking spaces for bicycles per visitor > 0.02/v.                        | 0   | 0    |
| Total number of points          |                                                                             | 0   | 50   |
| Location’s quality (%)          | (0% - 100%) - 2 x total number of points                                 | -   | 31.4 |
| Location quality score          | (0 - 10) - 0.1 x % of the location’s quality                              | 6.3 | -    |
| Score of location quality       |                                                                             | 6   | 63%  |

(Source: Author’s survey in 2014)

5. CONCLUSIONS

The most favourable situation for the operation of each theater is when it is the only one in the region, thus obtaining regional importance. However, from the user's perspective, this is not convenient, because there is no possibility of choice. More theater facilities on a smaller territory encourage competition and affect the formation of a specific repertoire, and provide users with a choice. A larger number of theaters at a small distance creates a network of facilities that provides excellent accessibility to culture for residents. The gravitational area of every theater and the number of inhabitants in it depends on a theater facilities' network, the territorial division of the population according to this network, as well as the repertoire and languages in which the plays are performed.

The theater's location quality depends on the traffic elements, because they provide access to the theater. Especially significant are: the representation of multiple types of traffic, proximity of intercity bus stations, railway stations, ports and airports and the proximity of major roads. Traffic has adverse effects, because it disrupts the ecological and functional conditions of the theater. Intensified traffic noise interferes with the work of the
theater, and an increased amount of exhaust gases reduces the pleasure of stay on the plateau before the play. High frequency of traffic affects the safety of visitors, and can also lead to traffic congestion, thus preventing efficient access to the theaters. The existence of multiple forms of transport, organized public city bus, tram and trolleybus transport, taxi services, nearness of bus, tram and taxi stations as well as transport facilities (bus station, railway station, airport, port, public parking lots and garages) are a great convenience for visitors, because they enable arriving at the theater, and give them the opportunity to choose modes of transport.

Theaters on flat ground have favourable conditions for ensuring easy access for all categories of visitors. The favourable effect of wind contributes to the ventilation of space and the pleasantness of stay in open areas in front of theaters. Existing plateaus in front of theaters are generally too exposed to intense insolation and there is no protection in the summer. Theaters that are further away from traffic areas have favorable environmental conditions; they do not have pollution by noise and exhaust fumes and are safe for visitors.

Theaters that are part of the street are very easy to reach, but their visitors may be endangered by frequency of traffic and pollution. If a theater is surrounded by the historical core buildings in its immediate proximity or if it is itself a building of ambient value, then it is even more attractive to visitors. The proximity of the place of residence, the visitor's starting point, is of great importance for the easiness of arriving to the theater without the use of any means of transport. A theater which is a part of the street is less noticeable, while a theater which was built as a free-standing building or in a square is visible from various sighting points.

For good functioning of theater facilities, it is necessary to provide access to the separate entrances intended for different users. A larger number of required entrances are difficult to achieve in facilities that are part of the building row, then in facilities that are located at an attractive square or within close edge built block. Theaters that are located in the historic core of the settlement or in pedestrian areas generally do not have predicted surfaces for stationary traffic. Most of the theaters do not have a sufficient number of parking spaces. The appropriate size of the plateau in front of the building is a precondition for an unobstructed course of the main activities taking place in theaters. Facilities that have higher capacities are potentially the buildings that can be developed and can reach the level of world significance. Theaters that are part of a square have an advantage over facilities that are only part of the street, because the surface of the square can be used to assemble the visitors. Theaters whose quality of location was estimated with a score of 5 should be either dislocated from the current position or reconstructed to a greater extent. Most of the locations of the studied theaters have unsatisfactory urban conditions. For most of the perceived deficiencies there are possible solutions.

It has been observed that the biggest problem with most theaters is the lack of parking spaces and plateaus for gathering visitors. Less favourable natural influences can be seen as a consequence of locating the theaters in heavily built central areas of the settlements. Although the position of the theater in the city centre is the most favourable in terms of accessibility, priority is given to those theaters that are further away from the centre, because they have the ability to organize their work more adequately.
6. Recommendations

Based on the conducted research and the observed interdependence between the buildings and their immediate environment, the following interventions are proposed:

- It is essential for the theaters to function not as isolated individual institutions, but to include the state in the organization of their work. Networking of theaters should be ensured on an international scale as well.\(^5\)
- Since the number of visitors depends on the represented forms of transport, as well as the level of development of traffic communication means at the city and intercity scale, it is essential to intervene in this area too.
- In settlements that have no organized public transport, at least one line should be introduced, if it does not already exist, which would link transportation facilities and residential areas with theaters.
- There are several ways of resolving the issue of stationary traffic: prohibition of the movement of motor vehicles in the center of the settlement, introduction of a traffic regime or the use of taxis, public city transportation and bicycle traffic. Another solution would be the construction of garages in the vicinity of the theaters.
- Fountains should be built on all plateaus in front of theaters in order to refresh the air in the warm summer months. Such an intervention would also improve the aesthetic quality of the area in the settlement where the theater is located.
- In places where there are leveling differences, it is required to set up a ramp with a slope of 5% for independent movement of persons with disabilities as accessibility standards may only be met by comprehensive shaping of a space according to universal design principles. [12][13]
- When possible, it is necessary to set up vegetation on the plateaus as a protection in order to provide "the inhabitants with nature, meet their atavistic needs and soften the hard and definite surfaces of urban structures, provide shelter in its shadow and introduce a lively green colour of its leaves to the ever-gray palette of an urban ambiance." [14]
- Subsequent providing of parking space could be solved by building a garage in the area of the wider city centre.
- The exclusiveness of the theatrical event and the invitation for citizens to participate in the spectacle can be provided by a temporary change in traffic regime, banning motorized traffic.
- It is necessary to organize a plateau in front of each theater building, and the existing ones need to be extended and rearranged.
- Since the theater is a facility whose functioning should not be dependent on climate conditions, it is necessary to provide a functional, healthy and interesting plateau which enables a simple, easy and safe access and entry to the building.

\(^5\) Since 2011, there have been attempts to revive theaters by organizing international manifestations such as the "Theater Night". This is an event organized by an international network “European Theater Night”. European Theater Night is an international project launched in 2008 in Croatia in order to directly stimulate creativity in drama and acting on the territory of the entire Europe and bring culture closer to the general public. From its beginning until today, this event takes place each year, besides Croatian and Serbian, also in Belgium, the Czech Republic, Slovakia, Austria, Slovenia, Bosnia and Herzegovina, Bulgaria, Montenegro, Slovenia and Hungary. (Blic Online 11/11/2014) Available at http://www.blic.rs/Kultura/Vesti/510273/Noc-pozorista-u-subotu-u-24-grada-Srbije (02/02/2015)
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APPENDIX
Available on: http://casopisi.junis.ni.ac.rs/index.php/FUArchCivEng/editor/downloadFile/5645/34541
PREPORUKE ZA URBANISTIČKU REVITALIZACIJU
LOKACIJA POZORIŠTA,
STUDIJA SLUČAJA – REPUBLIKA SRBIJA

Sa ciljem da se poboljša kvalitet funkcionisanja pozorišta u naseljima Republike Srbije, istražili smo kvalitet lokacije pozorišta prema prethodno formiranom modelu. Opšte prisutan proces globalizacije doveo je do značajnih promena u oblasti kulture, a samim tim se smanjilo i interesovanje za klasične pozorišne predstave. Loše stanje pozorišnih objekata u arhitektonsko-građevinskom smislu i njihovog neposrednog okruženja, u urbanističkom, posledica je dugogodišnjeg zanemarivanja oblasti kulture na nacionalnom nivou. Sumiranjem ukupnih bodova za specifične urbane aspekte dobijenih na osnovu sprovedenog istraživanja i prethodno prikupljenih podataka, utvrđeno je da je prosečna ocena lokacija pozorišta 6 od maksimalnih 10, na osnovu formiranog bodovanja i vrednovanja utvrđenih aspekata u okviru istaživanja. Pošto je aktivno funkcionisanje pozorišta na lokalnom nivou značajno za razvijanje tradicionalne kulture stanovnika, opravданo je da se predlože konkretne mere transformacije neposrednog okruženja pozorišta i da se one što pre implementiraju za 30 postojećih pozorišta u Republici Srbiji.

Ključne reči: model vrednovanja lokacije pozorišta, urbanističke intervencije, pozorišta Srbije