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## QUALITY OF PUBLIC SPACE OF TOWN CENTRE – TESTING THE NEW METHOD OF ASSESSMENT ON THE GROUP OF MEDIUM-SIZED TOWNS OF THE ŁÓDŹ REGION

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3

**ABSTRACT:** This paper presents the outcomes of research on the quality of public space of town center, led in chosen medium-sized towns of Łódź region, using the authors' method of assessment. Method consists of three elements: graphic valorisation, checklist valorisation and surveys, each of them giving numerical results, which enables comparison of the quality of public space in different aspects. The final effect of the method is ranking of towns, which can be analysed applying adopted criteria. Research revealed that the most important criterion of the high quality of public space of town center is well planned and executed revitalisation program, which introduces positive changes in all aspects identified as factors of quality of public space, between them animation of new activities.

**KEYWORDS:** quality of public space, town center, medium-sized towns, Łódź region, Bełchatów, Ozorków, Piotrków Trybunalski, Radomsko, Wieluń, Zduńska Wola.

### JAKOŚĆ PRZESTRZENI PUBLICZNEJ CENTRUM MIASTA – PRZETESTOWANIE NOWEJ METODY OCENY NA GRUPIE MIAST ŚREDNICH REGIONU ŁÓDZKIEGO

**ZARYS TREŚCI:** Artykuł prezentuje wyniki badań jakości przestrzeni publicznej centrum miasta przeprowadzonych w wybranych miastach średnich regionu łódzkiego, przy zastosowaniu autorskiej metody oceny. Metoda ta składa się z trzech elementów: waloryzacji graficznej, waloryzacji tabelarycznej i badań sondażowych, w wyniku których otrzymanywane są rezultaty liczbowe, umożliwiające dokonywanie analiz porównawczych

przestrzeni publicznej miast w różnych aspektach. Ostatecznym efektem metody jest ranking miast, którego wyniki można przeanalizować stosując przyjęte kryteria. Badania wykazały, że najważniejszym czynnikiem wysokiej jakości przestrzeni publicznej centrum miasta jest właściwie zaplanowany i przeprowadzony program rewitalizacji, który wywołuje pozytywne zmiany we wszystkich aspektach zidentyfikowanych jako czynniki jakości przestrzeni publicznej, w tym animację nowych aktywności

SŁOWA KLUCZOWE: jakość przestrzeni publicznej, centrum miasta, miasta średnie, region łódzki, Bełchatów, Ozorków, Piotrków Trybunalski, Radomsko, Wieluń, Zduńska Wola.

### 3.1. Introduction

Nowadays the quality aspects become increasingly important in the development of urban areas. Economic theories on localization factors and competitiveness of towns indicate that lately the quality criteria, e.g. the widely conceived quality of urban space, grew in significance in the localization decisions of investors. As towns and cities are striving to attract new business and inhabitants, as well as visitors and tourists, they are using different instruments to improve their offer, which in the case of urban structure is not only its functionality, but also its beauty, uniqueness, unbeatable local identity, and liveability. For this sake, municipalities implement actions towards the refurbishment or redevelopment of central areas of towns and public space located there, as the most representative and well-known fragment of town for visitors, and the element of identification for inhabitants. But there are still no uniform criteria which should be taken under consideration while planning and implementing such actions, to achieve the most plausible effects regarding not only improvement of functionality, aesthetics and the technical state of public space, but also invigorating activities which can attract users to the town centre. The final element has become a very important issue nowadays, when the questions regarding the future of the town centre arise, as the central areas of towns are losing their historically grounded functions, inhabitants and users before our eyes. The 'back to the centre' or 'back to the town' slogans of the last few decades are still valid, and the means which could make centres thrive anew are strongly discussed. This article presents the outcomes of a research conducted in selected middle-sized towns of the Łódź region in the terms of the quality of public space of the town centre, using the authors' method of assessment.

### 3.2. Public space, quality of public space

Public space is an element of urban structure, which serves multiple functions: spatial – binding together other elements of the spatial and functional structure of a town, as well as social, economic, cultural, recreational, and touristic. Regarding the spatial form, public space is in the presented research interpreted as the *open*

*urban space* (Wejchert 1984; Chmielewski 2001), not the interiors of public utility buildings, as some authors suggest (Lorens 2007; Mierzejewska 2011). We can indicate two types of open public space: *technical public space*, which serves in the biggest extent transportation functions, and *cultural public space*, which has social and cultural functions and where the typical form of traffic is pedestrian movement (Gehl 2001, in: Chmielewski 2001: 204). The town centre consists mostly of public space: in this case mainly the *cultural public space*, focusing the most important cultural, social and economic events of a town. The public space of a town centre also represents its identity in the most explicit way due to the unique values concentrated there, between them the historic urban structure and the most valuable examples of cultural heritage.

A high quality of public space is the increasing attractiveness of the town centre and the town as a whole, or impeding it in the case of its low quality. What we should consider as features of public space which influence its quality has been discussed in scientific circles for the last few decades (Lynch 1984; Sternberg 2000; Carmona, Sieh 2004; CABE 2004; European Council of Spatial Planners 2005), as well as the issue how to assure town centre vitality and safety (Jacobs 1961; Whyte 1988; Crowe 2000). The idea of sustainable development also added a new approach regarding planning and functioning of public space. To identify factors influencing the quality of public space (or which should influence it), the review of contemporarily dominating ideas and concepts of urban development, as well as already used methods of space valorisation was executed by the author, and the features of public space which should be introduced in proposed assessment method were isolated.

### 3.3. Proposed method of assessment of the quality of public space

The goal of the research was an assessment of the quality of public space of the town centre, testing the new research method on a group of selected medium-sized towns of the Łódź region.

For executing the research concerning the public space of the town centre it is necessary to delimitate its area. After the overview of the delimitation methods used up until now (Juchnowicz 1965, in: Parysek et al. 1995: 33–37), it was ascertained that they were not adequate for the scope of the research. Therefore, to delineate the research area, the author proposed to introduce a new notion of a key public space of a town. The assumption was made that „the central public space for a town is its key public space, where key public space is interpreted as the continuous network of cultural public space, constituted of nodes and axes, situated in a town’s downtown, including its old town area, offering the richest mixture of functions and enjoying the biggest number of users”<sup>1</sup>. The area structured around

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<sup>1</sup> The concept of a key public space was presented in: A. Wojnarowska (2015: 25–44).

the key public space can be recognized as the town centre. The delimitation of the town centre is therefore based on the identification of a network of the key public space, and the area adjacent to it, which is delineated according to the adopted criteria: encompassing areas of traditional downtown functions (trade, services, administration), green areas and recreational functions, or not downtown functions (such as housing), but surrounded by downtown ones or green/recreational areas. Green and recreational areas were included in the delimited town centre, contrary to what was suggested by M. Nowakowski (Nowakowski 1982, in: Parysek J., Guarino E., Mierzejewska L., 1995: 33). The set of downtown and not-downtown functions was adopted according to the proposals of S. Juchnowicz (1965).

The assessment method consists of three elements:

- graphic valorization,
- checklist valorization,
- surveys.

The graphic valuation and checklist valorisation is based on urban planning tools already used in Poland and abroad as the inventory of urban fabric, methods of valorisation urban space, as well as a method used in urban regeneration programs in Germany for recognising the weaknesses and shortcomings of an analysed area – the so-called *diagnosis of the deficits and conflicts* (Kozłowski, Wojnarowska 2011: 34–45). The set of factors included in both valorisations was based on the criteria influencing the quality of urban space, proposed in already developed concepts of reading of urban space and its evaluation, e.g.: *good city form* (Lynch 1984), *good design* (Sternberg 2000), *urban quality* (Trip 2007), as well as the *comprehensive assessment of the quality of space* (Carmona, Sieh 2004).

In the research, the assumption was made that the areas and elements taken under consideration in the assessment of the quality of public space must be accessible for public use – so they are public or semi-public, or private but visible from public space and in this way affecting the its image. That last statement was also acknowledged by *Karta Przestrzeni Publicznej* (2009) recognizing the influence of private investors on shaping the urban landscape by their spatial decisions.

All three elements of the method consider measurable effects as the final result, which can be calculated to indexes on the basis of which of the rating of towns in each method can be executed. The overall rating can also be obtained showing the ranks of towns in the whole method. Nevertheless, the most valuable outcome of all three elements of the method is a huge amount of data gathered in field research and surveys, providing the material for study concerning the advantages and the shortcomings of public space of the centre for each town, enabling also wide-ranging comparisons and analyses. The method of assessment of the quality of public space of the town centre, with rules for delimitation of research area, was presented in ESRAP (Wojnarowska 2016).

### 3.4. Medium-sized towns of the Łódź region

In the research, the medium-sized cities were identified using a division based on demographic criteria proposed by A.F. Weber (Weber 1899, *Wzrost miast w XIX stuleciu*): small cities up to 20,000 inhabitants, and big cities – above 100,000 inhabitants (Wallis 1979: 49). In the context of such a division, medium towns comprise a very wide demographical scale – at the bottom of the scale those slightly exceeding 20,000 inhabitants are settlements close to the small towns concerning their spatial, functional, social and economic structure. At the upper limit of the scale, from 50,000 to 100,000 inhabitants, medium towns are similar in terms of their characteristics and problems to big cities, for example regarding bigger distances to cover and congestion, what demands an introduction of a public transport system (Dydkowski, Tomanek 2005: 209, 211).

The group of medium-sized towns of the Łódź region consists of 15 towns which are characterized by different origins and level of development of spatial and functional structure of town and its centre. Some of them are multifunctional, historically grounded administrative and service centres of a supra-local range, reaching back to the medieval times (as Sieradz, Wieluń, Piotrków Trybunalski, Radomsko, Opoczno), but there are also new towns – of industrial origins in the 19<sup>th</sup> and 20<sup>th</sup> centuries (Zgierz, Zduńska Wola, Ozorków, Bełchatów). The definition of a 'new town' is based on the criteria proposed by W. Michalski (1989) who recognized historical, administrative, morphological, functional, infrastructural, demographical and human lives' organization criteria (Michalski 1989: 155–157). New towns in the medium-sized towns group of the Łódź meet fulfil almost all criteria mentioned above, but there is a necessity to notice that most of them emerged already in medieval times as small settlements, and it took the industrialization era to bring them to the map as quickly developing centres, with legal regulations and specifics of spatial, functional and socio-economic structures typical for towns.

The whole group of the 15 medium-sized towns of the Łódź region for the research purpose was divided into 3 sub-groups including 5 towns each, accordingly to their population (Fig. 1):

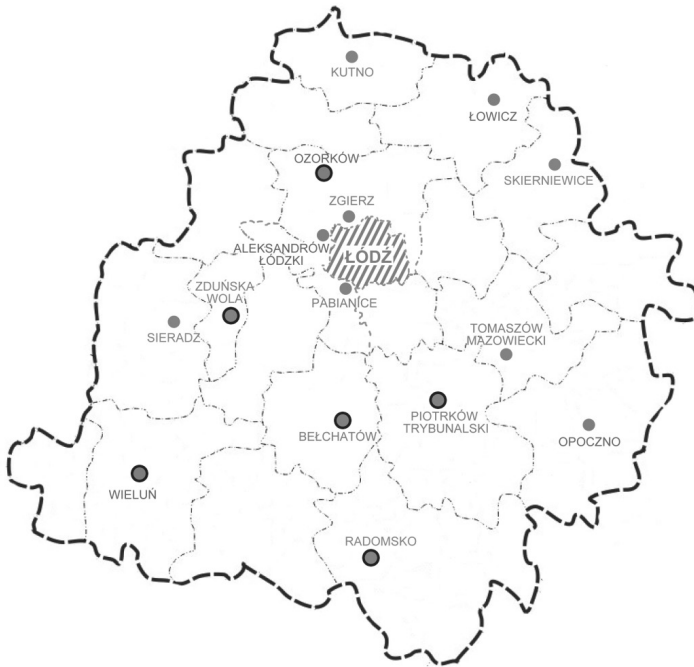
Small medium-sized towns (20,001 – 30,000 inhabitants)

- Ozorków 20,136
- Aleksandrów Łódzki 21,257
- Opoczno 22,100
- Wieluń 23,451
- Łowicz 29,280

Medium medium-sized towns (30,001 – 50,000)

- Sieradz 43,195
- Zduńska Wola 43,430

– Kutno	45,523
– Radomsko	47,560
– Skierniewice	48,693
Big medium-sized towns (50,001–100,000)	
– Zgierz	57,458
– Bełchatów	59,469
– Tomaszów Mazowiecki	64,712
– Pabianice	67,462
– Piotrków Trybunalski	75,732



**Figure 1.** Medium-sized towns and Łódź within the administrative borders of Łódź voivodship. Six towns selected for the research are marked with a bigger diameter and a black outline

Source: own work.

For the sake of the research, six medium-sized towns of the Łódź region were assigned two each group mentioned above. The selection criteria were as follows: from each group one town was chosen which was old, characterized by a multi-functional profile and a rich historic context, and one new town, where the quick development of a mono-functional industrial centre was caused by the localization of the industry in the 19<sup>th</sup> or 20<sup>th</sup> centuries. According to those assumptions, the following towns were selected:

- Wieluń and Ozorków representing the small medium-sized towns group,
- Radomsko and Zduńska Wola of the medium medium-size towns group, and
- Piotrków Trybunalski and Bełchatów of the big medium-sized towns group.

The research in those towns was conducted by the author and students of the University of Lodz, Faculty of Geographical Sciences, Spatial Economy specialization, in 2014 in Ozorków and Piotrków Trybunalski, and in 2015 in Wieluń, Radomsko, Zduńska Wola and Bełchatów.

### **3.5. Delimitation of towns' centres**

The first step of the research was the delimitation of the central area of each town. The areas of centres obtained as a result of a delimitation process, are as follows:

- Wieluń                    212,175 sq. meters (21.2 ha),
- Piotrków Tryb.    181,922 sq. meters (18.2 ha),
- Radomsko            116,200 sq. meters (11.6 ha),
- Bełchatów            96,927 sq. meters (9.7 ha),
- Ozorków              95,067 sq. meters (9.5 ha),
- Zduńska Wola        82,068 sq. meters (8.2 ha).

The size of the area of the town centre in hectares was used in the graphic valorisation to calculate the index of the quality of public space of the town centre.

### **3.6. The quality of public space research results**

The research conducted on the basis of the proposed method brings a lot of information regarding the positive features and the shortcomings of public space of the town centre. This information can facilitate a diagnosis of the existing state and forwarding proposals aimed at the improvement of the quality of public space. The assessment of the quality of public space executed for a specific town in appointed time intervals can also be an instrument of monitoring changes. The assessment made for different towns also offers an opportunity to indicate similarities and differences and brings a possibility to compare the quality of public space of different towns and making a rating of towns in this scope. Such rating cannot be seen as a goal in itself, just to make classification of towns, but, first of all, the goal is to indicate which towns are leading and why – what features and factors are the causes of their high position. It can constitute an important clue for towns which are striving for improvement of the quality of public space – showing which changes are desirable concerning its development and functions.

What follows is a summary of the results of the research in each element of the assessment method and final conclusions on the quality of public space of the centre of selected medium-sized towns of the Łódź region.







Table 1. Stimulant and destimulant indicators for the analysed towns and graphic valorization score for the analysed towns

GRAPHIC SYMBOL	DESCRIPTION	STIMULANTS								DESTIMULANTS								SUM	SUM								
		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	D1	D2	D3	D4	D5	D6	D7	D8	S	D
		5.6	-2.3	2.0	5	9.2	0	0.7	1	2	2	0	0	2	1	1.5	0	-2.4	0	0	0	-0.1	-0.2	-0.5	-4	29.7	-7.2
		10.3	10.6	16.7	7	16.5	9.9	1.6	7	5	6	1	13	2	1	1.5	-2.9	0	-4.3	0	-0.4	-0.2	-0.7	-3	109.1	-11.5	
		5.4	13.0	12.1	11	12.8	63.3	1.2	7	12	4	1	3	1	1	3.1	0	0	0	0	0	0	-1.0	-7	154.9	-8.0	
		2.0	1.8	18.2	7	16.9	3.5	0.2	6	3	3	2	7	2	2	2.5	-0.1	0	-0.5	0	0	0	-0.6	-3	77.1	-4.2	
		2.7	0.1	4.6	0	3.0	3.4	0.5	1	2	3	0	1	2	0	0.8	0	-4.5	-0.8	-0.6	0	-0.5	-0.8	-11	24.1	-18.2	
		4.4	2.9	3.4	7	1.6	2.0	1.2	2	5	3	0	1	3	2	1.4	0	-3.4	-12.1	0	0	-0.6	-0.8	-14	39.9	-30.9	

Source: own research.

To obtain the graphic valorisation index, the graphic valorisation score of each town was divided by the area of the delimited centre of the town. Such a procedure was necessary to obtain comparable values for each town, in the situation that they have centres of very different sizes – some of them more than two and half times as big as the others (8.2 ha to 21.2 ha). On the basis of the obtained indexes for the towns the rating of towns in graphic valorisation was concluded (Table 2).

**Table 2.** Rating of towns on the basis of graphic valorisation

Town	Graphic valorisation score (points)	The area of delimited centre (ha)	Graphic valorisation index (points/ha)	Rank
Bełchatów	72,9	9,7	7,52	1
Wieluń	146,9	21,2	6,93	2
Piotrków Tryb.	97,6	18,2	5,36	3
Ozorków	22,5	8,2	2,74	4
Radomsko	9,0	11,6	0,78	5
Zduńska Wola	5,9	8,2	0,72	6

Source: own research.

The first position in this rating was taken by Bełchatów, second by Wieluń and third by Piotrków Trybunalski. All three towns are very close to each other in terms of their indexes. Ozorków has only about one third of the index value of Bełchatów, the last two towns – Radomsko and Zduńska Wola – only about ten percent of it, what is a result not only of a low amount of positive points, but also a significant share of negative values.

### 3.8. Checklist valorisation

The second element of the assessment method is checklist valorisation. The general form of the list and evaluation system was based on the proposal of J. Natland (2007), who used it for a valorisation of the quality of public space of a commercial street in New Westminster, USA.

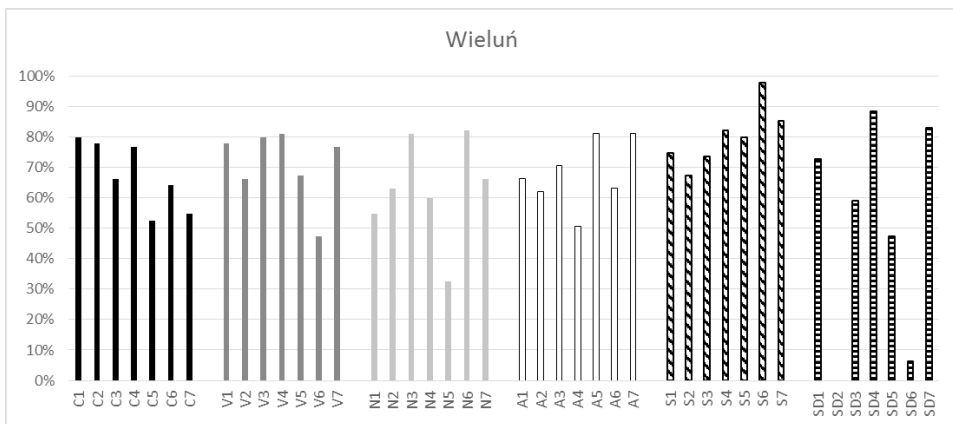
In the checklist valorisation criteria were grouped in six evaluation areas:

- **C:** composition/legibility/image/character/continuity and enclosure,
- **V:** vitality/flexibility/adaptability/use and activities/diversity,
- **N:** comfort/fulfilment of needs/convenience,
- **A:** accessibility/permeability/linkages/ease of movement,
- **S:** safety/control,
- **SD:** consistency with sustainable development principles.

In each area, 7 criteria<sup>2</sup> were evaluated – factors of the quality of public space – each of them given marks from 0 to 5. The outcomes of the research using the checklist valorisation in six selected medium-sized towns are presented below. Due to the fact that the research was conducted in towns by different numbers of students, which resulted in different numbers of valorisations, the research results are presented in a percentile form reflecting the share of points given to the maximum amount in each evaluation area (which equals 700 – 100% for each of the 7 criteria in each evaluation area). The ratings of all criteria in the six evaluation areas are shown below in the form of charts for each town.

### Wieluń

In Wieluń, the evaluation area which obtained the highest score was safety (80.15%), second was vitality (70.98%). Third, with almost the same percentage values were: accessibility (67.82%), composition (67.52%) and fulfilment of needs (62.83%). Consistency with sustainable development principles was ranked last (50.98%) (Fig. 3).



**Figure 3.** Percentile scores for all criteria within the 6 evaluation areas in Wieluń

### Ozorków

In Ozorków, safety obtained the highest score (60.71%). Three evaluation areas were assessed at similar levels: composition (55.36%), accessibility (54.29%), and fulfilment of needs (53.57%). Vitality received 50.71%, the lowest result achieved, consistency with the sustainable development principles – this group of factors obtained not much above one third of total points (38.57%) (Fig. 4).

<sup>2</sup> The full list of criteria in each evaluation area is presented in: A. Wojnarowska (2016: 81–109).

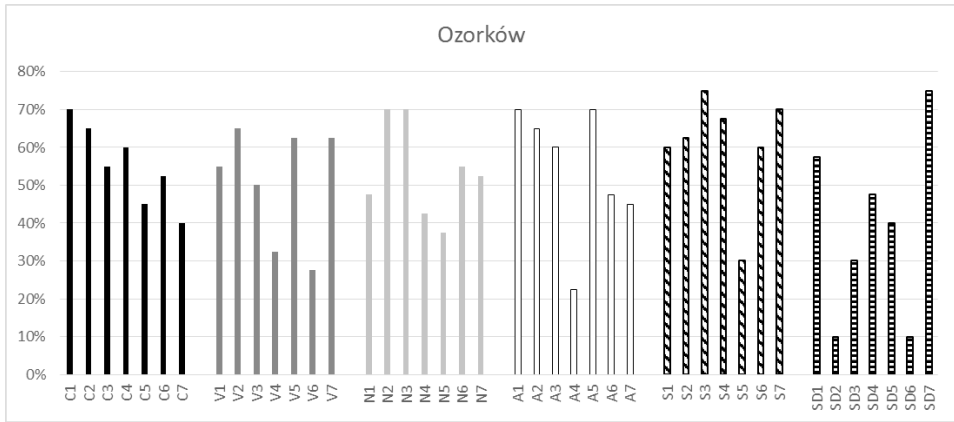


Figure 4. Percentile scores for all criteria within 6 evaluation areas in Ozorków

**Radomsko**

Radomsko received slightly more than half of the points (51.43%) regarding safety of public space of its central area. Consecutive items were: vitality (49.62%), fulfilment of needs (44.96%) and accessibility (44.51%). The two lowest scores obtained: composition (39.25%) and consistency with the sustainable development principles (36.99%) (Fig. 5).

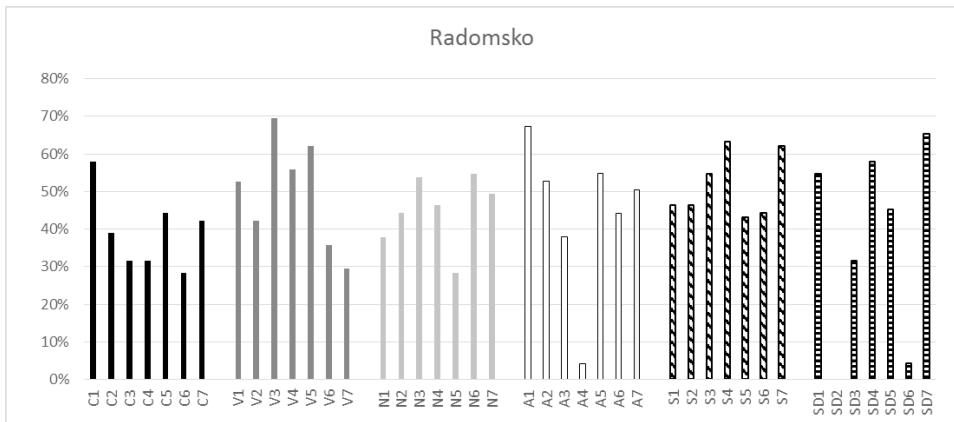
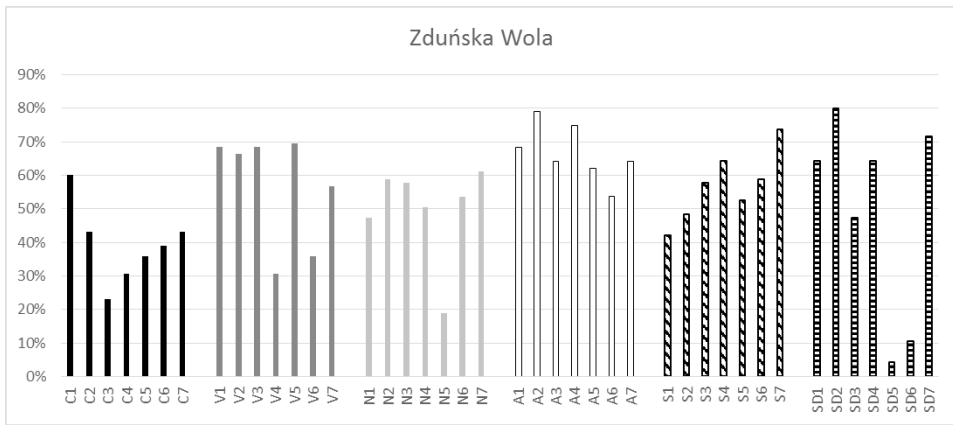


Figure 5. Percentile scores for all criteria within the 6 evaluation areas in Radomsko

**Zduńska Wola**

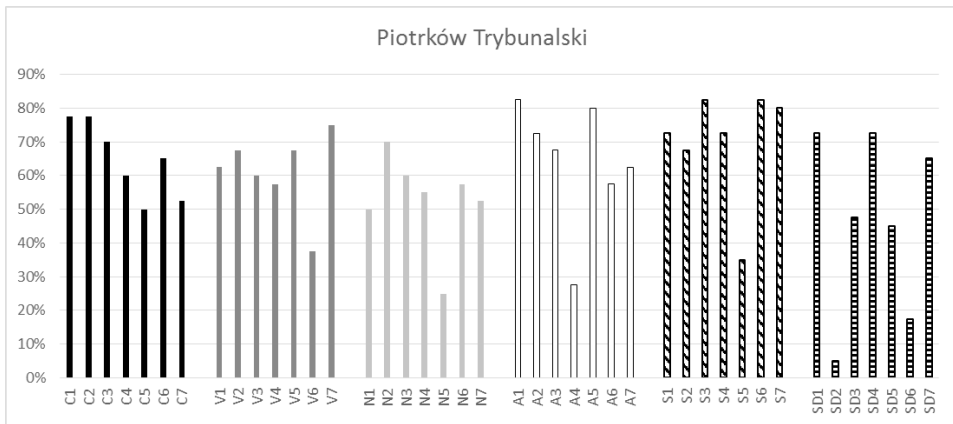
In Zduńska Wola, the highest marks were given to accessibility (66.62%). The remaining evaluation areas were assessed much lower: safety (56.84%) and vitality (56.54%). The fulfilment of needs received 49.77%, and consistency with the sustainable development principles 48.87%. The lowest mark was given to composition – only 39.25% (Fig. 6).



**Figure 6.** Percentile scores for all criteria within the 6 evaluation areas in Zduńska Wola

**Piotrków Trybunalski**

In Piotrków Trybunalski, safety was on the first place in the checklist valuation (70.36%), also composition was ranked high (64.64%). The following positions received: accessibility (64.29%) and vitality (61.07%). The factors of the fulfilment of needs were assessed at approx. half of total points (52.86%), the lowest score was admitted to consistency with the sustainable development principles – this group of factors received less than half of the score (45.43%) (Fig. 7).

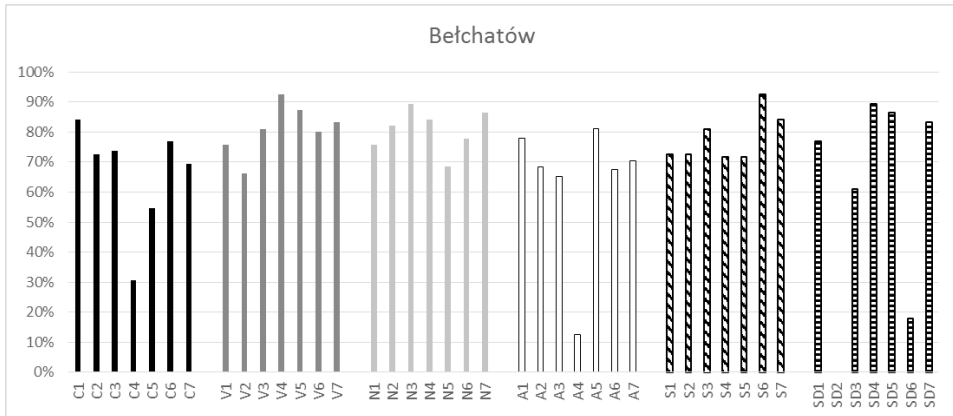


**Figure 7.** Percentile scores for all criteria within the 6 evaluation areas in Piotrków Trybunalski

**Bełchatów**

In Bełchatów, two evaluation areas were assessed very high: vitality (80.90%) and the fulfilment of needs (80.60%). Close behind was safety (78.05%). Composition obtained about two thirds of total points (66.02%), as well as accessibility

(63.31%). On the last place was consistency with the sustainable development principles, nevertheless with significantly high score (59.25%) (Fig. 8).



**Figure 8.** Percentile scores for all criteria within the 6 evaluation areas in Bełchatów

The comparison of the results achieved by the towns in each of the six evaluation areas is presented below (Table 3).

**Table 3.** Results of the checklist valorisation for the six selected towns (percentage of the total score in each evaluation area)

Town	Composition (%)	Vitality (%)	Fulfilment of needs (%)	Accessibility (%)	Safety (%)	Consistency with SD (%)
Wieluń	67.52	70.98	62.83	67.82	80.15	50.98
Ozorków	55.36	50.71	53.57	54.29	60.71	38.57
Radomsko	39.25	49.62	44.96	44.51	51.43	36.99
Zduńska Wola	39.25	56.54	49.77	66.62	56.84	48.87
Piotrków Tryb.	64.64	61.07	52.86	64.29	70.36	45.43
Bełchatów	66.02	80.90	80.60	63.31	78.05	59.25

Source: own research.

In general, the group of criteria concerning consistency with sustainable development principles acquired the lowest rank in all the towns – in 5 of 6 towns this evaluation area was on the last position. The safety of public space of the centre was assessed in general very high – in 4 of 6 towns this group of criteria

received the highest scores and took the first place. An interesting point is a big differentiation of scores of composition, which are between one third to more than two thirds of the total score. Vitality, fulfilment of needs and accessibility were also assessed quite high – in those evaluation areas even the lowest scores were about half of the total score. Accessibility was assessed rather high – in almost all towns it was close to the two thirds of the score, except in Radomsko, where it was given less than half of the total points. We should also point out the very high position of vitality and the fulfilment of needs in Bełchatów – the scores in those areas were the highest of all towns, achieving more than 80% of the total score. Bełchatów outstripped other towns in three of six evaluation areas, in other two taking the second position, close behind Wieluń. On the other hand, in two towns – Radomsko and Zduńska Wola – the group of criteria of composition area were assessed very low (in comparison to other towns), obtaining less than 40% of the score, which was lower than consistency with the sustainable development principles, which was usually evaluated as last.

Summing up the results obtained by the towns in all six evaluation areas and dividing them by the total score (600 – 100% in each of the 6 areas) enabled us to make an index for each town and a rating of towns on the basis of the checklist method (Table 4).

**Table 4.** Rating of towns on the basis of the checklist valorisation

Town	Sum of results obtained in all evaluation areas (%)	Maximum score (%)	Index	Rank
Bełchatów	428.13	600	0.71	1
Wieluń	400.31	600	0.67	2
Piotrków Tryb.	359.61	600	0.60	3
Zduńska Wola	317.98	600	0.53	4
Ozorków	313.21	600	0.52	5
Radomsko	266.76	600	0.44	6

Source: own research.

In the checklist valorisation Bełchatów again took first place, followed by Wieluń in second and Piotrków Trybunalski in third. So the order of the first three towns is exactly the same as in the graphic method. Zduńska Wola was fourth, then Ozorków in fifth and Radomsko was last. The order of the last three places is different than in the graphic method, with very close results of Zduńska Wola and Ozorków.



### 3.9. Surveys

The interviews as the third element of the method of the assessment of the quality of public space were envisaged to give a more objective view provided by the users, not by trained assessors. Besides, interviews gave an information not only on the actual state of public space – like two previous elements – but also on its desired functions or development in future. The survey was conducted in 2014 in Ozorków and Piotrków Trybunalski, and in 2015 in Wieluń, Radomsko, Zduńska Wola and Bełchatów. As different numbers of respondents were interviewed in both years (depending on the number of students conducting the interviews) to get comparable scores the results of the survey were shown as percentile, reflecting the number of people who indicated particular answers to the whole number of respondents in each town. The data concerning the number of respondents and their demographic structure were given in questionnaires only for information, as the results of the survey were not analysed from this point of view – gender, age, education, employment or place of residence. Such an assumption was made because, from the point of view of spatial development of public space and its functions, the needs and opinions of all users are equally important and public space should meet all requirements and expectations in an adequate degree.

The second part of the interview was concerned with some specific features of public space of the town centre – as accessibility by different means of transport, aesthetics, safety, cleanliness, and the organization of different events. The sums of percentile results of positive answers – *very good*, *good* and *satisfactory* – for each town in the aspects mentioned above are shown in the table below (Table 5). Regarding accessibility of the centre, the best scores in all towns obtained pedestrian accessibility, the worst – accessibility by public transport. High scores received also safety, then aesthetics and cleanliness. The lowest results received in all towns the organization of events in public space of the town centre – Ozorków obtained dramatically low marks in this aspect, where nobody assigned it a *very good* mark, only 3% – *good* and 13% – *satisfactory*.

In this rating, the explicit leader is Wieluń – with an outstanding score of 91.6% of positive answers, second is Zduńska Wola (88.9%). The following three places are occupied by Bełchatów (79.9%), Piotrków Trybunalski (79.1%) and Radomsko (79.0%). Ozorków was assessed remarkably low, taking the last place with 61.1% positive answers. Both ratings of towns can give us information on how those features of public space are evaluated by trained assessors, who are not everyday users of this space (in the checklist method) and everyday users of public space in towns (in the interview method). We can state that the level of satisfaction of the users of public space of the analysed towns is a bit different that the opinion of outside assessors: the very high second position of Zduńska

Wola is suggesting that the users evaluate it much higher than professionals. But still the remaining three of four towns on leading positions are: Wieluń, Bełchatów and Piotrków Trybunalski.

**Table 5.** Comparison of the sums of positive percentile results of specific features of public space of the town centre of six selected towns of the Łódź region

	Wieluń (%)	Ozorków (%)	Radomsko (%)	Zduńska Wola (%)	Piotrków Tryb. (%)	Bełchatów (%)	Sum
Pedestrian accessibility	99	78	98	94	95	86	<b>644</b>
Bicycle accessibility	88	50	80	84	59	82	<b>531</b>
Car accessibility	81	85	73	98	86	73	<b>567</b>
Public transport accessibility	92	61	66	89	81	56	<b>513</b>
Aesthetics	100	75	79	87	91	89	<b>618</b>
Safety	98	66	86	94	94	88	<b>621</b>
Cleanliness	100	56	76	83	81	96	<b>588</b>
Organized attractions	75	16	74	82	46	69	<b>440</b>
<b>In total</b>	<b>733</b>	<b>489</b>	<b>632</b>	<b>711</b>	<b>633</b>	<b>639</b>	–
<b>Percentage of positive answers</b>	<b>91,6</b>	<b>61,1</b>	<b>79,0</b>	<b>88,9</b>	<b>79,1</b>	<b>79,9</b>	–
<b>Rank</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>3</b>	–

Source: own research.

Summing up the results of the survey, it is necessary to notice that although the rating of the towns made on the basis of positive answers concerning the main features of public space of the centre in the second part of the questionnaire showed a following order: Wieluń, Zduńska Wola, Bełchatów, Piotrków Trybunalski, Radomsko, Ozorków, such an order is not quite confirmed by the answers in parts 3 to 6. In those parts often in terms of positive aspects first were named Wieluń, Piotrków Trybunalski and Bełchatów, though in negative aspects Piotrków Trybunalski was also quite frequently scored high.

### 3.10. Conclusions

All three elements of the assessment method of the quality public space of the town centre brought measurable results, which enabled the construction of general rating of towns (Table 6).

**Table 6.** Ranks of towns in all three methods of the assessment of the quality of public space of the town centre and their final rating in model

	Wieluń	Ozorków	Radomsko	Zduńska Wola	Piotrków Tryb.	Bełchatów
Graphic method rank	2	4	5	6	3	1
Checklist method rank	2	5	6	4	3	1
Interview method rank	1	6	5	2	4	3
<b>Sum</b>	<b>5</b>	<b>15</b>	<b>16</b>	<b>12</b>	<b>10</b>	<b>5</b>
<b>Total rank</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>1</b>

Source: own research.

Summing up, the ranks of the three elements of the method showed that two towns have equal number of points (5) – Wieluń and Bełchatów. It was assumed that Bełchatów in the final rating should be first as being first twice – in the graphic and the checklist methods. Piotrków Trybunalski was ranked third, then Zduńska Wola, Ozorków and Radomsko. It is necessary to stress that in the graphic valorisation and the checklist valorisation, three first places were taken exactly by the same towns in the same order: first was Bełchatów, Wieluń second, and Piotrków Trybunalski third. Three remaining towns rotated in both methods. What is interesting, the surveys showed us a different order, with an outstanding rank of Zduńska Wola classified second. But again, in spite of Zduńska Wola, we have three towns: Wieluń, Bełchatów and Piotrków Trybunalski on the three of four first places, what confirms their high position concerning the quality of public space of the town centre also in the public eye.

Final results can be analysed considering the adopted criteria characterizing a town as a whole and its centre:

1. Criterion of the age of town – new or old town;
2. Criterion of the size of town (within the group of medium-sized towns) – number of inhabitants;
3. Criterion of location of town in region – distance to Łódź;
4. Criterion of size of the delimited centre;

5. Criterion of size of the historical zone of the town centre;
6. Criterion of size of green areas in the town centre;
7. Criterion of the centre's revitalization – if it was implemented and to what extent.

The first place of Bełchatów in the overall rating, as well as in two partial ratings, suggests that the quality of public space of the town centre is not strongly related to five of the six first criteria which are of quantitative character. Bełchatów is not an old town, its historical zone is small, is the size of green areas situated in the town centre, its size of the delimited centre is in the middle of all six selected towns, the same applies to its location in the region, which is at a medium distance from Łódź. The size of the town (the number of inhabitants) may be of some importance, as two of the three leading towns represent the group of big middle-sized towns: Bełchatów and Piotrków Trybunalski. Nevertheless, considering the age of a town we have to notice that the second and the third place are taken by old towns: Wieluń and Piotrków Trybunalski, what can suggest a relation between the rich cultural heritage, preserved historical urban structure, and the traditionally grounded mixture of functions with the quality of public space of their centres.

Out of the criteria listed above the last one which is of qualitative character: successful implementation of vast and well planned and executed revitalisation of the town centre, seems to be the crucial one. The reason for this is probably that revitalisation programs of town centres are aimed at improving the quality aspects of public space, and its functional values – vitality, usability, walkability, accessibility, permeability of the area, fulfilling needs, and its safety – which all are the most fundamental factors of the quality of public space. So the quality of public space is highly increased if such a program is well envisaged and executed. Of the six examined towns only Radomsko has not yet implemented a revitalisation program of the town centre – and it is last in the overall rating, and also in all three elements of the assessment method twice being ranked fifth, and once sixth. Bełchatów and Wieluń, which are the two leaders, have executed vast revitalisation programs, which were even awarded in a nationwide (Bełchatów) competition for public space organized by the Polish Society of Town Planners, or in regional editions of this competition (Wieluń). The example of the astonishingly high second place of Zduńska Wola in the second part of the surveys also appears to confirm this statement, as the local community and the users of public space seem to be so overwhelmed by the revitalisation of the town centre that other shortcomings of public space of the central area become much less important.

Zduńska Wola is also a new town, as Bełchatów which is leading in the overall rating, so this may be the clue for the local authorities that they should not be overwhelmed by the superiority of old towns with their rich cultural heritage, historical urban structure and a complex compositional values of urban space.

New towns have also a big chance to attain a very good quality of public space of their centres, although not building on the values of cultural heritage which they lack. The high quality of public space may be created anew in such towns, taking under consideration in an adequate degree the needs of the users, at the same time enriching the urban composition, aesthetical quality and functional offer of the town centre, to ascertain its lasting vitality.

The research conducted in six middle-sized towns of the Łódź region also revealed the relationship between the high position of a town concerning the quality of public space of the town centre in the case of the presence of multiple social activities present there. Considering the quality of public space we may state that social activities occurring there are the fundamental determinants of its high quality (Gehl 2013: 11–16). The central area of a town assumes nowadays new functions regarding their realisation in the town centre. In middle-sized towns the centre becomes less representative and ceremonial, but more democratic and casual. The fulfilment of those functions, on the one hand, brings the liveliness to the town centre, on the other, improves the quality of life of the inhabitants. Three leading towns in the overall ranking – Bełchatów, Wieluń and Piotrków Trybunalski – have in their centres the elements of spatial development which serve activities which are new for the town centre – like active recreation, sport, or playing with children. The materialisation of new forms of activity and new ways of using the town centre (Edwards, Tsouros 2006; Sport England 2007; *European Innovation Partnership on Active and Healthy Ageing* 2012) can therefore influence the high appraisal of the quality of public space of the centres of these towns.

## Literature

- CABE (Commission for Architecture and the Built Environment), 2004, *The value of public space*, London.
- Carmona M., Siah L., 2004, *Measuring Quality in Planning. Managing the Performance Process*, Spon Press, London and New York.
- Chmielewski J.M., 2001, *Teoria urbanistyki w projektowaniu i planowaniu miast*, Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw.
- Crowe T.D., 2000, *Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts*, National Crime Prevention Institute (University of Louisville).
- Dydkowski G., Tomanek R., 2005, *Charakterystyka transportu zbiorowego w małych i średnich miastach w Polsce*, [in:] Heffner K. (ed.), *Małe miasta a rozwój lokalny i regionalny*, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice: 209–218.
- Gehl J., 2013, *Życie między budynkami. Użytkowanie przestrzeni publicznych*, Krakow.
- Edwards P., Tsouros A., 2006, *Promoting Physical Activity and Active Living in Urban Environments. The Role of Local Governments*, WHO Europe.
- European Council of Spatial Planners, 2005, *Guide to Sustainable Development at the Local Level: 'Try It this Way'*.

- European Innovation Partnership on Active and Healthy Ageing, 2012.
- Jacobs J., 1961, *The Death and Life of Great American Cities*.
- Juchnowicz S., 1965, *Metoda wyznaczania zasięgu obszaru centrów miejskich. Niektóre problemy ich struktury funkcjonalno-przestrzennej*, Warsaw.
- Karta Przestrzeni Publicznej*, 2009.
- Kozłowski S., Wojnarowska A., 2011, *Rewitalizacja zdegradowanych obszarów miejskich. Zagadnienia teoretyczne*, Łódź: 1–160.
- Lorens P., 2007, *Tematyzacja przestrzeni publicznej jako wyraz dywersyfikacji struktury urbanistycznej miasta doby globalizacji*, [in:] Madurowicz M. (ed.), *Percepcja współczesnej przestrzeni miejskiej*, Warsaw: 83–92.
- Lynch K., 1984, *Good City Form*, Massachusetts Institute of Technology, Massachusetts.
- Michalski W., 1989, *Bełchatów – miasto „nowe”. Próba definicji*, „Acta Universitatis Lodziensis. Folia Geographica”, 11: 147–165.
- Mierzejewska L., 2011, *Przestrzeń publiczna strefy podmiejskiej (na przykładzie Poznania)*, [in:] Wdowicka M., Mierzejewska L. (eds.), *Problemy rozwoju lokalnego i regionalnego na początku XXI wieku*, Biuletyn Instytutu Geografii Społeczno-Ekonomicznej i Gospodarki Przestrzennej Uniwersytetu im. A. Mickiewicza w Poznaniu, Seria: Rozwój Regionalny i Polityka Regionalna, 15, Poznań: 85–97.
- Natland J., 2007, *Urban by Design: An Evaluation of Public Spaces in Downtown New Westminster*, Simon Fraser University.
- Nowakowski M., 1982, *Kształtowanie centrum miasta w świetle teorii i praktyki*, Krakow.
- Parysek J., Guarino E., Mierzejewska L., 1995, *Wybrane problemy teoretyczno-metodologiczne delimitacji centrum miasta*, [in:] Kaczmarek J. (ed.), *Centra i peryferie dużych miast, transformacja i przyszłość. Pojęcia i metody badawcze*, VIII Konwersatorium Wiedzy o Mieście, Łódź.
- Sport England, 2007, *Active design. Promoting opportunities for sport and physical activity through good design*.
- Sternberg E., 2000, *An Integrative Theory of Urban Design*, American Planning Association, „Journal of the American Planning Association”, Summer 2000.
- Trip J.J., 2007, *Assessing Quality of Place: A Comparative Analysis of Amsterdam and Rotterdam*, „Journal of Urban Affairs”, 29(5): 501–517.
- Wallis A., 1979, *Informacja i gwar – o miejskim centrum*, PIW, Warsaw.
- Wejchert K., 1984, *Elementy kompozycji urbanistycznej*, Arkady, Warsaw.
- Whyte W.H., 1988, *City: Rediscovering the Centre*.
- Wojnarowska A., 2015, *Przestrzeń publiczna Uniejowa*, „Biuletyn Uniejowski”, 4: 25–44.
- Wojnarowska A., 2016, *Model for Assessment of Public Space Quality in Town Centres*, „ESRAP”, 23(1): 81–109.

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