







"New" public urban space: citizens' initiatives in participatory budgeting in Katowice, Łódź and Poznań

Abstract

Participatory budgeting has become a vital tool in making urban spatial planning more community oriented. Examination of how participatory budgeting has evolved is a pertinent subject in theoretical research and in practical applications. Projects proposed by local communities improve the quality of life in cities and enhance benefits offered by public spaces. The main goal of the paper is to present an overview and examine projects that transform public space, which have been implemented in selected Polish cities, namely in Katowice, Łódź, and Poznań within the framework of participatory budgeting exercise.

Our research has demonstrated that in many cases participatory budgeting has acted as a catalyst of a variety of local bottom-up initiatives addressing public space in researched cities. It is thanks to the engaged and creative people at the local level that new functions which improve the quality of life are developed in cities.

Keywords

Public spaces • participatory budgeting • urban policy • local development, sustainable development

© University of Warsaw - Faculty of Geography and Regional Studies

Arnold Bernaciak¹, Agnieszka Rzeńca², Agnieszka Sobol³

Faculty of Finance and Banking,
WSB University in Poznan, Poland
email: arnold.bernaciak@wsb.poznan.pl
Faculty of Economics and Sociology,
University of Lodz, Poland
email: agnieszka.rzenca@uni.lodz.pl
Faculty of Economics, University of Economics
in Katowice, Poland
email: agnieszka.sobol@ue.katowice.pl

Received: 4 March 2018 Accepted: 5 August 2018

Foreword

Public spaces determine the climate and specificity of cities; they are expressions of civilizational changes, history and traditions, testimonies to the social and economic performance of cities and efficient governance exercised at the local level. They act as platforms for urban life and co-create the city by stimulating and animating various forms of activity.

According to the Dictionary of the Polish language, "public" means "concerning society or a particular community as a whole". The term "public" is defined as common, open, available to all, addressed to a wider public, social (Szmidt 1981). The Spatial Planning and Management Act (Dziennik Ustaw [Journal of Laws] 2017, art. 2, item 1073, as amended) describes public space as a particularly relevant area which meets residents' needs, improves the quality of life and encourages social interactions because of its location, as well as the functional and spatial attributes specified in the feasibility study for development options in municipalities. Bierwaczonek, Lewicka and Nawrocki (2012) stress that the notion of public space remains ambiguous due to its multidimensional nature and dynamism (of the continuous processes that take place within it). Thus, we need to make the term more precise by describing its attributes, such as availability, monitoring and public interest.

Public space is understood as a good used by everyone, shaped by people in line with social rules and values, a good that meets the needs of local and trans-local communities. Space can become public only when people use it. Public space as a common good undergoes dynamic transformations as a result of its material development and the activities performed by its users. How and to what extent it is used is decisive for the nature

of the commons. In this context, the quality of public spaces, their availability, development and use-related priorities become vital and meaningful for how public spaces function and how they are perceived. The quality parameters applied to public space may also impact urban development and the value of local assets¹.

"Being public" does not refer exclusively to space ownership or to the way it is used. First and foremost, it offers a platform for social interactions and a setting within which communities get in touch. These spaces are the only area where a human being may move freely even if s/he is not a member of the local community. Public space includes roads, streets, squares, parking lots, parks and public buildings.

Zimmermann (1951) and Jalowiecki (1988) drew our attention to public space utility, transformations and development. Both stressed that the utility of public space emerges and evolves under the influence of the natural environment, human factors and culture. Jałowiecki also wanted to find out how such spaces are created and what share its stakeholders have in the process, as well as how local residents are engaged in its planning. The interdependence between public space and the public realm has been explored by many authors, including Lofland (2007) and Gehl (2009). These studies identified a series of shortcomings and barriers that inhibit society's real impact on the shape of public spaces.

Although spatial planning in Poland is an increasingly community-led process, it still does not offer the conditions for exerting a real impact on the shape of public spaces. This

¹It is estimated that the quality of public space accounts for a minimum of 20% of property values (Kiziniewicz 2013).

is because investment projects are typically carried out based on discretionary planning permissions (building regulations approval). Moreover, protracted procedures of adopting local development plans cause delays social participation effects. Spatial planning deficiencies in fully community-led planning processes and their low efficiency are often addressed in the literature (Sobol 2009; Sobol 2013; Polski 2009). At the same time, we hear increasingly often that the *status quo* should be changed. Hence, an important question arises: what instruments can be utilized by local communities to shape the public space, and to what extent?

Social involvement (participation) is becoming more visible, more highly appreciated and more widely used by decision-makers. Sadura and Olko (2017) present instruments of civic engagement as a specific remedy to the urban planning crisis. As shown by the practice exercised by local authorities in Polish municipalities, participatory budgeting – besides social consultations and local initiatives – is the tool most frequently used to make local development more community-oriented. It opens up opportunities to create new spatial solutions and to obtain social approval for their implementation.

The main goal of this paper is to identify those projects which will benefit the most from the participatory budgeting process, which can change public spaces considerably. The paper presents an overview of the public space transformation projects which have already been implemented in selected Polish cities – namely, in Katowice, Łódź and Poznań, which fall within the framework of participatory budgeting. Special attention has been paid to the identification of projects which significantly improve the quality of life and the quality of public spaces in these cities. Consideration is given to projects submitted by local communities under the participatory budgeting exercise in 2015/2016.

Urban public space

Nowadays, we are all living in a deeply transformed environment. Gradual changes in spatial management and the adaptation of the environment to human needs are historic processes inherently linked with the development of our civilization. The natural landscape, as we call it, is in most cases nowadays the product of human activity. The principle of sustainable development is one of the basic principles applied in the assessment of the performance and shaping of urban spatial structures. It helps in assessing the coherence of processes taking place in urban areas based on their environmental performance, social aspects and the economy. Assessment also includes the likelihood of the materialization of potential threats and conflicts, as well as institutional development which ensures smooth governance in a particular area. All economic, social and environmental factors have a spatial dimension (see Burchard-Dziubińska, Rzeńca & Drzazga 2014).

Public spaces constitute a vital part of cities since, through material and non-material attributes, they co-create a city's image and attractiveness. As an urban component which is so commonly used, public space should co-exist in symbiosis with the rest of the urban tissue. This guarantees its multifunctional use which, in turn, increases its attractiveness and competitiveness, making it more popular among residents. The search for guidelines which could help produce high quality public spaces is reflected in design principles that tackle, inter alia, the distribution of urban functions to ensure adequate distance between them and the critical mass of people and events, the integration of a variety of functions into a city to ensure diverse and rich experiences, social balance, and the sense of safety in individual urban areas (Lynch 2011). By providing conditions for the harmonious and multiple use of public space, we significantly contribute to the amelioration of living conditions for the urban population (Kochanowska 2010).

Public space is the principal platform of urban social life. Urban planning and architecture need to be skilfully combined with activities and initiatives proposed by local communities. Markiel (2013) points to authenticity as an important attribute of space, in terms of how it meets the taste and expectations of local people. Kochanowska (2010) stresses the need to maintain the balance between built-up and non-built-up areas as well as areas reserved for pedestrians and cars. Furthermore, parks, squares or urban forests are urban components which are relevant for the city and its residents. Urban areas mostly consist of hardened surfaces developed at the cost of green areas. This is why urbanization radically changes hydrological and thermal balances in certain spaces, often leading to the creation of urban heat islands. This unfavourable albedo is counteracted by the "greening" of urban areas and by the introduction of "blue" infrastructure. Water areas, fountains and graduation towers are introduced with the aim of counterbalancing the artificial conditions created by humans. Concrete roads or parking places are transformed into green and leisure areas which are resident-friendly (for more, see Rzeńca ed. 2016). The transport infrastructure is crucial for spatial transformations which take account of the environment. By developing pedestrian and cycling infrastructures, we can substantially change the urban landscape (see Przygodzki ed. 2016).

People living in contemporary cities are increasingly aware of environmental aspects and their impact on quality of life. Surveys conducted in the towns and cities of the Łódź Metropolitan Area (Łódzki Obszar Metropolitalny) and in selected towns in the Łódź region² clearly show that degraded, low-quality space with poor hygiene and lacking in green areas is perceived as the key environmental threat. Increasingly, communities are articulating their expectations vis-à-vis local authorities. In response, urban decision makers introduce tools that ensure citizen involvement in developing urban policy and space. Participatory budgeting is one of the tools which has been used the most frequently and has resulted in a number of urban space transformations in Polish cities (Bernaciak, Rzeńca & Sobol 2017).

Participatory budgeting as an instrument for shaping urban space

The importance of citizen engagement and the role of communities in urban policy was neglected in Poland for many years. However, the boost of citizen involvement has encouraged cities to engage in dialogue with their local communities and introduce community-led mechanisms. Participatory budgeting (PB) has become a key instrument to engage residents in urban development. Notably, participatory budgeting is one of the components of a social movement that activates and integrates urban communities (see Boryczka 2016).

The "right to the city" is a repeatedly articulated postulate of urban communities. Many Polish cities have witnessed the emergence of urban movements that bring together groups of active citizens. These informal initiatives have sprung up largely because local communities in cities felt deprived of the right to co-decide on urban policy, in terms of goals, investment projects and public space (Mergler, Poblocki & Wudarski 2013). When explaining their *raison d'être*, urban movements make reference to political declarations — in particular, to the assumptions of the Leipzig

Pilot studies entitled Zasobooszczędne gospodarowanie w miastach Łódzkiego Obszaru Metropolitalnego oraz w wybranych miastach Regionu Łódzkiego [Resource-Efficient Management in the Cities of the Łódź Metropolitan Region and Selected Towns of the Łódź Region] were conducted in March 2016. They covered urban residents aged 18+, city councillors and local authority staff from specific units (offices, departments) of the City Hall and from urban organizational units that directly or indirectly deal with environmental issues, investment, spatial planning and strategic management. In the studies of local authorities and local administration, samples were selected using purposive/ convenience sampling (non-random sampling).

Charter of 2007 (Europa 2007). The Charter contains statements that directly address the co-creation of public spaces. Moreover, it states that the creation and safeguarding of functional and well-designed urban spaces, infrastructures and services is a task which must be tackled jointly by the state, regional and local authorities, citizens and businesses. The re-definition of a city aimed at making the local development more community-led and at fostering the "right to the city" has also become part of the UN policy. The latter stresses that the duty to reconcile the needs of numerous users poses a real challenge to urban development and the task can be successfully accomplished only by actively engaging citizens in local development (Brown & Kristiansen 2009).

At the beginning of 2018, the participatory budgets were formalized through legislation. An Act of Law amended certain laws in order to increase the participation of citizens in the election, function and control of certain public bodies. It has introduced provisions for civic budgeting. As a consequence of the amendment to Article 5a of the Act of Municipal Self-Government (Dziennik Ustaw 2017, poz. 1875), basic issues concerning the form of consultations were supplemented. As Article 5a points out: "Within the framework of a civic budget, the inhabitants vote directly for their part of municipal budget expenditures each year. The tasks selected in the process are included in the municipal resolution."

Participatory budgeting is a relatively simple, transparent and egalitarian procedure for engaging the local population. It is a way of involving citizens in decision-making about how to divide resources from the local budget. The procedure applies to a fraction of the resources from the city budget (usually less than 1%), which will be spent on the projects proposed by citizens that receive the highest number of votes from local people.

Public space in participatory budgeting in Katowice, Łódź and Poznań

The organization of contemporary urban space is a crucial component of urban policy, which has so far been the domain of local authorities. Recent years have witnessed enhanced local social engagement in this respect³ (Dymnicka 2013; Sagan 2017). The Congress of Urban Movements (organized since 2011) has confirmed that urban development should be taken forward through bottom-up initiatives of local communities. By examining the participatory budgeting, we discovered how inhabitants get involved in the hands-on shaping of public space and identified the starting point for monitoring further activities in this area.

In the three cities covered by the study, projects addressing public space featured prominently in participatory budgeting. Projects submitted and categorized as a "new" public space represented 11% in Katowice (38 out of 335 proposed projects), 11.6% in Lodz (75 out of 645 projects), and 35% in Poznan (38 out of 110 proposed projects) (Figure 1). In Katowice, the total value of these projects oscillated around the total budget available for the exercise, while in Łódź and Poznań it was higher (Figure 2).

Despite obvious differences between the cities, participatory budgeting is an important area which reflects the creativity and innovation of local people in striving to improve urban public space. Green areas and cycling infrastructure are the two categories which dominated in the submitted and selected projects.

The vast majority of projects proposing a new layout of public spaces focused on the district level. They were initiated and proposed by local communities wishing to meet their own needs. Projects that proposed solutions relevant to the entire city accounted for 20% of the overall project pool in Katowice and Łódź, and 38% in Poznań.

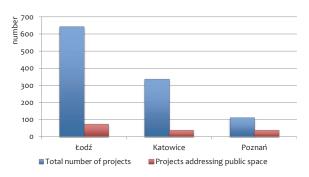


Figure 1. PB: total number of projects vs. projects addressing "new" public spaces. Source: own research based on studies.

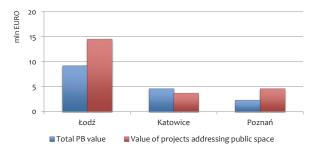


Figure 2. Value of projects addressing "new" public spaces.

* according to the average exchange rate of the Polish National
Bank (1 EUR = 4.33 PLN). Source: own research based on studies.

In Poznań and Katowice, the most expensive projects addressed blue infrastructure. Three projects carried out in Poznań and Katowice consumed a substantial portion of the budget – ca. 50% and 40%, respectively. In Łódź, most resources were spent on the modernization and development of green infrastructure (Figure 3).

"New" public space projects – case studies in Poznań, Łódź and Katowice

In Poznań, one of the most expensive projects was "Plażojada - Three Lakes Trail: Rusałka, Strzeszynek, Kiekrz", which had a total planned cost of EUR 460,277,13 (PLN 1,993,000; according to the average exchange rate of the Polish National Bank, 1 EUR = 4.33 PLN). This comprehensive project proposed the revitalization of over 1,000 hectares of forests together with the Rusałka, Strzeszynek, and Kiekrz lakes. It included a new beach on Rusałka Lake with volleyball courts, and the development of Strzeszyńskie Lake, involving the replacement and reconstruction of platforms, the placement of deckchairs, a bike repair station and a rope course. On Kierskie Lake, the project involved creating beaches with a volleyball court, playgrounds and fitness facilities. It also addressed the improvement of water quality in the lakes, marking routes and paths, lighting, installing waste bins and public toilets (http:// plazojada.pl/). Other projects focused on the arrangement of public space in Poznań within the framework of the participatory budgeting exercise include (Poznański Budżet Obywatelski 2017):

- "Vineyards of Poznań", an idea to organize a community garden in the city centre with vines as the primary crop,
- "Św. Marcin re-animation", a non-infrastructural project proposing a series of activities to mobilize local communities with a view to supporting regeneration and spatial transformations in one of the major streets in the city,

³In Łódź, the "Critical Mass" social movement initiated the development of the cycling infrastructure.

Table 1. Projects addressing "new" public spaces in cities included in the survey

Category	Łódź		Katowice		Poznań		Total	
	Z	R	Z	R	Z	R	Z	R
Green infrastructure	48	14	25	8	20	6	91	27
Blue infrastructure	3	0	3	3	7	3	13	6
Cycling infrastructure	24	7	10	6	11	4	50	18
Total	75	21	38	17	38	13	154	51

Legend: Z – proposed, R – implemented Source: own research based on studies.

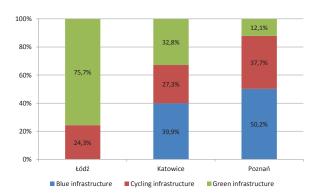


Figure 3. "New" public space projects by value. Source: own research based on studies.

- "The Główna River in Poznań" (a pun in Polish meaning "the main river of Poznań"), a project intended to add attractiveness to the space alongside the Główna River, especially in the already regenerated area of the same
- district parks and green areas: near Żurawiniec, the Piątkowsko-Winogradzka promenade, around Fort IX, and in Dolna Wilda street,
- cycling routes and parks in Jeżyce, Nowe Miasto and Grunwald,
- infrastructural elements that improve the quality of public space: lighting on sledding hills and in areas along the Warta River, an observation deck in the Town Hall, the City Gate, a wooden observation tower in the 'Szachty' area in the southern district of Poznań.

In Łódź, projects addressing public space focused mainly on green areas. Pocket parks, squares, city gardens and leisure areas decorated with green infrastructure were the main themes in the projects proposed by Łódź activists. Special attention should be paid to the comprehensive projects focused on modernizing and arranging urban space, such as:

- "Green urban patio a safe leisure, activity and meeting area", a project involving the regeneration of backyards in the principal street of the city – Piotrkowska No. 113 and 115/119 – and the extension of Pasaż Schillera,
- "Amusement Park a different perspective: a modern area of leisure, recreation and animation in Zdrowie Park", a devastated former amusement park which was incompliant with safety standards has been replaced by an attractive zone for active relaxation,
- "Zacisze Backyard", another "urban backyard" project a woonerf, designed to slow down traffic and arrange a

- specific public space, a one-way street, in a modern way to provide an impulse for social and economic revival,
- "Jana Lakes and Stefańskiego Ponds 'Anew' Stage III", the next stage of building paths for pedestrians, roller skaters and cyclists, and installing benches, waste bins, dog waste bins, bicycle parking racks and other architectural elements, as well as solar lamps.

In Katowice, in the participatory budgeting vote of 2015/2016, citizens cast most votes for the water park project. The water playground was built in Dolina Trzech Stawów (Three Lakes Valley) and is the biggest agua park in Katowice. The cost of investment exceeded EUR 346,400 (PLN 1.5 million; according to the average exchange rate of the Polish National Bank, 1 EUR = 4.33 PLN). The park has an area of 318 m² and consists of zones for younger and older children. Another interesting project which transformed Katowice is the construction of a graduation tower in Ligota district. The project was submitted for participatory budgeting in 2015/2016 but, although it was largely supported by all the city's communities (5,268 votes in favour), it was too expensive and was not approved for implementation. Nevertheless, in the next PB round in 2016/2017, it ranked first, with over 15,000 votes in favour. The size of the graduation tower was increased compared to the original project and the cost grew from the planned EUR 485,000 to EUR 600,500 (PLN 2.1 million to PLN 2.6 million; according to the average exchange rate of the Polish National Bank, 1 EUR = 4.33 PLN). The areas neighbouring the graduation tower will be greened and there will be facilities making the space friendlier for elderly people and the disabled.

Other projects have been proposed to change the image of spaces in different locations in Katowice connected with the development of the cycling infrastructure: routes, bike-sharing system stations and a cycling centre where people can learn to ride bicycles. Citizenship engagement has also produced many new playgrounds and open-air fitness gyms, which are surrounded by new green areas filled with street furniture and architectural elements.

Conclusion

With participatory budgeting, citizens have the opportunity to articulate their needs, prioritize local projects and allocate public resources. Public spaces are becoming an important field of civil interest. Since 2011, Polish cities have observed the growing involvement of residents, mobilized by participatory budgeting, in local affairs. Many participatory budgeting projects focus on the layout of urban public spaces and on the new functions. As a result, parts of cities are reinvigorated, and they present characteristics typical of that part. At this point, the space becomes known to its citizens; it also increases in popularity, as highlighted

by Sobol (2017), accentuating the role of local communities as its users and co-creators. In the words of Yi-Fu (1987), it becomes "humanistic". When places are co-created, people identify with them more easily and feel responsible for them. Existing spaces equipped with new functions acquire new, characteristic features and can better identify their users. By matching these spaces to residents' needs and by making them useful, we return the city to its residents. The importance of a public space increases when its inhabitants interpret it as a valuable resource.

Engaging local people in spatial transformation involves a profound qualitative change. By co-creating the urban space, people identify themselves more with the city. The space becomes entirely "theirs". Changes in how we perceive the city and become familiar with its parts reinvigorate the city. "New spaces" developed through projects originating from participatory budgeting exercises respond to citizens' needs. These projects make the new space useful and friendly.

Our analyses have demonstrated that citizens are engaged in transforming public spaces. Participatory budgeting has given them a concrete tool with which to share ideas for how urban space could evolve. Many of the proposed projects have been fuelled by long years of neglect of their basic infrastructure. Some reflect huge resourcefulness and innovative approaches

to the modernization and layout of urban spaces. Creative, motivated people help to develop new functions in the city and to improve quality of life. Participatory budgeting reflects real citizen involvement and social responsibility. As shown by our surveys, it is also an effective operational tool for the implementation of urban policies.

Participatory budgeting provides people with new experiences and citizenship skills. We can observe the effects of learning and knowledge expansion. There is also the occurrence of the so-called "snowball effect", when projects from one district (city) inspire other communities. Many projects continue for many years – for example, projects for cyclists or those involving the development of green, natural areas in the city.

The paper does not exhaust the issues relating to the involvement of citizens in transforming public spaces in Polish cities. However, it shows that, with a tool such as participatory budgeting, urban communities have been given an opportunity to impact the shape of the space around them. The democratic procedure seeks to ensure social interest in planned investments: projects must be approved by local residents. Community-led, local development introduces a new quality into the urban space, a quality created together with local residents.

References

- Bernaciak, A, Rzeńca, A & Sobol, A 2017, `Participatory budgeting as a tool of environmental improvements in Polish cities`, Economic and Environmental Studies, vol. 17, no. 4, pp. 893-906.
- Boryczka, E 2016, 'Partycypacja społeczna` ['Social participation'], in EkoMiasto#Społeczeństwo [EcoCity#C ommunity], eds. A Nowakowska, Z Przygodzki & A Rzeńca, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Bierwaczonek, K, Lewicka, B & Nawrocki, T 2012, Rynki, malle i cmentarze. Przestrzeń publiczna miast śląskich w ujęciu socjologicznym [Markets, malleas and cemeteries. Public space of Silesian cities in sociological terms], Nomos, Kraków
- Brown, A & Kristiansen, A 2009, `Urban Policies and the Right to the City. Rights, responsibilities and citizenship`, UN Habitat. Available from: http://unesdoc.unesco.org/images/0017/001780/ 178090e.pdf>, [15 January 2018].
- Burchard-Dziubińska, M, Rzeńca, A & Drzazga, D 2014, Zrównoważony rozwój naturalny wybór [Sustainable development a natural choice], Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Dymnicka, M 2013, Przestrzeń publiczna a przemiany miasta [Public space and the transformation of the city], Wydawnictwo Naukowe SCHOLAR, Warszawa.
- Dziennik Ustaw 2017, Ustawa o planowaniu i zagospodarowaniu przestrzennym z dnia 27 marca 2003 r. [Official Journal 2017, Act on spatial planning and development of March 27, 2003], art. 2, poz. 1073 ze zmianami.
- Dziennik Ustaw 2017, Ustawa z dnia 8 marca 1990 r. o samorządzie gminnym, poz. 1875 ze zmianami [Official Journal 2017, Act of 8 March 1990 about the local government, item 1875 with changes].
- Gehl, J 2009, Życie między budynkami. Użytkowanie przestrzeni publicznych [Life between buildings. Use of public spaces], Wydawnictwo RAM, Kraków.
- Jałowiecki, B 1988, Społeczne wytwarzanie przestrzeni [Social formation of space], Wydawnictwo Książka i Wiedza, Warszawa.
- Kiziniewicz, A 2013, Nasze wspólne dobro, nasza przestrzeń publiczna [Our common good, our public space], Beck

- Nieruchomości [Beck Real Estate]. Available from: <www.nieruchomości.beck.pl>. [15 January 2018].
- Kochanowska, D 2010, 'Przestrzeń publiczna kluczowy element miasta współczesnego zintegrowana czy podzielona? ' ['Public space a key element of the contemporary city integrated or divided?'] in Problemy kształtowania przestrzeni publicznych [Problems of shaping public spaces], eds P Lorens & J Martyniuk-Pęczek, Wydawnictwo Urbanista, Gdańsk, pp. 23-37.
- Lofland, LH 2007, The Public Realm: Exploring the City's Quintessential Social Territory, Transaction Publishers, London.
- Lynch, K 2011, Obraz miasta [Image of the city], Wydawnictwo Achivolta, Kraków.
- Markiel, K 2013, 'Witalność miejska_jak uprawiać idee rozwoju przestrzeni miejskiej? ' ['Urban vitality_ how to cultivate the ideas of urban space development? '], Małopolskie Studia Regionalne, Departament Polityki Regionalnej, Urząd Marszałkowski Województwa Małopolskiego, Kraków.
- Mergler, L, Pobłocki, K & Wudarski, M 2013, Anty-bezradnik przestrzenny - prawo do miasta w działaniu [Spatial anti – helpless - right to the city in action]. Available from: http://publica.pl/wp-content/uploads/2013/08/Antybezradnik_www.pdf>. [20 December 2017].
- Polski, J 2009, Problemy kształtowania ładu przestrzennego w świetle idei zrównoważonego rozwoju [Problems shaping spatial order in the light of the idea of sustainable development] in Wpływ idei zrównoważonego rozwoju na politykę państwa i regionów [Influence of the idea of sustainable development on the policy of the state and regions] ed B Poskrobko, Wyższa Szkoła Ekonomiczna w Białymstoku, Białystok.
- Portal projektu Plazojada [Portal of the Plazojada project]. Available from: http://plazojada.pl/>. [20 January 2018].
- Poznański Budżet Obywatelski 2017 [Partcipatory budget of Poznan]. Available from: https://pbo2016.um.poznan.pl/. [20 January 2018].
- Przygodzki, Z (ed.) 2016, EkoMiasto#Zarządzanie [EcoCity#Management], Wydawnictwo Uniwersytetu Łódzkiego, Łódź.

- Rzeńca, A (ed.) 2016, EkoMiasto#Środowisko [EcoCity#Environment], Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Sadura, P & Olko, D 2017, 'Sociological Intervention as a reaction to the crisis of the city. Public consultation in Warsaw', Research in Urban Sociology, vol. 15, pp. 401-421.
- Sagan, I 2017, Miasto. Nowa kwestia i nowa polityka [City. New issue and new policy], Wydawnictwo Naukowe SCHOLAR, Warszawa.
- Słownik języka polskiego PWN [Dictionary of the Polish language PWN] (2015), Wydawnictwo Naukowe PWN, Warszawa.
- Sobol, A 2009, `Procesy urbanizacji a idea zrównoważonego rozwoju` ['Processes of urbanization and the idea of sustainable development'] in Zrównoważony rozwój regionów uprzemysłowionych [Sustainable development of industrialized regions], ed. E Lorek, vol. 1, Wyd. AE Katowice, Katowice.
- Sobol, A 2013, `Gospodarka przestrzenna a lokalny rozwój zrównoważony` [`Spatial economy and local sustainable development`], Ekonomia i Środowisko [Economics and the Environment], vol. 3, no.46, pp. 70-78.
- Sobol, A 2017, 'Wpływ przestrzeni wspólnych na rozwój miast' ['Influence of common spaces on urban development'] in Przemiany przestrzeni publicznej miast [Transformations of public space in cities], ed. I Rącka, PWSZ, Kalisz, s. 63-74.
- Szmidt, B 1981, Ład przestrzeni [The order of space], Państwowy Instytut Wydawniczy, Warszawa.
- Yi-Fu, T 1987, Przestrzeń i miejsce [Space and place], Państwowy Instytut Wydawniczy, Warszawa.
- Zimmerman, E 1951, World Resources and Industries, Harper, New York.