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PERCEPTION OF SPACE IN THE CONTEXT OF MODEL VISIONS OF SUSTAINABLE URBAN DEVELOPMENT: EVIDENCE FROM WARSAW

Abstract. In the presented article, the perception of urban space in the context of the concept of sustainable development (SD) is being addressed. It can be seen as an umbrella term encompassing various model visions of urban development, including green city, creative city, smart city, 15-minute city, just city, participatory city, happy city, inclusive city, and compact city. Based on qualitative research conducted in Warsaw, Poland, key narrative fields for each model have been identified. The article shows how the different model visions are revealed in the expectations and assessments formulated towards urban space. The key conclusions concern the need to change the dominant "flat" narrative of urban sustainability, which is accompanied by a relatively poor language and a one-dimensional view of complex multi-layered issues. The conclusion emphasizes the need to appeal more to the values that are the pillars of the individual model visions of urban SD, as well as issues that appeal to emotions.

Key words: urban space perception, urban development, sustainable development, urban conflict.

1. INTRODUCTION

The presented article addresses the perception of urban space in the light of the concept of sustainable development (SD). Although this term is reiterated in the discourse like a mantra, at the beginning of this article it is worth returning

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to the understanding the category of 'development' itself. It seems that urban development is colloquially regarded simply as a process of change over time that manifests itself in space. However, to deeply discuss development, an additional element is necessary: the reference of these changes to their approved direction. If the vector of change is consistent with this, then we are indeed dealing with development. If it is not, then we should rather speak of regress, decline, and anti-development, but in practice, in the context of an undesirable trajectory of urban change, we tend to speak of 'uncontrolled development' (Gugler, 1997; Cheshire and Hay, 2018), 'chaotic development' (Chen, 2009) or alternatively use the term 'shrinking cities' (Fol and Cunningham Sabot, 2010).

In this context, however, not every 'development' should actually be considered a 'development'. In order to be able to distinguish between them, we need a clear vision of the desired state we should be heading towards. Theoretical models, which are necessarily simplistic and somewhat detached from their context (Steger and Lakshmanan, 1967; Monteiro *et al*., 2022), perform an important function as a point of reference, but they enable us to compare the current condition of urban space with our aspirations (Almusaed and Almssad, 2019). Such points of reference are found in the concepts describing the model visions of urban development. Currently, the concept of SD is the most popular. "(...) many studies have been conducted to define sustainability and the sustainable city. However, many of these definitions suggest a range of contradictions, implying that the achievement of sustainability is elusive. The problem lies in setting unreasonable definitions of sustainability and in the various contradictions to these definitions, making sustainability seemingly unattainable" (Hassan and Lee, 2015).

These contradictions lose their significance when we consider sustainable city as a theoretical umbrella concept (model), encompassing many issues of interest of various model visions of city development, such as: green city, creative city, smart city, 15-minute city, just city, participatory city, happy city, inclusive city, and compact city. In each, the focus is on a different aspect of SD, hence the use of the plural in the title – the model visions of SD. They are primarily concerned with the qualitative dimension of changes occurring in a city, which is why this article consistently refers to the term 'urban development' and not 'urban growth,' which, in my opinion, emphasizes more strongly the quantitative dimension of the changes, or the fact that changes are occurring at all. The aforementioned visions are most often the results of various complementary elements: scientific concepts, publications, research, architectural and planning practices and the resulting demands, political agendas in relation to cities, media coverage, and local marketing activities (Belyaev and Pyatkova, 2023).

This article proposes to look at urban space from the perspective of how it is perceived by its users, and while this proposal is not new (Hall, 1966; Newman, 1972; Alexander, 1978; Whyte, 1980; Bentley *et al*., 1985; Gehl, 2011), what is novel in my work is the focus not so much on the mere 'sensory' perception of urban space but on its specific social conditions. The main argument of the arti-

cle is that the model visions of urban development influence the perception of urban space and the expectations formulated toward it. According to the concept of double hermeneutics (Giddens, 2003), concepts and terms that categorise social processes (in this case, models of urban development) diffuse and make their way from academic and political discourse into public debate, and finally – they are used by 'regular people' who begin to perceive their own spatial experiences through their lens. Changes in urban space are a way of implementing certain model visions of development and are interpreted through their lens.

This article is based on a secondary analysis of material from 96 interviews with participants of spatial conflicts in Warsaw. The scope of the study in the spatial dimension refers to Warsaw (as a whole, but also to selected districts, housing estates, streets, and even individual objects in the city), in the temporal dimension to the years 2014–2020, in the objective dimension to the perception of urban space from the perspective of various models of city development (green city, creative city, smart city, 15-minute city, just city, participatory city, happy city, inclusive city, and compact city), and in the subjective dimension to the participants of urban spatial conflicts. The main assumptions of the research state that (1) people think in constructs, and therefore model visions of urban development influence the perception of urban space and the expectations formulated toward it, and (2) participants of urban conflicts have at their disposal resources of knowledge, skills, and social competencies that can be used more widely in urban studies – not only to study the field of the category of 'conflict', but also the field of the category of 'development'.

2. LITERATURE REVIEW

The level of urban development, however defined, manifests itself in spatial changes. The same space will be assessed differently from the point of view of different development criteria. As said in the introduction, the currently dominant paradigm in the discourse is SD. "SD can be understood as a kind of mega-order, integrating social, economic, environmental, but also institutional and spatial order" (Mierzejewska, 2015). The way contemporary cities function is the result of the dynamic adaptation of space by people operating in an area under the conditions of specific social, economic, historical, cultural relations, etc. The concept of SD emerged from the observation of increasing pressure on limited resources, including spatial, energy, and biological resources (Kanchana, 2022). The problems arising from this are particularly apparent in cities, in the form of, inter alia, chaotic suburbanisation, threats to biodiversity, land occlusion, inefficient transport, etc.

The theory of SD fully emphasizes the coordination and sustainability among the three pillars: social, environmental, and economic (Basiago, 1999; Larimian

and Sadeghi, 2021; Liu *et al.,* 2020). While there is much discussion about the crucial balance between these pillars, it is not the balance itself that is the focus of urban space research in SD but rather the importance of space within each pillar. There are works focused on the social dimension (Cope *et al.*, 2022; Feng and Hou, 2023), the environment (Matlock and Lipsman, 2020), and those with economic issues as their main focus (Azapagic and Perdan, 2000). There is also a growing number of analyses that focus on a perspective of at least two pillars, such as the green economy (Birkmann *et al.*, 2022; Barbier, 2011; Brand, 2012).

Urban challenges to SD are most often interdisciplinary in nature and it is difficult to talk about one pillar in relation to cities without indicating the relationship to the others. These challenges cover a range of issues, including: 'liveability', sustainable mobility; the shaping of residential urban functions (mix-use); the shaping of compact urban structures; the creation of high-quality public spaces; the protection of historic and cultural heritage; the protection of the environment; and the use of modern technologies (UN, 2019). All the identified aspects can be referred to the spatial dimension of urban development.

SD in a city can be assessed by examining the evolution of its urban social space. Therefore, the two are highly interconnected in a close relationship. Urban space is a container that can be filled by sustainable urban forms, so that the sustainable city ceases to be a purely theoretical entity (Jenks and Jones, 2009). It is now generally accepted that a third generation of urban agglomerations is emerging, based on the idea of sustainability, and the transformation is compared to the changes that took place in the past when industrial cities replaced pre-industrial cities (Wehle-Strzelecka and Korczyńska, 2007). The primary goals of a sustainable city are to support the quality of life of the inhabitants, to reduce the environmental impact of urbanisation, and to develop a low or zero-carbon economy. Indeed, the changes visible in urban spaces, not only in the form of mega-infrastructure (Sturup and Low, 2019), but, for example, in the form of photovoltaic solutions on buildings, charging infrastructure for electric cars, roof gardens or flower meadows, which are evidence that cities are moving in this direction.

As E. Glaeser has suggested, "if the future is to be greener, it must be more urban" (Glaeser, 2012). This means that urbanisation can serve the goals of the broader environmental agenda, provided two conditions are met. First, if the overall geographical distribution of the population is concentrated in a relatively small area, respecting the principles of 'green urban planning' and the need to transform existing cities from fragmented to densely clustered. The idea is to optimise the use of space and the availability of urban infrastructure in order to minimise human interference in areas that are free of it. In particular, there is an emphasis on the use of brownfield before greenfield, i.e., the reuse of land, buildings or facilities that are given new functions rather than the creation of developments on 'greenfield' sites. Compact cities are being developed in this vein.

The second premise refers to the fact that in the concept of the sustainable city, the quality of urban space is linked to the availability of an adequate amount of natural resources (Smaniotto *et al*., 2008). Green-blue infrastructure is a specific resource in cities that positively influences the valorisation of space. Greenery in a city affects air quality, provides shade and contributes to water retention. Large green areas in cities mean a greater range of leisure activities (Lamond and Everett, 2019). Spatial changes towards improving quality of life in the urban environment are generally appreciated by city users. As a result, spatial changes bring the very idea of SD closer to city users' reality and make it more convincing. This creates an agenda of issues around which it is easier to build social consensus, which is not easy in the context of a wide range of economic, social, and political issues that need to be revalued, as well as a set of dilemmas and problems that are visible from the perspective of SD in the broadest sense (Breheny, 1992). Spatial change in line with the idea of the sustainable city can thus be seen as a kind of transformational vehicle that shifts the focus from the category of 'use' to that of 'co-responsibility'. This approach has the potential to fulfil the actual aspirations enshrined in the concept of SD.

The concept of the sustainable city promotes infrastructural measures that interfere directly with the form of space, but not only that. Promoting specific patterns of space use, e.g., the reuse of space (ESPON, 2020), is an important element of these activities. Space in a sustainable city should reflect the harmonious co-existence of the social, environmental and economic elements. This trend advocates a type of development with mixed functionality (housing and services), with access to green infrastructure.

One of the priorities of SD in relation to cities is the quality of space (especially in relation to public spaces) – including its accessibility, its connection to the wider ecosystem, but also its aesthetics. Space is supposed to provide stimulation for the senses, address the need for novelty, and at the same time meet residents' expectations of harmony in their surroundings. Urban landscapes, architecture, urban planning, and spatial order play an important role in creating living conditions for city dwellers, both current and potential (Szarek-Iwaniuk, 2021; Stratmann, 2020; Gorzym-Wilkowski, 2017; UN HABITAT, 2010), with a broad consideration of the needs of vulnerable groups (Cassarino *et al*., 2021; Hendricks and Van Zandt, 2021). For this reason, issues such as light pollution and advertising chaos, for example, are on the sustainable city agenda.

It seems that nowadays much is said about the quality of urban space in relation to places of consumption and entertainment, as well as 'third spaces' – places of rest, of 'disengagement' from everyday life and from non-family/professional social contacts. An important feature of third spaces is that they allow us to observe other people and present ourselves to them (Oldenburg, 1989). Third spaces are important for shaping the idea of neighbourhood and strengthening the sense of local identity. Through a change of perspective it is possible to boost individual creativity in them, as well as to increase distance from the social roles we identify with on a daily basis (Tran *et al*., 2021; Cilliers and Goosen, 2018).

In the model vision of SD, cities strive for internal social, economic and spatial cohesion. In the context of the last element, we see in many cities the challenge of large industries disappearing from city centres due to changes in the global economy, leaving their characteristic spaces. Abandoned port areas or post-industrial enclaves open up opportunities for transformation and the adaptation of infrastructure to the current needs of residents. Activities related to revitalisation which are promoted in them focus on the needs of disadvantaged neighbourhoods. These activities are implemented under the assumption that changes in space influence a more profound social change. For example, there are so-called small-scale, grassroots revitalisation projects, in which neighbourhood communities themselves conduct activities to improve their immediate surroundings, which often result in greater care, a stronger sense of local identity, and a greater willingness to cooperate and increased trust within the local community. However, revitalisation is accepted insofar as it does not drift towards excessive gentrification, which is a risk especially in huge-scale revitalisation projects.

Gentrification is "a class-based succession within the population structure of neighborhoods undergoing this type of spatial transformation" (Drozda, 2017). Several stages can be distinguished in this process. In the first one, the so-called gentrification pioneers (people with more cultural capital) emerge and begin the process of displacing the incumbent population. The pioneers are then replaced by advanced gentrifiers. They have more economic capital at their disposal and, thanks to this advantage, accumulate the symbolic capital generated by the pioneers. These are the advanced gentrifiers who conduct the final transformation of the urban space, but the process does not end there. Gentrification is multidimensional. The economic dimension refers to the fact that the range of locally available services changes; there are characteristic transformations in the real estate market. The spatial dimension refers, among other things, to the fact that aesthetics improve, functionality changes. The social dimension of gentrification focuses on the change in the population structure and its demographic characteristics (Litorowicz, 2012). To some extent, this is a desirable process, but due to the controversies that accompany it, the term itself has gained a negative connotation in the public debate. In recent years, the term gentrification has increasingly referred to the concept of urban green space availability – eco-gentrification, environmental gentrification (Gearin *et al*., 2023; Cole *et al.*, 2017).

The issues indicated above concern the spectrum of matters raised in discussions on sustainable development. In these discussions, the category of 'sustainable city' is often used interchangeably with the green city, compact city, the city 'for all', smart city, etc. – depending on (1) which aspect of sustainable development and the challenge associated with it we consider the most important, and (2) who is discussing and with whom. It is difficult to find a coherent, complete and summary list of model visions of city development in the literature, which is why the author's proposal is presented below in Table 1.

Table 1. Model visions of urban development, main priorities and reference to the pillars of SD

Model visions of urban development	Main priorities	Pillars of SD		
		Ecology and environmental responsibility	Social development	Economic development
Green city	green areas; climate challenges and pollution, biodiversity	•		
Creative city	creative industries, quality of life, innovation		•	•
Smart city	technology, intelligent management of urban systems, open data		•	•
15-minute city	sustainable mobility, spatial accessibility, decentralized development	•		
A just city	availability of resources, equal rights, distribution of responsibilities		•	•
Co-managed city	participation; governance, co-decision procedures		•	
Happy city	quality of life; transport accessibility, quality of public space		•	
Inclusive city	social inclusion, accessibility, valuing disadvantaged groups		•	
A compact city	densification of buildings; counteracting chaotic suburbanization , mixed-use of space	•		

Source: own work based on literature review.

3. METHODOLOGY

This article attempts to answer the main research question: how is urban space in Warsaw[1] perceived in the light of model visions of sustainable urban development? Two main research methods were used in the search for an answer.

[1] Warsaw is a metropolis of almost 2 million inhabitants in the alpha class of global cities. The European Cities SDG Index ranks Warsaw 31st out of 45 cities surveyed in terms of its level of sustainability (UN Sustainable Development Solutions Network, 2019).

The first was the analysis of available source materials, including academic literature and already published data. The second method was to conduct 96 interviews with various individuals who declaratively identified themselves as participants in urban conflicts in Warsaw. This purposeful sampling was dictated by the need to obtain respondents who were interested in, aware of, knowledgeable about and experienced in urban development issues. At the same time, they were not academics rooted in urban sociology who might use scientific jargon thinking that this is expected of them as 'experts.' This sampling was intended to result in an opportunity to interview 'regular' but nevertheless 'informed' residents.

The interviews were of a partially formal nature, conducted on the basis of a specially prepared questionnaire, with the possibility of freely formulating questions within a specific thematic scope. The questions concerned a range of issues, including the assessment of the quality of Warsaw's space, the city's spatial policy, the way space is used, and the conflicts in this context.

The sampling process occurred in stages. First, conflict situations that involved changes in the city space were identified. Conflicts were chosen based on their media coverage and manifestations in the urban space in the form of protests, pickets, performances, street fights, etc. The interviews discussed several local conflicts in Warsaw, which can be grouped into 3 main categories.

3.1. Quality of life of residents and ways of using the city

It contains interviews around conflicts between residents and the developer who sought to create a new investment (Sielce district), issues related to reprivatisation (Śródmieście district), organisation of sports marathons and closing some streets in the centre, as well as the issue of curfew in the context of the functioning of cultural and entertainment facilities (Powiśle district).

3.2. Assigning meanings and appropriating symbolic spaces

The interviews focused on art in the city (the artistic installation "Tęcza" by Julita Wójcik, the work "Guma" by Paweł Althamer and the installation "Pozdrowienia z Alej Jerozolimskich" (the popular "Palm") by Joanna Rajkowska and advertising chaos (Central Railway Station).

3.3. Infrastructure

The main topics of the interviews were discussions around the demolition, preservation, reconstruction and construction of specific buildings and spaces, e.g., Universam Grochów, Krasicki Bridge, Saski Palace, Plac Defilad Square or Vistula riverfront.

'0' respondent involved in a specific conflict was then selected and could be interviewed. The key criterion was their personal involvement in the conflict. This could have manifested itself in a variety of ways, for example by participating in protests, writing to the authorities, using legal tools or being active on social media. The sampling method was based on the so-called snowball or chain method, which involves identifying further respondents through their knowledge of other respondents. This method aimed to find people who could provide valuable information on the topic.

The interviews were conducted with residents of the Warsaw metropolitan area, both those with longer and shorter periods of residence (between 2 years and "the whole life"). The respondents included 56 men and 40 women aged between 20 and 61, with the majority between 20 and 30 years of age. All respondents were professionally active or studying, the largest groups consisting of students, NGO staff, and public officials involved in urban development. Most people had higher education (completed or ongoing). The characteristics of the respondents are presented in the Table 2.

Table 2. The number of the respondents in terms of gender, age and education

GENDER	**Women**			**Men**	
	40			56	
AGE	**20–29**	**30–39**	**40–49**	**50–59**	**60–69**
	57	18	11	9	1
EDUCATION	**Primary**	**Secondary**	**Higher**		
			Completed	**During studies**	
	0	14	36	46	

Source: own work based on empirical material.

The material was analysed using semantic field analysis, on the basis of which statements relating to particular model visions of urban development were identified. For example, smart city was affiliated with the following terms: smart; digital; technology; computer; information; mobile phone; remotely, and participatory city by the terms: participation; consultation; decision making; inhabitants' rights; vote.

4. RESULTS

Most often, respondents referred directly to the sustainable city model, as well as participatory city, and just city. This was followed by respondents' focus on happy city, inclusive city, 15-minute city, and green city. In the interviews, respondents devoted relatively little space to the topic of smart city or compact city. It can be noted that in the total number of statements classified as referring to particular visions of city development, almost three quarters referred to four models of city development: sustainable, co-managed, fair, and happy. A quarter of the statements referred to the other eight models.

The research showed that sustainability needs to be considered at various levels, including spatial, environmental, economic, social, etc. In this perspective, urban space is subject to a complex, multidimensional analysis, which caused some problems for the respondents. Only by referring to specific examples or asking questions to clarify the issue did the respondents find it easier to provide answers.

In the vision of sustainable city, irrespective of the key points of emphasis of the individual model visions of development, the needs of the residents, their quality of life, come first. This is the benchmark and criterion for assessing the quality of urban space.

I believe that the main, priority goal of Warsaw's development is to improve the quality of life and ensure the safety of its residents (M, age bracket 20–29).

The city is primarily about living, living and functioning (...) The city is for the people, that is my opinion (M, age bracket 30–39).

In the statements, quality of life most often appeared as a universal category. Often respondents used generalisation and considered that their needs and expectations regarding urban space were common to all residents. A few respondents noted that the expectations of different groups of residents differ. In one of the statements, there was a proposal in the context of the idea of a sustainable city, the balancing of the needs of different groups of inhabitants regarding the use of urban space should be considered. In particular, respondents raised the issue of urban mobility and the competition between different groups of residents for dominance over others.

Sustainability, i.e. balancing the needs of different groups of people. If we are only talking about adapting the city for cyclists, i.e. increasing the number of cycle paths and encouraging people to switch, then at that point you also have to consider the group of people who have no way to commute other than by car. So, at this point, a little bit broader perspective (...) more sensitivity to different needs, rather than focusing on more catchy, trendy slogans: eco, pedestrians, bikes. It's not a one-way street, you have to think about everyone (M, age bracket 30–39).

The research raised the question of the interdependence between spatial and social context. In this relationship, the economic dimension is important, conditioning to some extent the possibility of action, but also the issue of assigning

meanings and values and the motivation to take or not take grassroots action to improve the quality of space.

> We have economic conflicts due to the fact that a community would like to invest in their space, but is not quite able to simply provide the funds. Some communities are very poor and even though they would like to, they can only organize a tiny garden, which for them is a huge effort in terms of time and money. And large gated communities, for example, may have the urge and resources, but they don't do so (F, age bracket 30–39).

4.1. Green city

SD goals that relate to green cities are accepted as long as people and their needs are at the centre. Greenery is perceived as an important measure in the assessment of the quality of life, and its deficit affects the downgrading of urban space. There have been repeated opinions about the feeling of a significant deficit of urban greenery in the space of Warsaw.

> There is a scarcity of greenery in Warsaw, a scarcity of places where residents who want to get out of their crowded flats to be able to spend time surrounded by greenery. Such places are increasingly scarce as new housing estates are built (M, age bracket 30–39).

In the context of achieving pro-environmental goals, one respondent noted that there is a need for both infrastructural measures applied by the municipal authorities and measures to change the awareness of residents themselves and increase their sense of responsibility for the quality of the environment in which they live.

> It seems to me that we need to raise public awareness of how we can influence ecology and our city, because we have no other planet and most people have no other place to live than in Warsaw. We need to understand that we need to start taking care of it. (...) There definitely also needs to be more rubbish bins, because there are very few of them and this is actually a problem too (F, age bracket 20–29).
> I would encourage people to pay their taxes and not to use their cars in the city, which is important, and to be more pro-social (F, age bracket 30–39).

4.2. Creative city

The concept of creative city refers to the occupational structure of cities. The transformation of civilisation, and the disappearance and emergence of new professions are all reflected in the urban space. One respondent raised this point in his statement.

(...) various professions that were typical of the urban fabric 20 years ago will have to fall out. (...) others are coming back, for example barber-shops, after all there was no such thing. Crafts are coming back, more and more people want to go to a haberdasher, in a little while to an engraver, so this city may start living again the way it lived before the war. (...) in the city people can afford it, here you earn more, you live at a higher level of status, so some professions disappear, others return, new ones appear. This can show that such is the evolutionary wheel in the city, which will keep turning non-stop (M, age bracket 50–59).

With regard to the vision of the creative city, there are references to the changing population structure and the emergence of a subculture of hipsters who are gentrifying certain neighbourhoods.

Żoliborz is a rather exclusive district, or if less affluent people live here it is because they inherit these apartments simply. And the people who move here are certainly wealthy people. Well, and you know, it is said that hipsters live in Żoliborz and meet at Sunday breakfast picnics, where a portion costs no one knows how much. But it's all eco, too (F, age bracket 20–29).

4.3. Smart city

Few statements directly referred to the smart city vision. When the concept did emerge, it was related to other trends, such as the sharing economy or green infrastructure. One respondent emphasised its risks, such as the need to prepare appropriate legal and organisational instruments, which lag behind the dynamics of the spread of technological innovations.

One might think that on a philosophical level, sharing is super great. I mean, if we could exchange the excess of something we have and not generate pointless consumption, that would be good, that's the kind of real sustainability at the city level. We've all got used to using Veturilo bicycles by now. Also a cool thing, in a moment there will be cars available on the same principle, that you will be able to gather a group of 4 people, with a driving license, take this car and travel from place to place for the price of a tram ticket, that will be cool too. There will be forced carpooling, because only then it will be profitable. So you can see here that this whole trend of developing technology harnessed to make things better in cities, something called smart cities trend will be the future of cities. But conflicts will arise where the status quo will change (M, age bracket 50–59).

4.4. 15-minute city

It was noted that urban residents support a particular model of urban development freed from the dominance of cars because of their own convenience and *homo oeconomicus*-type motivations, rather than because of more abstract ideas or community values.

> There was a study done in Copenhagen. It was said that people there ride for environmental reasons, for health, something like that. It turned out that they ride bicycles primarily because it is the fastest. Costs – the Danes are one of the richest European societies – costs were listed as second, health and so on. Ecology was at the very end. This is the easiest. If getting anywhere by car is faster than by public transportation and than by bicycle, then people will choose the car, simply (F, age bracket 60–69).

In addition, as the respondents stressed, realizing the vision of a 15-minute city requires fighting the stereotype about public transportation.

> In addition to not wanting to be hit, it's the transportation, you know, it's for the poor, it's for people who can't afford a car, gasoline, and that's why they use it. And not, as I told you, in New York, where there is no such demarcation, it's just more convenient and that's it (M, age range 20–29).

One respondent directly addressed the need to have locally available services in close proximity and to make urban residents' functioning independent of cars.

> I would rather not create expressways to get to the centre of the city and then struggle for half an hour to find a parking spot, but rather create bicycle paths that would allow me to get to the centre in 15 or 20 minutes (...) So that there are not only Biedronka and Tesco shops and some other big chains around, but also small crafts and small stores could develop. So that it's like you don't have to go by car to the outskirts of the city to do your shopping, but to get all your needs satisfied in the area, locally, and that it's not some big luxury, right? That I can buy things for breakfast in some small neighbourhood store and not in some big corporation on the outskirts of the city, right? (M, age bracket 20–29).

4.5. Just city

Revitalization efforts and the accompanying gentrification make places symbolically inaccessible to certain groups of residents.

> (...) due to this situation, some kind of boundary has been created between those who were there and previously did shopping at Universam and what will happen there, that is, the developer and probably future residents (...) these will no longer be apartments for those people who settled this space before (M, age bracket 30–39).

Respondents noted that there are groups in the cities that are 'inconvenient,' who do not fit in with the modernisation trend.

> The developer is the most satisfied party and that part of the population that is in favour of the change (...) the standard of the place was at odds a bit with what the local authorities are now trying to introduce (...) maybe due to the fact that it wasn't the cleanest, there were sometimes people hanging around there that the public doesn't want, yes? It wants to get rid of them (M, age bracket 30–39).

The observation was made in the interviews that residents are not unanimous in the context of the catalogue of needs for the city's development.

> It would be important to note that there are people living in Warsaw who have different priorities and are interested in different ways of developing the city. The city is a certain community, a collective that is in such constant conflict with each other precisely because of these differences in priorities (M, age bracket 20–29).

According to the respondents, it is important not to allow excessive spatial segregation in cities.

> There will always be the rich and there will always be the poor, but ghettos of neither can be formed. You can't get out of neighbourhoods of poverty, society should be mixed (M, age bracket 20–29).

Respondents most often referred to fairness interpreted in economic terms and in relation to the power structure.

> History has already shown us, the rich have more rights. They can certainly afford more. Either they buy something for themselves, or they are from a higher social class, so they have access to more things. Some of the poor accept their fate or try to do anything about it. (...) Classes will be everywhere, in any regime, even if everyone is measured by the same measure, as the middle class, there will always be power. Hierarchy will be preserved in any country, at any time in various forms (F, age bracket 20–29).

4.6. Participatory city

In terms of stakeholders who should be involved in participatory processes, residents come first, but there are also other groups.

> Even developers are required to consult on their larger developments. And that's a good thing. My friends live near the Varso development and they were consulted on this investment (M, age bracket 40–49).
> It is impossible to strictly define who should decide. Each time, it's who else should be able to do it, sometimes it's the residents, sometimes it's the developers, it's important that it all goes in favour of Warsaw, so that it is somehow checked, so that these decisions are not typically emotional, but looking at the possibility of Warsaw developing further, but also not harming the residents themselves. It is worth it to often take people who are authorized to give their opinion, have information, have knowledge, simply are experts in a certain field (M, age bracket 20–29).

There were voices in the interviews that were critical of the very idea of participation.

> In the past the idea originated from the architect, urban planner, that is, a professional, a man educated in the field. Just as to cut a patient, to operate on an open heart, one does not call

a cobbler or a fish farmer, but a heart surgeon, so to plan a city, comfortable for people to live in, one also called a professional. Now there are public consultations. This cross-section of society is very scattered, and everyone has the right to have their own idea. So the effect is that sometimes these are very conscious, well-meant ideas, and sometimes this is just wishful thinking (...) it's time-consuming, because these procedures take time, and the results, however, are not always spectacular (F, age bracket 30–39).

4.7. Happy city

The interviews included references to Copenhagen's iconic vision of a happy city, which has an image of a place that puts the well-being of its residents first.

There are cities (...) Copenhagen or Oslo, Helsinki, that focus strictly on residents. And these are such leaders of this approach. Simply put, the welfare of the resident or the community is always put above the interests of the developer or anyone else (M, age bracket 20–29).

According to those surveyed, city development should take into account the user experience, including aesthetic impressions and those related to functionality.

First of all, in my opinion, there should be an action for creating the right impression (...) aesthetic expression also affects functionality. This is where the social factor comes in. If you do something unsightly, then from such a sociological point of view it becomes a dysfunctional place where people will not want to stay (M, age bracket 20–29).

One respondent noted the importance of the aesthetic layer, but at the same time stressed that, in her opinion, it was secondary to the functionality of urban infrastructure.

This is at the very end, because this is just the aesthetic sphere, more pleasing to the eye. I like the architecture of Warsaw, but actually some buildings are such that you just don't want to stay here. They are depressing, etc. Let me think…, parts of Żoliborz, or just Ursynów, Praga. There are a lot of buildings that could be renovated, and this is of course at the end of the priority list, because there are more important things to focus on, but in general this is also something I would improve to make it more pleasant to live here. I like the fact that Warsaw is not so standardized. You don't have every building looking exactly the same, but that it also maintains any kind of aesthetics, not so stripped down, etc. I also don't like the graffiti on the buildings (F, age bracket 30–39).

In the vision of a happy city, the opportunity to socialise within the framework of so-called third spaces plays an important role. One of the respondents focused on the possibilities to spend leisure time in Warsaw depending on the season and available resources.

It's also an economic problem – when I have some free time between classes, it's not much of a problem in the summer, because if I don't want to go to a café and spend 10 PLN on a coffee

every day, I'll go to the park, read a book and spend my time there. But in the winter you can see it – it's over, well it's over (F, age bracket 20–29).

One respondent made an interesting comment about the appreciation of everyday life and the small rituals associated with urban life, which she felt were more important to the quality of life in the city than large, impressive investments.

You asked about the main priorities for Warsaw and how it should develop. Here it seems to me that such a metaphor of ants and elephants is apt. We get excited about these elephants, that bam, they wave their trumpet and suddenly there's a second metro line or the Saski Palace, such a great investment that you can get excited about, that you can brag about, that you can feel some kind of pride in. I think that some people are like that, but I have this feeling that what we need is to stop fussing about elephants, but to appreciate the hard work of people, which in a way improves our everyday life (...) that there would be more such squares, gyms or just tables where neighbours could gather on warm days and sort of have a meal together and talk over Sunday breakfast (...).) such small, but crucial things of everyday life (...) Well, a lot of such trifles, very small things concerning such everyday life, that is, as if ants, which, as if braiding anew, rather than elephants, which with their great trumpets will build us the Saski Palace, for example, or another metro line. I mean, it's nice if there is a metro line, but if I have to choose between the metro and the development of backyards, well I'd rather the backyards develop (F, age bracket 20–29).

4.8. Inclusive city

In the context of an inclusive city, the issue of accessibility emerged as a chief issue in the interviews. It is treated broadly, both in spatial and economic or symbolic terms.

Everyone would like the city to invest in space for residents (...) one lady would like nice apartments to be built here, and she could live in one of them. It's like people feel that this is a different pool, that this will be a space no longer available to them. There will be apartments and banks here, and it will already be a private space (F, age bracket 20–29).

Respondents raised the problem of restrictions on the availability of space as a result of fencing off residential areas.

I was just a child brought up in a tenement. And we all played in the courtyard. It didn't occur to anyone to ask whether we were playing in a private yard, or a public yard, or a community yard, there are simply spaces where everyone should have free access. But we know that the developer trend, probably as early as the late 1990s began, to divide these spaces with fences, close them off with wickets with intercoms. I used to have free access to my elementary school friend. Whether today my grandson would have free access to his elementary school friend, I dare to doubt (F, age bracket 20–29).

The issue of the city's inclusivity problems with regard to sexual minorities arose in the interviews.

> I believe that the various social changes in the relationships between us are long-term. These are slow steps to change our tastes or habits. In the same way that smartphones entered the world and stayed, they didn't enter immediately, they entered gently, but nevertheless quickly (...) I think, it will still take about 100 years for this to completely disappear – homophobia, it won't be easy to overcome either (M, age bracket 30–39)

One respondent stressed that the idea of an inclusive city has broad fields of reference – economic, cultural, demographic, etc.

> (...) strong discrimination against minority groups, all sorts of racism, nationalism, i.e. considering one's own nation superior to other nations, homophobia, heteronormativity that is valid in these groups, often sexism, (...) this is very much linked to how people are treated, these are all forms of exclusion. And so certain people are excluded from the urban fabric, so poor people are excluded from the urban centre, people who don't have capital, people who have less opportunity to acquire that capital, often the elderly, the infirm, the sick. It's all a mesh of relationships (sex "other," age bracket 20–29).

4.9. Compact city

The vision of a compact city was often combined in interviews with the issue of spatial order and optimal use of urban infrastructure.

> I would like the space of Warsaw to be characterized by spatial order so that we could talk about harmonious development, which is a concentrated, compact development, in which high-rise buildings have their place and are located creating a certain concentration of such development (M, age bracket 40–49).

There were voices among respondents against mono-functional developments or quarters. The postulated solutions went in the direction of combining residential service and office functions.

> The city is very much influenced by fairly aggressive development, in terms of development assumptions, but towards offices and commercial spaces rather than new housing (F, age bracket 20–29).

Densification of development was often resisted by the residents in reference to the ventilation wedge argument.

> Now a great deal of these windward strips are being built up because of the developer's planning policy. That is, when there are vacant lots, they just build up (F, age bracket 30–39).

The need to define the centre of Warsaw and reconstruct transport corridors in the spirit of deprioritisation of cars was indicated.

> When something is broken, it creates more conflicts (...) broken is generally because there is no city, there just isn't (...) Warsaw is congested in the centre because there is no city street grid, we only have two arteries. When they've created a road, it's of the Chałubinskiego Street-type. The city doesn't need to have wide streets at all, it just needs to have a grid of streets so that it distributes traffic. And this flyover, God forbid, I don't know who had the idea to make a flyover in the centre of the city. And at the same time, no one thought to make many connections over the railway tracks (F, age bracket 20–29).

A caricatured image of suburbanisation appeared in the respondents' statements.

> A developer, I know it's a cliche, is someone who builds in empty fields where you can't get to by car, and when you get out of it you need wellingtons (F, age bracket 30–39).

To summarise this part of the work, Tab. 3 presents data on the main topics that emerged in the interviews regarding the various visions of the city's development, as well as individual statements that were atypical, but cognitively interesting.

Table 3. References to model visions of urban development (typical and atypical) in the context of the research

Model vision of city development	**Type of narrative resulting from interviews**	
	Typical statements	**Atypical statements**
Sustainable city (umbrella concept)	• Priority for residents' needs • Quality of life as a benchmark for evaluating urban space • Various levels, including spatial, environmental, economic and social • Vision widely endorsed	Need to balance the different expectations of different groups regarding space
Green city	• Anthropocentrism • Greenery is subservient to quality of life • A sense of scarcity of greenery and the threat of losing it	Need for action to increase residents' sense of shared responsibility for urban greenery
Creative city	• Revitalization resulting in the gentrification of specific neighbourhoods • Risk of exclusion of economically disadvantaged groups • Threat to spatial cohesion – increasing differentiation between neighbourhoods	Impact of changes in urban occupational structure on space

Model vision of city development	Type of narrative resulting from interviews	
	Typical statements	**Atypical statements**
Smart city	• Linked to other trends, such as the sharing economy and green infrastructure • Convenience of use thanks to new technologies as a parameter of space evaluation	Threats posed by lagging legal and organisational instrumentation in the face of the pace of technology development
15-minute city	• Need to free urban space from car dominance • Local availability of services • Need to promote public transport • Privileging pedestrians and cyclists	Need to fight the stereotype about public transport
Just city	• Recognising the needs of 'invisible', 'inconvenient' groups regarding space • Justice interpreted as access to power and capital that condition the use of space • Spatial segregation is a material form of injustice	Difficulty in operationally defining the vision of a just city
Participatory city	• Participation as an element of citizen control over spatial development policy • Presence of participatory tools and procedures improves image of city government in space management • Need to trigger co-management at the earliest possible stages of spatial planning • Key issue of information transparency in the spatial planning process	Risk of co-management by residents who lack competence and knowledge of urban planning considerations
Happy city	• Iconic image of Copenhagen's transportation spaces • User experience of urban space (aesthetics and functionality) • The importance of the quality of public spaces and accessible third places	The need to value the space of urban everyday life
An inclusive city	• The key issue of accessibility (spatial, economic, symbolic, etc.). • Fencing off the space	The issue of space accessibility in the context of gender
Compact city	• Opposition to chaotic suburbanisation • Spatial order • Optimise the use of urban infrastructure • Densification as a threat to residents' quality of life	Multifunctional housing

Source: own work.

5. CONCLUSIONS AND DISCUSSION

The reason for raising the subject of this article was the need for a deeper understanding of the phenomenon of urban space in the era of the sustainable development paradigm through the analysis of the opinions of stakeholders of urban conflicts. It is the appreciation of participants in urban conflicts in research on spatial development that I consider to be the greatest novel of the work. The analysis of the attitudes of conflict stakeholders, with their informational, motivational, and behavioural components, may lead to reflection on the category of urban development and the expectations associated with it. Although much attention is paid in the scientific community and in the political activities of participation in the management of urban space, conflicts as a type of non-consensus participation remain in the shadows. Expanding interest in the analysis of conflicts within urban governance processes could change the organisation of participatory processes. This change would aim to make greater use of the potential of bottom-up participation, which is present in the act of participation in conflicts.

The idea of linking spatial analyses to the category of SD is important to me for two reasons. First, in this optic urban space is not a static entity but a dynamic one, undergoing constant change, which often seems to be overlooked from a research perspective in analyses dedicated to the perception of space (Wojciuk *et al*., 2016). Second, referring to model visions of urban development appeals to the collective imaginary around what a city is and can be (Dunn, 2018). A sustainable city is (at least for today) a certain abstract model that has certain characteristics, but in its pure form it does not exist in reality. Despite this limitation, however, the concept of a sustainable city is useful because it enables different measures of urban development (including spatial changes) to be compared with each other against this characteristic.

The survey confirmed that spatial changes are perceived by respondents as an indicator of urban transformation towards a sustainable city (or evidence of failed policies in this regard). The issue is both the presence of sustainable urban forms and changes in the ways in which space is used (much less so than its co-creation in the spirit of shared responsibility). SD is perceived by respondents through the lens of various spheres – social, economic, ecological, spatial, etc. The respondents have observed that these spheres are interdependent. They paid much attention to transportation issues and sustainable urban mobility. They noted the need to build spatial order, effective urban planning, and care for aesthetics. They emphasised the need for places for entertainment, consumption, and recreation, referring to expected quality of life.

In light of the collected empirical material, in all the conducted interviews there were elements referring to at least one of the model visions of sustainable urban development presented in the theoretical chapter (green city, creative city,

smart city, 15-minute city, just city, participatory city, happy city, inclusive city, and compact city). The different visions represented, as it were, different aspects of SD and directed the attention of the respondents to social issues or more to environmental issues, and another time to economic issues. It was these perspectives that determined the field and criteria for evaluating urban space by the respondents. It seems that the leading criterion is the servitude of urban space to the aforementioned quality of life, which can be interpreted as the dominance of the social and economic aspect over the environmental in the perception of the respondents.

Almost all respondents referred directly to the category of SD but far less frequently to a specific vision of urban development. Elements of these visions had to be distilled from the respondents' statements of expectations (using key words and semantic field analysis). Each respondent had some vision and expectations for development, but these visions most often fell under the broad umbrella category of SD. Often elements of different visions appeared in a single statement, complementing or interpenetrating each other. The research practice revealed problems in attributing specific statements to specific visions, since some model visions of SD contain points in common. Such difficulties included the distinction between the visions of an inclusive city and just city.

Referring to different model visions of sustainable urban development shows how different public perception and understanding of the SD concept is. Different visions point to different priorities, and it is in the question of priorities that, in my opinion, the entire spectrum of the complexity of implementing the concept of SD is revealed. Lack of awareness of the vision (and thus of the priorities) being promoted could be the cause of communication difficulties and a potential breeding ground for conflict among various urban development stakeholders. Increasing this awareness could result in a deeper understanding of interests and actions – their own, as well as those of other conflict actors. In addition, moving the discussion from the 'interests level' to the 'vision level' provides an opportunity for substantive discussion in urban spatial conflicts.

The research revealed some contradictions between different model visions of sustainable urban development. The first example of such a contradiction is the simultaneous identification of suburbanisation as a significant challenge and concerns about overdevelopment in compact city. The second example of a contradiction is the high relevance of green city and environmental issues, but the simultaneous maintenance of primacy of human beings and their needs for the use of space in the context of quality of life. A third example of a contradiction is the indicated need to counter socio-spatial inequalities, for example through the revitalisation of specific areas, which is paradoxically accompanied by concern about the growth of such inequalities.

The category of SD functions, in light of the statements of the respondents, as two types of entities – a theoretical model, and a category for describing reality. An approach that treats the model of sustainable urban development (and the

model visions that contribute to it) as a theoretical reference point seems more justified. As civilisation changes, our approach and the way we define SD will change, which in itself opens up an interesting field for further scientific analysis. In my opinion, the two mentioned ways of understanding SD – as a model and the reality – although related, are two different things. The language around SD does not have the capacity to show this at the moment. "(...) sustainability is not a well-defined concept but a probabilistic expression of a latent idea. However, this supposed latent idea is not necessarily reached by aggregating its multiple applications (...) A discourse based on words with multiple and discordant meanings will be ambiguous and discordant" (Bova, 2022). In order to change the narrative about SD, we need a more expansive conceptual vocabulary.

The research showed that perhaps due to the lack of more precise terms in the discourse around SD there is a certain flattening of concepts, which is reflected in the level of knowledge and awareness around SD, which is not very sensitive to nuance, specific conditions, contradictions or dilemmas. This hypothesis requires further research. It may be that the model vision of a sustainable city can never be fully realised, and if certain goals can be achieved, sustainability will rely on maintaining them over time and in balance to other goals. However, this should not be an argument for abandoning efforts. Sustainability is – metaphorically speaking – like a healthy lifestyle. It means, first of all, understanding the cause-and-effect relationships of certain human activities, building good habits, and being willing to sacrifice short-term gratification for long-term benefits. SD in practice for me means precisely making better, more conscious choices – building habits is more important in this sense than achieving specific goals.

Finally, it's worth indicating how the results of the research presented in the article can support Education for Sustainable Development (ESD). First of all, the goal of ESD should not only be on increasing knowledge because this is not enough to change attitudes. It also needs to affect emotions to motivate attitude change (Cristóvão *et al.*, 2023; Ojala, 2014). To increase the level of emotional engagement, one needs to appeal in the narrative about SD to things that are relevant to the viewer. When talking about the SD Goals for cities, it is worth putting more emphasis on issues that are important values for urban residents, such as the issue of quality of life that appears in the research. It is also worth showing SD in the context of the dilemmas of spatial management, especially in relation to real case studies, where people and their stories appear. Against this backdrop, it is possible to gain a deeper understanding of the multidimensionality of SD and broaden awareness of the topic.

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