



Environmental justice in the context of urban green space availability, accessibility, and attractiveness in postsocialist cities



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ARTICLE INFO

Keywords:

Central and Eastern Europe
Green and blue infrastructure
Transition economies
Environmental planning
Environmental governance
Neoliberalism

ABSTRACT

This article aims to position postsocialist cities in Central and Eastern Europe in the broader debate on urban environmental justice. The article crosscuts through all three dimensions of justice (distributive/distributional, procedural/participatory, and interactional/recognition) in the context of urban green and blue space provision. Environmental justice is still an emerging topic in postsocialist cities, constrained by market-orientation and neoliberal trends within society, privatization, and the primacy of private interests. The respective situation in postsocialist cities provides insights into the international debate on environmental justice, by highlighting some extremes related to neoliberal and populist governments and very rapid processes that lack long-term democratic consensus within societies. The findings of this study are discussed in the context of a postsocialist legacy, which includes broad tolerance for inequalities, a lack of solidarity in society, a lack of responsibility for the public interest, and extreme individualization and disregard for social interests. This has gradually led to the corporatization of local authorities and various business–government coalitions. This setting is more likely to favor business models related to the use and management of urban green and blue spaces than the environmental justice discourse.

1. Introduction

The socialist system claimed to promote an egalitarian social mix, with a strong focus on society and social needs. After the fall of socialism, researchers were concerned that there was no alternative “comprehensive progressive vision of a just social order (...) to take socialism's place” (Fraser, 1997, p. 2). Environmental justice (EJ) – a concept that highlights the differential exposure to environmental

burdens (bads) and access to environmental goods experienced by different socioeconomic groups (Schweitzer & Stephenson, 2007) – provides an example of such an alternative vision. The understanding of EJ is clearly broader than the above – most highlighted – distributive/distributional approach that focuses on fair allocation of/access to benefits for all social groups. It also encompasses procedural/participatory justice (fair integration of all affected groups into decision-making processes), and interactional/recognition justice (recognizing

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<https://doi.org/10.1016/j.cities.2020.102862>

Received 28 August 2019; Received in revised form 20 April 2020; Accepted 25 June 2020

Available online 07 July 2020

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the needs, values, and preferences of all stakeholders in a safe, fair, and non-discriminatory environment) (Low, 2013; Schlosberg, 2003; Walker, 2012).

The importance of EJ research is growing worldwide, with increasing attention paid to this topic in key international documents (such as the UN Sustainable Development Goals or Habitat Agenda), international research projects, and publications. Most recently, a particularly important strand of research in this context has focused on the availability, accessibility, and attractiveness of urban green and blue spaces (UGBS) to different socioeconomic groups of inhabitants. UGBS are understood here as all those parts of urban land which are covered by vegetation and water. This broad interpretation is supported by the fact that a large share of such spaces in postsocialist cities is actually not protected as parks, forests or other forms of formal green spaces (Feltynowski et al., 2018; Sikorska, Łaszkiewicz, Krauze, & Sikorski, 2020), and yet all of such spaces and their functional connections and interrelations provide a broad range of services to urban residents (Andersson et al., 2019).

Postsocialist cities, which have undergone a significant socioeconomic transition since the beginning of the 1990s – from socialism to free-market capitalism – are poorly represented in this new wave of research, with little attention paid to the social equity and inclusion contexts of urban greening. Examples from postsocialist countries have been mentioned in few overview publications that refer to the topic of EJ (Haase et al., 2017), while proper case studies from the region have been omitted from large scale comparisons that focused on equity and inclusion in the context of UGBS (Connolly, Trebic, Anguelovski, Wood, & Thery, 2018). It is highly relevant to study how postsocialist cities fare in terms of ensuring EJ in this context, as when it comes to UGBS planning and management in more general terms, postsocialist countries represent a distinct family, in most cases different from other groups of countries in Europe (Davies et al., 2015). With this article, we wish to position postsocialist cities in the broader debate on urban EJ.

Our main research questions are the following:

1. What crosscutting insights with respect to EJ can we observe in postsocialist cities?
2. How are EJ issues related to general urban debates in the postsocialist realm?
3. How does the postsocialist condition influence the debate on EJ?

We respond to these questions based on the different types of evidence cumulated through an iterative and deliberative research process through which we aimed to elicit, systematize, and synthesize emerging knowledge on EJ in postsocialist cities. We link evidence related to research on EJ and UGBS in postsocialist countries, and to the practice of UGBS management observed in these countries. In particular, we refer to Central and Eastern Europe, and countries such as Belarus, Hungary, Poland, Romania, Russia, Slovak Republic, Ukraine, and eastern Germany, which formerly constituted the German Democratic

Republic. We have rich evidence from these countries that represents the challenges encountered by postsocialist countries in general.

We see the added value of this article in collecting and synthesizing EJ evidence from postsocialist cities. In this way, we contribute both to the ongoing discussion on urban EJ, which so far has largely neglected the postsocialist context (Koprowska, 2019), and to the ongoing debate on postsocialist cities, which has provided scattered information pertaining to EJ issues. Indeed, we argue that the specific postsocialist realm has a specific connection with EJ and can bring new insights to the broader discussion.

After this introduction, we describe the evidence used in this article and how it was elicited (Section 2); in Section 3, we provide an overview of the ongoing debate on EJ in postsocialist countries, showing that although still very small, the number of studies and discussions referring to this topic has grown in recent years and that scholars from postsocialist countries increasingly contribute to international debates on this topic. This largely sets the context for answering our first research question. In Section 4, we present insights into EJ from the UGBS provision perspective, divided into availability (whether UGBS exist close to where people live), accessibility (whether they are physically and psychologically accessible), and attractiveness (whether they meet the prospective users' expectations and needs). It is here that the key EJ issues related to general urban debates in the postsocialist realm are reviewed, in light of our second research question. In Section 5, we interpret the different aspects of UGBS provision in postsocialist cities in the context of people-based dimensions of EJ, referring to: distributive/distributional justice; procedural/participatory justice; and interactional/recognition justice. This section provides most insight into the third research question regarding the postsocialist condition and its influence on the debate on EJ. The Discussion in Section 6 is divided into subsections specifically responding to our research questions in light of the material presented in the previous sections. Section 7 offers the final concluding remarks.

2. Methods and materials

This paper builds on comprehensive evidence that includes our previous and ongoing research, a deliberative process that brought all of us together in April and May 2019, and different sources of additional material (Fig. 1).

The deliberative process included two rounds of questions, to which all thirteen of us responded remotely (for the full list of questions, see the Electronic Supplementary Material accompanying this article), and a workshop held at the University of Lodz, Poland, on 24 May 2019. The authors were selected based on their experience with the topics of UGBS and EJ in their relevant countries. The selection was intended to ensure a broad representation of postsocialist countries, especially in Central and Eastern Europe. In this way, we attempted to cover various political and geographical contexts within the region and to identify commonalities and differences between different countries. The broad



Fig. 1. Schematic representation of the research process and material, along with the analytical frameworks.

spectrum of countries represented allowed us to make some generalizations based on the aggregated empirical knowledge.

The process was designed not only to elicit information pertaining to different national and urban settings but also to ensure a common understanding of the issues we discussed. The workshop in Lodz was moderated to clarify the issues that emerged during the remote phase of the discussion and to elicit additional information. The workshop discussion helped us to synthesize the findings and reflect on the commonalities and contradictions between postsocialist countries. Additionally, the workshop provided an opportunity to discuss the specific content of the draft manuscript. Following the workshop, all authors were asked to provide representative case studies to illustrate various EJ issues in postsocialist cities and to provide additional research material. The criteria for the selection of case studies included representativeness for the broader issues observed in postsocialist countries but also including the specific local context. The case studies serve as confirmation of our earlier generalizations and are used for additional illustration only. They mostly represent our own ongoing research, most of which has not been published yet.

Beyond the authors' own work and knowledge, this article builds on a comprehensive and qualitative literature review, including academic literature, grey literature, and mass-media reports. The latter made it possible to cover areas and topics which we did not study ourselves and for which no other evidence was available. The analyzed literature covered various national and local contexts and included not only what has been published in English but also in many other native languages of the studied Central and Eastern European countries.

We studied the collected material using two analytical frameworks. The first focused on UGBS availability, accessibility, and attractiveness, which was first proposed and tested in the postsocialist context by [Biernacka and Kronenberg \(2018\)](#). The framework helps to disentangle the differently interpreted concepts of UGBS availability and accessibility, adding the dimension of attractiveness to obtain a comprehensive picture of UGBS provision. It provides insight into discussions on EJ and political ecology by making it possible to clearly connect the different aspects of UGBS provision with the location of urban inhabitants or their share in UGBS governance.

The second framework explicitly involved EJ. When looking at EJ from the perspective of potential UGBS users or urban residents in general, we follow the approaches introduced by [Schlosberg \(2003\)](#), [Walker \(2012\)](#) and [Low \(2013\)](#), which we combine into three distinct EJ dimensions: distributive/distributional, procedural/participatory and interactional/recognition.

3. Environmental justice in postsocialist countries – general insights from the literature

There are clear differences in the prominence of EJ in different postsocialist countries. In Germany, in the east as much as in the west, EJ has become an important topic and part of the national-scale debate driven by scientific deliberation ([Kabisch & Haase, 2014](#); [Kindler, Klimeczek, & Franck, 2018](#); [Maschewsky, 2004](#)) and the government's strategic policy formulations ([BMUB, 2017](#); [UBA, 2016](#)). Interestingly, the urban context is one of the two key EJ topics in Germany, along with areas that are subject to the location of controversial investments, such as wind energy and power distribution lines. Still, justice issues are not necessarily addressed in terms of segregation or unequal housing conditions, and the EJ debate is not embedded in power or political contexts.

Meanwhile, in other postsocialist countries, EJ is barely addressed or known outside narrow academic circles and environmental NGOs, although clearly, as in other parts of the world, some environmental conflicts in postsocialist countries have been discussed through the lens of EJ ([Agyeman & Ogunneva-Himmelberger, 2009](#); [Dushkova, Krasovskaya, & Evseev, 2017](#); [Filčák & Steger, 2014](#); [Filčák, Szilvasi, & Škobla, 2018](#); [Harper, Steger, & Filčák, 2009](#); [Sabadash, 2013](#); [Špirić,](#)

[2018](#); [Steger, 2007](#); [Velicu, 2019](#); [Velicu & Kaika, 2017](#)). In a similar vein, occasional studies focused on socio-environmental vulnerability and the exposure of minorities to environmental bads, either based on ethnic background ([Filčák et al., 2018](#); [Filčák & Steger, 2014](#); [Steger, 2007](#); [Steger & Filčák, 2008](#)) or age and economic status ([Szewrański, Świąder, Kazak, Tokarczyk-Dorociak, & van Hoof, 2018](#)).

Other publications that refer to EJ in postsocialist countries are fairly general and explain the origins of the concept or the linkages between the concepts of EJ and sustainable development (e.g., [Krajewski, 2012](#)) – these discussions are typically carried out by lawyers and philosophers. Interestingly, this discussion is quite often isolated from broader theoretical debates, for example, there are no references to international sources, and there is a lack of translations of the most relevant international publications on this topic. As a result, the term EJ sometimes appears in publications that argue – again in quite general terms – for the need to raise environmental consciousness and lower environmental impacts ([Bojar-Fiałkowski, 2016](#); [Sidorenko, Abroskina, & Sidorenko, 2012](#)). When specific EJ case studies are discussed in publications originating from postsocialist countries, the cases tend to be from abroad, especially from the USA, as if these issues were not relevant to the postsocialist context ([Hardashuk, 2005](#)).

Civil society is relatively the most active actor in the scene, and many international and local NGOs have embraced the theoretical and practical notions of environmental and social justice. NGOs and other community groups often write official letters of complaint and petitions. They boycott products of selected companies, organize protests and demonstrations, and also carry out research, as in the case of Védegyelet, which has played a crucial role in Hungarian EJ research. However, quite often, even when NGOs and political movements/parties, such as the Greens, refer to the issues of EJ in postsocialist countries, again, they usually only repeat general information from Western pamphlets (e.g., [Maciejewska & Szwed, 2010](#)).

The topic of EJ is not necessarily associated with political movements that represent the left. In Romania, both the NGOs and right-wing parties have a common enemy in the public local and national administration, which is dominated by a left-wing party. Hence, rather unusually, the political right advocates for the consideration of EJ, while the political left basically ignores the topic. Paradoxically, gentrification is very often discussed positively in postsocialist countries (especially by local authorities) with the focus on making cities more attractive, and thus attracting wealthier residents. The negative effects of gentrification are usually downplayed as being outweighed by the economic benefits for the city in general ([Golubchikov & Badyina, 2006](#)). Interestingly, even in Germany, city authorities and planners usually deny the effects of eco-gentrification.

In general, EJ is rarely invoked in public debates regarding environmental conflicts, even when it concerns redistribution issues related to transportation, energy taxes, the elimination of individual coal-fired heating in city centers, air and water pollution, waste management and disposal, the regime of protected species (especially large carnivores), and the like. Of course, it is sometimes mentioned that without proper redistribution mechanisms, the poor will most likely suffer the consequences, but the term EJ does not appear in these discussions. In this way, policymaking seems to be removed from the broader declarations. After all, postsocialist countries have been part of international conventions regarding sustainable development, and many have developed national strategies to reach the United Nations' Sustainable Development Goals, including those regarding social equity, minimizing economic inequalities between regions and countries, and environmental protection. Similarly, national legal systems, including national constitutions, do recognize that access to a safe environment is a basic human right. Still, if they cover it at all, local urban development strategies usually only include the theoretical basis of problems without offering solutions suitable for the local conditions.

4. Environmental justice in the context of urban green and blue space availability, accessibility, and attractiveness

4.1. Availability

Availability is the simplest indicator of whether people have access to UGBS, i.e., whether these spaces exist close to where people live. European comparisons indicate that UGBS availability in postsocialist countries (Central and Eastern Europe) is relatively good (Kabisch, Strohbach, Haase, & Kronenberg, 2016), which has also been confirmed by smaller-scale assessments (De Sousa Silva, Viegas, Panagopoulos, & Bell, 2018). Still, we may observe that UGBS availability differs among inhabitants in a way that high socioeconomic status groups have better UGBS availability than others, which can be interpreted as environmental injustice. For example, Łaskiewicz, Kronenberg, and Marcińczak (2018) investigated the ability to develop place attachment thanks to UGBS by the different socioeconomic groups of inhabitants in the Polish city of Lodz. It turned out that inhabitants with lower socioeconomic status have fewer opportunities to develop place attachment via the use of UGBS. (Łaskiewicz & Sikorska, 2020) studied green space availability along children's home-school routes in Lodz. Meanwhile, Kabisch and Haase (2014) indicated several studies on the availability of green spaces to different social groups carried out in eastern German cities.

Łaskiewicz, Czembrowski, and Kronenberg (2019) investigated these issues further with the use of hedonic pricing, a non-market valuation method that indicates the monetary value of UGBS based on real estate prices. They found that not all parks and forests in Lodz act as desired amenities from the perspective of real estate buyers, but also that preferences for these UGBS differ among price sub-segments in the real estate market. Most notably, amenity parks are increasingly desired by subsequent price segments, which the authors interpreted as a sign of apartment buyers appreciating the luxury of having those parks in the neighborhood, which is clearly an amenity that not all socioeconomic groups can afford. This is what can explain small-scale segregation occurring specifically around such amenity parks (Łaskiewicz, Kronenberg, & Marcińczak, 2020b).

Further studies illustrate the social segregation context of urban greening in postsocialist cities, such as gated communities and the elites occupying areas in the Green Belt of Moscow (Blinnikov, Shanin, Sobolev, & Volkova, 2006; Dushkova, Ignatieva, & Melnichuk, 2020). Indeed, the development of gated communities in postsocialist cities has been primarily associated with environmental issues and green spaces in particular, rather than the alleged security, which was their driving factor in many other regions (Kovács & Hegedűs, 2014; Krupickaitė, Pociūtė, & Peciukonytė, 2014). A similar pattern can be observed in the case of the better-off moving towards the outskirts of cities to benefit from better UGBS availability (Koprowska, Łaskiewicz, & Kronenberg, 2020).

Even in places where local authorities seem to be aware of the differences in the availability of UGBS for different social groups, and where upgrading and greening for the better-off is denied, such as in large cities in eastern Germany, it still happens due to increased competition for urban space and land use (Ali, 2017; Haase, 2019). In Berlin, there are examples of so-called green gentrification, including the privatization of whole streets with the adjacent UGBS and playgrounds. At the same time, there are local initiatives which provide opportunities for the improvement of neighborhoods in a more inclusive way, with examples such as neighborhood management systems in Berlin or the Freimfelde network in Halle, both of which deliberately avoid 'luxury greening' when improving the environmental quality of neglected neighborhoods and strongly count on co-creation and co-management.

There have been other studies that addressed the issue of ensuring UGBS availability to all inhabitants in simpler terms – without addressing the EJ context (Borowska-Stefańska & Wiśniewski, 2017;

Korwel-Lejkowska & Topa, 2017; Połom, Beger, & Topa, 2017; Biernacka, Kronenberg, & Łaskiewicz, 2020). The approach adopted in such studies is sometimes also reflected in planning documents that attempt to ensure UGBS availability for most inhabitants. A qualitative document analysis carried out by Niță, Anghel, et al. (2018) indicated that the majority of urban strategies in Romania take into account UGBS. However, their objectives are only related to protecting existing UGBS and, at most, increasing the green surface in cities. They rarely provide quantitative indicators, targets, or explicit actions aimed at achieving those objectives in terms of UGBS availability for urban inhabitants. Still, indicators prescribing the amount of public green space per capita or minimum UGBS size for different types of urban settlements do exist in some postsocialist countries, both at the national and local levels (e.g., MPU, 2018), but often only on paper. Interestingly, many of them were already in place in the socialist period, but at the beginning of the transition, most were either formally repealed or ignored (Badiu, Onose, Niță, & Laforteza, 2019; Dushkova, Haase, & Haase, 2016; Kronenberg, Krauze, & Wagner, 2017).

The reasons for the limited availability of UGBS have also been studied in postsocialist countries (Kronenberg, 2015), and the most prominent one is development pressure. UGBS, especially informal ones, are often treated as reserve land in cities (Sikorska, Łaskiewicz, Krauze, & Sikorski, 2020). Indeed, many UGBS in postsocialist cities were lost due to so-called construction terrorism – the aggressive building-up of land, based on exploiting the neoliberal economic system, poor legal protection, and the abuse of numerous legal loopholes (Dushkova et al., 2016; Hirt, 2012; Onose, Iojă, Niță, Badiu, & Hossu, 2020; Zupan & Büdenbender, 2019). For example, in Sofia (Bulgaria), about one-third of the green spaces were lost in the first 15 years of the postsocialist transformation (Hirt, 2012). Such a building-up of land often leads to social conflicts and public outrage (Dushkova et al., 2016; Onose et al., 2020; Zupan & Büdenbender, 2019). Some UGBS categories, such as allotment gardens, are under pressure because they are seen as relics of the socialist past. Moreover, as allotments are often used by underprivileged social groups, their interests are rarely voiced in public discussions (Biernacka & Kronenberg, 2019; Haase, Dushkova, Haase, & Kronenberg, 2019). However, it should be noted that even the existence of flagship and cherished UGBS may be threatened by neoliberal models of governance (Zupan & Büdenbender, 2019). These challenges are related to broader power issues and whoever's interests are prioritized. One example where these issues are particularly relevant in postsocialist countries is the restitution of privately-owned land nationalized during the socialist period (see Subsection 5.2 on procedural/participatory justice).

4.2. Accessibility

Accessibility refers to whether people can freely reach and enter UGBS, considering both physical and psychological barriers. This is the least addressed issue in postsocialist cities.

There is one exception which focused on EJ in the context of a historical and literary analysis of parks in the past – analyzing how the public accessibility of Ogród Saski (Saxon Garden), a well-known park in the center of Warsaw (Poland), has changed since the 17th century, when it was established (Kronenberg, 2019). This is a story of how different social groups were discriminated against, and how the changing elites kept the park for themselves with the use of various measures – including guards, and rules regarding access and expected behavior.

One of the most visible examples of barriers preventing access to UGBS in postsocialist cities are newly-developed and fenced residential or corporate buildings. Again, this links to construction terrorism – not necessarily within UGBS, but mostly on their border (see an example from Lodz in Table 1). This is related to ongoing gentrification, but also the privatization and commodification of UGBS, partly by new developments (real estate) and partly by new uses (cafes and events) (Zupan

Table 1

Case studies illustrating environmental justice issues emerging in postsocialist cities regarding different dimensions of UGBS provision (see the Electronic Supplementary Material for further information on these case studies).

Case study, country, city	The relevant justice dimension	The relevant aspect of UGBS provision	Brief description
Solaris Park in Lodz, Poland (dominance of private interests, the dominance of the interests of elites)	Distributive, recognition	Availability, accessibility, attractiveness	The most luxurious residential building in Lodz dwarfs Sienkiewicz Park in the city center, and its construction directly affected the park. Only a few can afford to live that close to a park in the city center. Currently, the park is being renovated as part of the city's urban revival program. The building's inhabitants protested against extending the playground in the direction of their building and sued the City Office, demanding compensation for the lost value of their apartments due to the expected noise from the playground.
Luník IX district in Košice, Slovakia (social segregation)	Distributive, procedural, recognition	Availability, attractiveness	Luník IX is the biggest urban space in Slovakia; it is an 'urban ghetto,' occupied overwhelmingly by the Roma ethnic minority. Although the district is surrounded by a forest, it is affected by the proximity of a landfill. Although Luník IX was not officially or originally designed as a ghetto, there were structural, social, and environmental factors that led to its development. Once the space became inhabited predominantly by Roma, it became a place (in the eyes of the majority, i.e., decision-makers) unsuitable for green investment, as seen in other parts of the city.
Lene-Voigt-Park and Parkbogen East, Leipzig, Germany (eco-gentrification)	Distributive, recognition	Accessibility, attractiveness	A former railway brownfield to the east of the city center, it opened to the public in 2004. It serves as an example of increasing social-spatial segregation to which greening – unintentionally – contributes. The main aim of the park was to offer more green space for dense and poor housing. The park became popular and led to the opening of cafés and local shops. Now, the park is the heart of an increasingly expensive housing area with young and educated residents pushing the former inhabitants out of the area due to rising housing costs.
Kamyennaya Horka in Minsk, Belarus (new district devoid of green spaces)	Distributive, recognition	Availability	Under construction since 2008, this district has one of the highest population densities (with 120,000 residents) and one of the lowest amounts of green space in the city. The creation of new parks in Minsk is totally dependent on the initiative of private investors, as there is no money for this in the city budget. It comes as no surprise, then, that no green spaces have been created in this district: a large portion of its housing stock is social housing inhabited by low-income families and/or those with many children.
Criminalizing homelessness, Hungary (excluding a social group from access to UGBS)	Procedural, recognition	Accessibility	In 2012, the government first attempted to criminalize homelessness, which was deemed unconstitutional by the Constitutional Court. After winning the next election, the Fidesz-KDNP governing parties overruled the decision of the Constitutional Court and put the unconstitutional resolutions into the Fundamental Law in 2018. Orbán's regime initiated a hate campaign against people experiencing homelessness. The new regulation stated that using a public space as a habitual dwelling shall be illegal. As a result, people experiencing homelessness had to adapt to the regulations, and they disappeared from frequented public spaces.
Restitution of Titan Park in Bucharest, Romania (restitution of private property)	Procedural, recognition	Availability, accessibility, attractiveness	Of the 790 ha of parks in Bucharest, 53 ha (6.7%) were still in restitution processes in 2018. In the case of Titan Park, 12 ha of its area has been in litigation since 2006, and the new owners want to transform it into a shopping mall. The area in litigation is currently abandoned, not administrated by the city hall (a lack of legal right to intervene) nor by the private owner since the court decision is not final. Therefore, it represents a security risk, with problems such as waste and stray animals.
Park Znesinnia in Lviv, Ukraine (illegal construction in a park, regulatory failures)	Procedural, recognition	Availability, accessibility, attractiveness	Znesinnia is a 312 ha regional landscape park that belongs to the UNESCO World Heritage site. 159 ha of the Park also belongs to the Ukrainian national reserve fund. Despite this, since 2006, part of the park has been threatened with illegal construction. The case illustrates multiple regulatory failures, such as the local government issuing a land lease agreement, although it did not have the right to dispose of state land, and interrelated interests of political and business elites. It also illustrates multiple cases of abuse, such as building without the necessary permits and despite social protests.
Fencing green spaces in Russian cities (creating explicit barriers)	Procedural, recognition	Accessibility	As stated by city administrations, fences help to define and protect schools, kindergartens, and other categories of urban facilities. Fences can be found almost everywhere – in residential backyards (restricting the access of non-residents), in recreational zones, and along roads. Very often, fences block pedestrian pathways and turn the whole UGBS into a mosaic of fragmented, disconnected, and inaccessible spaces. There are examples of fences constructed in urban parks and gardens where visitors are directed to follow specially defined walking trails, which are also fenced to avoid vandalism and to protect particularly sensitive natural habitats.

& Büdenbender, 2019).

The relevant conflicts are perhaps most prominent in Russia, with numerous cases of waterfront areas being illegally acquired by officials and the super-rich who privatize, build up, and put fences around land that is supposed to be a national reserve or areas for public use (see an example from Russia in Table 1). This has been investigated by, among others, the Russian Anti-corruption Foundation (<https://fbk.info/voda/>) (cf. Büdenbender & Zupan, 2017). The problem could partly be explained by the insufficient legal base. Punishment and penalties for illegal construction are too low to discourage powerful companies (Büdenbender & Zupan, 2017). At the same time, in Moscow and St. Petersburg, new programs are being developed to open the riverbanks to the public. While this work is ongoing, it has put accessibility in the public debate (as revealed in these cities' official websites) (Dushkova et al., 2020). This further links to conflicts regarding the use of UGBS or trade-offs between satisfying the needs of their different users (Biernacka & Kronenberg, 2019; Ioja, Rozyłowicz, Pătroescu, Niță, & Vănaș, 2011).

The only group which has recently attracted interest in postsocialist countries in this context is the disabled, and relevant references can be found even in Russian (Yarskaya-Smirnova & Yarskaya-Smirnova, 2018). The disabled may be excluded from access for many reasons, including the poor quality of roads around and paths within UGBS. Furthermore, insufficient or a lack of public transport, along with the insufficient adaptation of transport infrastructure for people with special needs, may prevent access to UGBS. These issues have started to penetrate public discussions in postsocialist countries.

Finally, with regard to accessibility, but excluding the EJ context, several studies – in particular, those carried out in Romania – have considered social connectivity between UGBS, e.g., with the use of bicycle paths (Niță, Badiu, et al., 2018) or in the context of proper urban planning connecting residential areas and the interconnected system of UGBS (Gavrilidis, Niță, Onose, Badiu, & Năstase, 2019). Another study focused on the connectivity of green spaces of reduced accessibility – school gardens – as part of broader urban green infrastructure (Ioja, Grădinaru, Onose, Vănaș, & Tudor, 2014).

4.3. Attractiveness

Attractiveness refers to whether UGBS meet the expectations of their users, for example, regarding the available amenities and activities, landscape metrics, or biodiversity. This issue is frequently addressed in UGBS planning and management, including from the perspective of different groups of potential users, including potentially vulnerable groups, such as the disabled, children, and the elderly. Attractiveness is often mentioned as a desired feature of UGBS in different planning documents and strategies – cities intend to ensure the availability of high-quality UGBS to all inhabitants. In some cases, this is linked to urban marketing, especially with regard to elegant upgrades, as in the case of Moscow's rebranding strategy that featured an attempt to create “world-class parks to compete with cities like London, Paris or New York” (Zupan & Büdenbender, 2019, p. 130).

There are multiple studies that focus on whether UGBS correspond with the needs of certain groups of users, such as children (Onose et al., 2016); some studies also deal with potential or emerging conflicts of uses or between user groups (Biernacka & Kronenberg, 2019; Kabisch & Haase, 2014). Different tools have been tested to assess the attractiveness of UGBS in postsocialist countries, including participatory GIS (Pietrzyk-Kaszyńska, Czepkiewicz, & Kronenberg, 2017) and sociotope mapping (Łaszkiewicz, Czembrowski, & Kronenberg, 2020a). However, there seem to be very few studies that discuss the inequalities in the availability of attractive UGBS in the spatial context (spatial distribution of inequalities for the whole population) and in the context of different socioeconomic groups. For example, Kabisch and Haase (2014) showed for Berlin that the shape and type of vegetation of some UGBS more or less correspond with the wants and needs of different

groups of users. Similarly, Biernacka and Kronenberg (2019) investigated conflicting needs of different socioeconomic groups of users of a municipal forest in Łódź in the context of organizing loud entertainment events there.

5. Distributive, procedural, and interactional environmental justice

5.1. Distributive/distributional justice

Distributive justice refers to whether different population groups enjoy equal UGBS availability, accessibility, or attractiveness where they live. In the most general terms, the groups suffering from limited UGBS provision in postsocialist cities are similar to those identified in other countries (Haase et al., 2017). These groups include disabled people, migrants, ethnic minorities, and people with precarious educational, job, and housing situations. Although they may differ from country to country, income/economic position is a major driver of their potential exclusion from living close to UGBS (or pushing them away from more accessible and attractive UGBS). Indeed, even in the case of social housing, UGBS availability is typically very limited because of cost reductions (see an example from Minsk in Table 1).

The uneven distribution of UGBS seems to be an important precondition for potential distributive environmental injustice, and it may determine the marginalization of certain groups of inhabitants in terms of UGBS availability. In addition, other, usually case-specific factors may determine distributive injustice. They feature a combination of social mix (existing segregation patterns), the evolution of housing stock (its age and ownership structure), the historical background of the UGBS (e.g., some might have evolved together with neighboring prestigious locations, but others might have become neglected following the degradation of neighboring locations), etc. This is particularly well demonstrated by the difficult situation of the Roma community in those countries where they constitute a significant percentage of the population, Slovakia and Hungary, in particular (Filčák & Steger, 2014; Málovics, Crețan, Méreine-Berki, & Tóth, 2019). Similar to Western countries, refugees from non-EU countries are also exposed to additional discrimination with regard to environmental conditions (Haase, Budnik, et al., 2019).

As indicated above, the availability and accessibility of UGBS are often reduced by new construction, which is related to conflicts of interest between land users. This clearly shows that distributive justice is closely related to procedural/participatory justice. It is common to observe that different socioeconomic groups represent different visions of how land should be managed, especially whether UGBS should be created or eliminated. By observing whose visions are implemented in reality, we may conclude whose interests are given prominence. Most typically, it is the interests of the more powerful actors, especially when combined with the neoliberal urban management models, dominant in postsocialist cities. Such conflicts have different spatial scales – from local to national – and involve various groups, from small and rather homogenous communities, such as allotment gardeners or most prominent citizens, through larger business groups, such as developers, to the government or national-scale authorities and churches. Indeed, some of the megaprojects that translate to the reduced availability of UGBS are promoted by national governments, such as Project Liget – a new museum quarter which has destroyed the biggest and oldest park in Budapest (Smith, Sziva, & Olt, 2019).

A recent study of environmental conflicts involving urban green areas in Bucharest indicated that parks in the city are mainly affected by conflicts related to the competition between land uses (land restitution, illegal construction, clearing, and other urban projects), which mostly affect distributive justice, but with links to the other two dimensions (Onose et al., 2020). In extreme situations, a whole park or another public UGBS may fall into private hands. One specific example is the Lower Park in Zolishchyky, Ukraine, the total size of which is

5 ha, and part of which now belongs to a famous Ukrainian oligarch family. The decision to sell public land to an individual was taken in a non-transparent way, which again links to the issue of procedural/participatory justice. Similar concerns have been raised in the context of the abovementioned privatization of whole streets in eastern Germany.

5.2. Procedural/participatory justice

Procedural/participatory justice refers to whether all relevant groups are included in decision-making processes. Most typically, in postsocialist cities, local policymakers and planners make decisions regarding UGBS, and these decisions are mostly made in a top-down manner. There is a large group of people whose voices are completely missing in any greening project/strategy, in particular, those of underprivileged groups. The marginalized groups mentioned in the previous subsection have fewer opportunities to introduce their views, ideas, and preferences in the same way the privileged can – including in the form of written opinion-making using online newspapers, blogs, and other fora. Society at large rarely demands the location of new UGBS. There are very few advocate groups and even fewer community groups that would argue for such issues (although the number of such groups is increasing).

Belarus provides an extreme case where the civil society has nothing to say about what is available in the public space. It is closely followed by Russia, while eastern Germany provides another extreme example, with increased focus on disadvantaged groups, including – most recently – migrants and refugees (e.g., through projects such as KoopLab, which focuses on improving social cohesion through cooperative UGBS development in neighborhoods inhabited by a heterogeneous population, including migrants and refugees; see <https://www.kooplab.de/project/>). In those eastern German cities which are regrowing after a long period of shrinkage, there may be procedural injustice in cases where cooperative UGBS development was applied in a time of shrinkage to improve quality of life and make people stay, and which have now become more attractive. Displacement then becomes an issue – displacing those people from the green spaces for whom, and with the help of whom, they had once been developed (Haase, 2019) (see an example from Leipzig in Table 1).

Even in countries where public participation has become a legally binding part of most planning processes, there is a bias of whose interests and perceptions lead or guide the process of UGBS development and management. It usually involves well-educated people with middle or better income who know how to make their voices heard. Also, planners are sometimes aided by various groups of ‘cosmopolitan experts,’ including lobbyists, consultants, or scientists with expertise, and those who are able to invest or to buy (developers). Developers’ influence is most often negative in that they invest in greenfields, which results in the loss of informal UGBS (Sikorska, Łaszkiwicz, Krauze, & Sikorski, 2020). Sometimes, planners adopt ideas put forward by local environmental activists (if these ideas fit into their overall planning objectives and if they seem to fit the respective political marketing purposes). A very relevant example is the Green Polesie program in Lodz – where the planners accepted and implemented activists’ ideas.

There are cases when public consultations were organized in a way that specifically favored one option, e.g., by organizing online voting concerning the replacement of allotment gardens with a public beach in Lodz, Poland (Biernacka & Kronenberg, 2019). At the same time, the authorities of many postsocialist cities declare that they prioritize the interests of particularly vulnerable groups, such as the disabled, children, and the elderly. However, although such people are sometimes invited to participate in planning, most typically, their preferences are only interpreted by the planners and other ‘experts.’ New participatory processes are also being introduced in Russia, but so far, it has mostly been limited to the largest cities, such as Moscow and St. Petersburg. For example, the recent federal program, “Comfortable City

Environment,” encourages citizens to express their opinion on the locations of new parks and other amenities (Zupan & Büdenbender, 2019). However, even these new attempts have been criticized for misinformation and public opinion manipulation. Similar concerns have arisen regarding non-transparent decision making concerning environmental issues at different levels of government in many post-socialist countries, including Ukraine (see an example from Lviv in Table 1). When the opportunities to take part in planning are limited, and public interest is low, citizens usually do not even try to stay informed and often find themselves surprised by the implementation of some projects which have passed through official public consultations (see the example from Lodz in Table 1).

The injustices mentioned above may result from existing regulations, which do not enforce a more comprehensive approach to public participation. All of the above are also related to the postponed development of civil society, partly to other priorities of society (basic issues, such as jobs, permanent income, accommodation, and social security), and partly to the authoritarian approach to local planning and neglecting collaboration potential, especially with the civil society (Kronenberg, 2015; Kronenberg, Pietrzyk-Kaszyńska, Zbieg, & Żak, 2016; Mabelis & Maksymiuk, 2009). The regulations – or lack thereof – sometimes lead to paradoxical situations when dubious private interests are given priority over public interests, as is particularly evident in the case of the abovementioned restitution of land confiscated during the socialist period.

Restitution affected both small green areas and urban parks, even if legally there were alternatives to the restitution of UGBS. In some countries, such as the Czech Republic, Slovakia, and Romania, this issue has already been solved, and previous owners had a deadline to claim their property, which often resulted in losses in UGBS. Nevertheless, even in these countries, some restitutions are still being judged (see an example from Romania in Table 1). These conflicts illustrate clashing interests, power, and ownership, and they also indicate the conflicts between the rich (private owners or their supposed legal representatives, churches, etc.) and the ordinary – with examples of incredible abuse and fraud.

Perhaps one of the most extreme cases of environmental and social injustice emerged in Hungary in 2013, when the Orbán regime adopted an amendment to the Fundamental Law, making it possible for municipal councils to declare living in public areas illegal and punishable. Although this amendment was repealed by Hungary’s Constitutional Court, in 2018, the National Assembly adopted another amendment to the Fundamental Law stating that “the habitation of public spaces is prohibited” (Evangelista, 2019) (see an example from Hungary in Table 1).

On the positive side, there has been an increasing number of civic initiatives indicating interest in enhancing UGBS provision that spans the whole spectrum of postsocialist cities. These ranged from protests against the removal of UGBS, through local initiatives creating community gardens or other informal UGBS, to local initiatives focused on maintaining UGBS. The latter include subbotniks (which take place on Saturdays in spring) and voskresniks (on Sundays), whereby local inhabitants take care of the courtyards/backyards and parks. This used to take place primarily during the socialist period, but it still thrives in some post-soviet countries (Dushkova et al., 2016; Haase, Dushkova, et al., 2019).

5.3. Interactional/recognition justice

The terms interactional and recognition justice refer to recognizing the needs, values, and preferences of all stakeholders in a safe, fair, and non-discriminatory environment. We see the recognition of different behaviors, attitudes, perceptions, and values as a pre-condition for interactional justice, meaning that people representing those different behaviors, attitudes, perceptions, and values may use UGBS free of discrimination. Emerging conflicts are subject to negotiation and

compromise, and they should not lead to exclusion. Hence interactional/recognition justice refers to issues ranging from the interactions between the different users within UGBS to whether the needs of the different users are considered in UGBS planning and management.

Even if a UGBS is available and accessible, it does not mean that it fulfills the needs of its users. However, when it comes to postsocialist cities, instead of accounting for a variety of needs, a more basic question arises regarding whether having UGBS in the vicinity matters for urban inhabitants. Interestingly, as already indicated above, in many cases, it seems that inhabitants do not care about whether they have access to UGBS or not (availability, not to mention accessibility). At least, this is not something that most people would indicate as a priority, which is often indicated by local decision-makers as one of the challenges to urban greening. Furthermore, for the most marginalized groups, proximity to UGBS plays a minor role compared to other urgent and basic needs, such as access to healthcare. Even among inhabitants characterized by high income, access to UGBS is not always a priority. For example, new residential developments are in high demand, regardless of whether they have UGBS close by. This vicious circle is partly related to deficiencies in public participation and a feeling that people's needs are not considered anyway (see the previous subsection), and partly as a result of a general apathy in postsocialist societies.

In general, one may have the impression that community needs are relatively well-considered when designing UGBS. There are special places for children (playgrounds), the elderly (chess tables), people with pets, and people wanting to practice sports. However, in many cities, we may observe the tendency in UGBS design for younger groups, in particular, favoring active people who require physical facilities or equipment. Other needs, such as those of quietness, biodiversity observation, or spiritual contact with nature would come in second (if they were considered at all). Besides, when one studies the perception of the available facilities by their users, it often turns out that they are considered to be unsatisfactory (Iojă et al., 2011).

When it comes to more specific cases, serious examples of neglect may be found. The Roma minority faces visible and strong discrimination (especially in countries such as Slovakia, the Czech Republic, Hungary, or Romania – see an example from Košice in Table 1). Another evident example of a group whose needs are ignored in UGBS management is the people experiencing homelessness. Although UGBS may be more important for them than for other social groups, given that, by definition, they do not have homes, their potential needs and preferences are not included in UGBS design (Koprowska, Kronenberg, Kuźma, & Łaszewicz, 2020). Quite the opposite. As illustrated by the extreme case from Hungary and more subtle examples from most other countries, people experiencing homelessness represent a group which is pushed out of UGBS. Both in the case of people experiencing homelessness and the Roma, environmental injustice is just one of many forms of discrimination. This complex issue is often part of public debates on UGBS. In the case of the recent proposal to create a new Central Park in Warsaw, the question of how to ensure that this place would not be accessible for those experiencing homelessness was one of the most important problems, on a par with the issues of costs and foregone economic opportunities.

The above clearly indicates the neoliberal approach to UGBS management that favors the interest of some groups over those of the others. In addition to the abovementioned extreme example of Project Liget from Budapest, another specific case of a large-scale intervention where the needs of the local residents have been neglected is the International Horticultural Exposition 2024 in Łódź promoted by the local authorities as 'the Green Expo.' The event (the aim of which is mostly related to making the city more famous) will strongly influence the Baden-Powell and May 3rd Parks. The event is planned in a top-down manner by the city, assisted by a global consulting company. This neoliberal model neglects local expertise and the preferences of nearby inhabitants, even though it will strongly and permanently affect the functions of the above two parks.

Interactional justice also involves conflicts between the different users of UGBS. In some cases, the presence of specific groups in a park (e.g., groups of drug dealers, young male immigrants, drinkers) prevents others from going there (e.g., women with children). In other cases, not all groups of people feel comfortable in certain UGBS. Indeed, some studies report on the appropriation of UGBS by some groups leading to the relative exclusion of others (Kabisch & Haase, 2014), and the fears that some people cannot visit public parks due to the way they dress, e.g., wearing clothes typical for Muslim or African countries, or wearing a veil/chador. At the same time, people representing the host society may avoid UGBS where many migrants are present, or UGBS which have been appropriated by groups of drunkards are avoided by everyone. Here, clearly, various processes of exclusion overlap or impact each other (i.e., excluded people appropriate a space, and in doing so, they prevent others from going there) – the UGBS becomes the "battlefield" of societal exclusion. It is linked to eco-gentrification, among others, and indeed, preliminary evidence from postsocialist countries indicates the importance of UGBS for gentrifiers (Górczyńska, 2017).

6. Discussion

6.1. Crosscutting insights on EJ in postsocialist cities

In Table 2, we show how the three dimensions of UGBS provision and the three dimensions of EJ interact or operate together for the topics/issues that are addressed in the scholarly and public debate in postsocialist cities. In this way, Table 2 features a synthesis of the results of our analysis.

Some aspects of environmental injustice have already emerged, and others can be observed but have not been broadly discussed. Some problems of exclusion/marginalization/discrimination are addressed by research, but there is a lack of awareness of those issues in societies and the public debate. Interestingly, while social cohesion and a sense of community and brotherhood, along with collectivism, were the conceptual ideas of socialism, these ideals were largely lost during the postsocialist transition.

There are insufficiencies that affect all urban dwellers and injustices that affect only parts of society or specific groups of people, their wants and needs, or their values and perceptions. Issues of discrimination/exclusion are often linked to a lack of accessibility; availability increasingly relates to housing segregation; wants and needs regarding different aspects of UGBS provision are considered more often in the case of some groups than of others. Nevertheless, the conflicts between the different uses of UGBS and user groups are increasingly recognized (cf. Onose et al., 2020). The emerging EJ debate is constrained by the market-orientation of society, privatization, and the primacy of private interests. The slowly growing importance of EJ is probably related to the impact of EU and western experiences, funding programs, and other international projects.

6.2. EJ as part of UGBS and other urban debates in postsocialist cities

Although very neglected in the first two decades of the political change, UGBS have recently started to attract increasing attention in postsocialist countries. This is partly because of a catch-up effect, related to a kind of environmental Kuznets curve (Stern, 2004), with the societal demand for UGBS (as part of broader urban quality of life) increasing after some level of wealth has been achieved. This can also reflect the higher needs in Maslow's (1943, 1970) hierarchy being met. Among the three UGBS provision levels distinguished by Biernacka and Kronenberg (2018), availability is the most often used, both by researchers and practitioners in local authorities and NGOs. Often, this is the only aspect considered, even though it does not necessarily consider for which socioeconomic groups UGBS are available. Attractiveness tends to be addressed in planning as well; however, again, it is not

Table 2

Interaction of topics related to UGBS provision and EJ that are discussed in postsocialist cities (those marked with (+) represent emerging positive trends).

	Distributive justice	Procedural justice	Interactional/recognition justice
Availability	<ul style="list-style-type: none"> - Social segregation - Discrimination of certain social groups (Roma in particular, but also allotment gardeners, migrants, very poor people, drunkards, etc.) – an extreme form of poverty and exclusion, where environmental issues are part of a general condition - Improvement of UGBS in certain undersupplied areas which may imply undesired effects (eco-gentrification) 	<ul style="list-style-type: none"> - Privatization, reprivatization, appropriation of land by developers - Downplaying the importance of UGBS in the legal system - (+) Raising the awareness and activity of civil society (especially with regard to the overlooked needs of certain social groups) 	<ul style="list-style-type: none"> - The low perceived value of UGBS, higher priorities related to the construction/development and commercial potential of UGBS - The needs of some social groups are not recognized at all – extreme marginalization and/or discrimination - (+) Raising awareness and activity of civil society (especially with regard to the overlooked needs of certain social groups)
Accessibility	<ul style="list-style-type: none"> - Access restrictions affecting many UGBS (e.g., allotment gardens, private green spaces) - Discrimination of certain social groups (Roma and people experiencing homelessness in particular) - Neglected needs of specific groups, e.g., disabled people 	<ul style="list-style-type: none"> - Control, monitoring, municipal police - Formally publicly accessible spaces become closed and inaccessible - Fencing waterfronts – formally illegal but still tolerated by the authorities 	<ul style="list-style-type: none"> - Congestion, conflicting uses (e.g., dog users releasing dogs in public spaces), restricting access to nearby inhabitants in the case of particularly popular UGBS – especially in previously socially homogenous areas - Being afraid of violence in society (a new issue in postsocialist societies, after feeling generally safe previously), perception of crime, feeling unsafe – omnipresent fencing and monitoring - Gender issues (e.g., safety) - Discrimination of certain social groups (Roma in particular) - (+) The slowly changing recognition of the needs of the disabled
Attractiveness	<ul style="list-style-type: none"> - UGBS characteristics not adjusted to the needs of local residents (not attractive for the majority who live nearby) 	<ul style="list-style-type: none"> - Insufficient inclusion of different social groups in UGBS design and management 	<ul style="list-style-type: none"> - Poor social cohesion; more tolerance for injustices as they are considered ‘natural’ under capitalist rule - Insufficient recognition of the needs of all inhabitants - (+) Eastern Germany: UGBS as meeting places and strengthening social cohesion

necessarily considered in the context of EJ. Accessibility is the aspect least often considered, and the only marginalized group that is considered in this context is the disabled – if they are considered at all. Note that UGBS issues are mostly discussed in the largest cities, where issues such as gentrification or smog alarm situations have increasingly raised concern in recent years. Nevertheless, it is remarkable that EJ does not play an important role in the analysis of these problems.

The neglect of the EJ context resembles similar problems with other useful frameworks for analyzing and planning UGBS. For example, the ecosystem services framework is used to a very limited extent, and only among experts involved in planning (Maczka et al., 2016). In short, the lack of availability prevents all ecosystem services, while reduced accessibility only prevents some, and attractiveness refers primarily to trade-offs between different ecosystem services. This is particularly the case in the context of issues such as climate change adaptation. Biernacka and Kronenberg (2019) studied how the different barriers that prevent UGBS provisioning at the three levels affect the delivery of ecosystem services. A few more nuanced studies linked the availability of UGBS with specific ecosystem services, such as noise mitigation (Koprowska, Łaskiewicz, Kronenberg, & Marcińczak, 2018), and they discussed the findings in the context of EJ. However, although the problems mentioned in Section 4 clearly translate into the reduced ability of urban ecosystems to provide their services, this has not been part of the public debate in postsocialist countries. Again, the prioritization of private, commercial, and business activities, and ongoing construction, are the most prominent challenges. Meanwhile, the most relevant ecosystem services to be considered in this context include recreation, along with physical and mental health, climate adaptation, water overflow regulation, and local microclimate regulation, including the heat island effect. In Russia, in particular, another important ecosystem service that is affected by new developments is food provisioning. It is related to dachas, which first appeared in pre-revolutionary Russia but which remained important during the socialist period, primarily for the purpose of growing vegetables and fruit to supplement poor diets (Dushkova & Krasovskaya, 2018; Ignatieva,

Konechnaya, & Stewart, 2011).

UGBS provision, and in particular, their attractiveness, has also started to be used by local policymakers and planners as an element of political marketing and to improve the image of cities. As such, the location of UGBS is used as a tool to improve the attractiveness of neglected districts in urban revival projects. In the case of both society at large and experts, the uptake of UGBS issues is also partly related to the exchange of experience related to increased travel and work abroad, along with the available funding mechanisms for urban renewal. All of the above are related to the activities of the European Union (EU), which seems to be the main driver of the sustainability debate in Central and Eastern Europe (Kronenberg & Bergier, 2012). Interestingly, the impact of the EU extends beyond its member countries thanks to various pre-accession measures, migration between postsocialist countries within and outside of the EU, and other forms of exchange of experience.

Still, urban greening is very much an issue of interest for better-off and well-educated people, which makes it so relevant from the point of view of EJ. Indeed, in some cases, justice issues arise due to the increasing polarization of society. This is increasingly evident in the case of UGBS provision, which is – at least in some postsocialist countries (most notably in eastern Germany) – increasingly connected with housing, social segregation and displacement, and the so-called middle class bias in urban planning (Ali, 2017; Haase, 2017; Holm, 2011; Konzack, 2017). Moreover, initial results for Lodz showed that inequalities in UGBS availability and potential environmental injustice might appear even if residential segregation is not intense. This is because, in low segregated spaces, one can still observe some micro-scale segregation (for example, in urban blocks or neighborhoods) (Łaskiewicz, Kronenberg, & Marcińczak, 2020b). These issues are further connected with increasing individualization and people's interest in optimizing their own health and well-being, and limited attention paid to the public interest.

EJ, as a term, is not spoken about or written down in public documents regarding urban planning – at least not officially. However, it is

indirectly mentioned in various strategic planning documents in some eastern German, Polish, Romanian, and Russian cities, with general declarations that the authorities aim at providing a better balance of UGBS provision for all inhabitants. Instead of EJ, general inequalities in UGBS availability, and the limitation of their accessibility by middle and low-income people, tend to be indicated in postsocialist cities. Clearly, gentrification does occur, as in the case of waterfront cafes and similar amenities targeted at middle to higher income groups; in the case of Russia, this would refer to domestic households with an upper intermediate income, as well as expats and tourists. However, throughout postsocialist countries, this gentrification is most often seen as a positive urban development (Golubchikov & Badyina, 2006; Zupan & Büdenbender, 2019).

One reason for the relative absence of debate on EJ in postsocialist cities may be that inequalities have not reached levels similar to those in countries where EJ has been part of the public debate for decades, such as the USA. There are other extreme examples of injustice, especially in post-Soviet countries, where the division is often made between 'people' and 'oligarchs.' Furthermore, UGBS provision is probably not a key driver of segregation, at least not yet, as so far it only appears on a small scale in places where segregation linked to UGBS results from a broader historical context. Indeed, in postsocialist Europe, most basic issues (e.g., having a good job, a steady income, a house/flat, and social security) have been solved for the more affluent part of societies, and those people are now becoming interested in new issues, e.g., green cities, quality of life, and possibly also justice issues. In general, this also refers to younger people. Still, the fact that the development of UGBS in postsocialist cities is often oriented at the interests of those who already expressed an interest in this topic (as indicated above) might be mainly due to the fact that many planners or decision-makers share those interested citizens' educational, income, and lifestyle background and share their expectations of what central parts of the city should look like, reproducing very much western or even global ideas of UGBS (Ignatieva & Smertin, 2007).

6.3. How does the postsocialist condition influence the debate on EJ?

Justice, as a basic concept, has been dwarfed by market logics in postsocialist societies. This is despite the fact that in the socialist period, the fair distribution of goods and resources was one of the fundamental pillars of the official rhetoric. A reason for this might be that due to its function as a fundamental principle of state socialist ideology, justice was rejected after 1989 as a "thing of the past." The newly emerging injustices were seen as "natural outcomes" of the new, capitalist reality. It is not clear whether this is primarily because of social values and perceptions or because of the specific institutions and legal systems which developed during the transition. The vacuum in the 1990s was filled by the market, massive privatization, the commercialization of public space, individualization, and hence the enormous power of developers and other businesses. Postsocialist countries suddenly turned from state regulation towards an extremely liberal economy, which resulted in changes in both power relations as well as priorities of how to plan and develop cities. UGBS became one of the evident victims of this transformation. Parks replaced with parking spaces may be one of the symptoms of the problem – public transportation systems in postsocialist countries collapsed and private cars became yet another symbol of the same problems. At the same time, cars became yet another issue related to justice – the transportation exclusion of those who cannot afford a private car or who are not able to drive.

In most postsocialist countries, private property is seen as a sacrosanct value in itself, and hence, the absolute dominance of private interests over public interests. Again, eastern Germany represents an exception here, due to its strong public sector and urban housing markets, which are characterized to a great extent by rental contracts instead of owning property. Anything that is intended for common, shared use, including public space, has become secondary to private

interests, which can be interpreted as a part of a backlash from socialism. After decades of the primacy of public ownership, the situation after 1990 can be seen as a complete swing of the pendulum in the other direction. Expenses related to UGBS were typically considered unjustified in the face of many other needs, and the potential savings related to urban greening – or at least to not destroying existing UGBS – were ignored (Kronenberg, Bergier, & Maliszewska, 2017). Meanwhile, as indicated above, UGBS seem to have been more prominent, and definitely more comprehensively considered in urban planning in the socialist period than after the transition (Badiu et al., 2019; Haase, Dushkova, et al., 2019; Kronenberg, Krauze, & Wagner, 2017). In particular, in the Soviet Union, the policy of increasing UGBS and providing an even distribution of UGBS in all parts of a city, especially in the formally working-class neighborhoods, had a strong political foundation. It was seen as the socialistic approach (and opposite to the old capitalistic view of the city), based on a planned economy and common property rights. The greening policy was the way to create truly green cities for everyone and not only for the privileged groups (Dushkova et al., 2020). Unfortunately, most of these achievements were lost during the transition period, and only recently has this topic started to attract public attention (Haase, Dushkova, et al., 2019).

Although legal systems guarantee access to a safe environment to all (e.g., through constitutional provisions), it seems that these norms exist only on paper as there are no effective mechanisms to implement them in real life. This discrepancy between broad declarations and the everyday reality may be seen as typical for both the socialist and the postsocialist period. Other relevant problems, typical of postsocialist countries, include high levels of corruption in public institutions, poor collaboration between different actors involved in UGBS management (Kronenberg et al., 2016), and problems with data availability regarding UGBS (Badiu et al., 2016; Feltynowski et al., 2018; Niță, Anghel, et al., 2018).

Not surprisingly, there has been relatively little interest in UGBS provision, including EJ issues, within the academic community in postsocialist countries or the international scholarly community researching postsocialist cities. For example, the Cities After Transition network, which brings together scholars dealing with postsocialist cities and has organized bi-annual conferences since 2005, has put little emphasis on UGBS, even though it considers social segregation and housing some of its key topics of interest. Here, we see future avenues of research and networking, and considerable gaps to be filled.

6.4. Implications for further research and planning

The most basic research need is to diagnose the level of UGBS provision in postsocialist cities regarding where the different socio-economic groups reside. Postsocialist social and environmental studies tend not to be interdisciplinary and are still poorly integrated with the global academic debate, and it would be interesting and relevant to study the legal/planning/institutional context to recognize the main drivers and obstacles for EJ in postsocialist cities. One step in that direction might be to analyze for each country the legal documents which could 'support' or allow for environmental injustice and those which could promote EJ but are missing in national/local legal systems. Our article highlights some of the main trends, but more specific studies are necessary regarding regional differences and to discover how our findings would be relevant, for example, to Caucasus and Central Asia, i.e., other postsocialist countries which are exposed to different challenges. In particular, it would be interesting to study specific postsocialist stakeholder hierarchies and power relations that are relevant from the point of view of urban EJ and UGBS in particular (Ernstson, 2013). These may be very different in different groups of countries, and definitely different in postsocialist and western countries.

While public participation is poorly developed in postsocialist countries, it is relevant to note that in western countries, there is an ongoing debate on the lack of knowledge among urban planners about

the needs and perceptions of those who are not reached by ordinary participation methods and events. Such groups represent an even larger part of society in postsocialist countries, and they need to be identified, studied, and considered. With regard to governance, it would also be relevant to study how the ecosystem services framework can enhance the debate on social and environmental justice in the postsocialist context, a topic that has received increased attention in western contexts within the last few years (Haase et al., 2017).

7. Conclusions

While postsocialist countries differ – in relation to how the issues of EJ have been addressed in the context of UGBS provision, among others – they also share many similarities. Interestingly, the respective situation in postsocialist cities provides interesting insights into the international debate on EJ by highlighting extremes related to neoliberal and populist governments. Note that eastern Germany is an outstanding case compared to the rest of postsocialist Europe due to German reunification and funding. Thus, it had a different development trajectory after 1990, which greatly resembles the debates carried out in western Europe.

The broad tolerance for inequalities in postsocialist countries, the lack of solidarity in society, and the lack of responsibility for the public interest result from the extreme individualization and disregard for the social interest that appeared after the breakdown of socialism and the establishment of neoliberal market-capitalism. The extreme rejection of socialist ideas, including equality and social fairness, was particularly evident in the 1990s. While privatization took over, public planning was completely disregarded, as if it was part of the rejected socialist legacy. Economic interests were prioritized as if private capital owners were going to repair all the flaws of the previously centrally planned economies. This gradually led to the corporatization of local authorities and various business–government coalitions. This setting is more likely to welcome business models related to the use and management of UGBS, rather than the EJ discourse. The perception of what capitalism is and a broader acceptance of the rule of the market without any state intervention has been observed in postsocialist societies since the beginning of the transition, which distinguishes them from most types of western capitalist societies.

In spite of factors pushing the ideas of green and fair cities, such as EU pressure (policies, debates, capacity building, funding, experience, and exchange), UGBS availability, accessibility, and attractiveness are still far from being a priority topic in postsocialist countries. The importance of UGBS is not (yet) widely acknowledged or understood, and their importance is downplayed in the legal documents and in governance (while in the socialist period it was acknowledged). The availability, accessibility, and attractiveness of UGBS still largely must be discussed through the lens of market logic, as otherwise, UGBS are synonymous with losing money. Following this logic, only those who voice their opinions in the public debate are likely to ensure better UGBS provision for themselves. Public participation still has a long way to go before it is rooted in the prevailing way of decision making. The general belief in decisions made by the experts (on the side of decision-makers) and simultaneous lack of trust that one's own opinion will be heard (on the side of the society) have made participation an empty institution.

Apart from the conflicts between land uses (commercial or residential vs. green/blue), conflicts between different users of UGBS, which affect not only the attractiveness but even the accessibility of UGBS, also reflect the increasing polarization and segregation in postsocialist societies. While misbehavior was neither socially accepted in the socialist period, the transition weakened all social control mechanisms, resulting in a situation where the stronger feel even more important and take over space. This is reflected, for example, in the behavior of dog walkers who let their dogs off the leash in UGBS despite regulations, or car drivers using UGBS as informal parking places.

There is still a long way to go before distributive/distributional, procedural/participatory, and interactional/recognition justice are accepted as guiding principles for shaping and managing UGBS in most postsocialist countries (less so than in the case of many western countries). This is closely linked to the abovementioned lack of solidarity and responsibility, which is still inherent in postsocialist societies, an issue that also affects expert and decision-making spheres. Nevertheless, the scientific discourse has slowly started to address those issues and to relate empirical evidence to EJ theory. Meanwhile, civil societies show an increased general interest in equity and justice issues. The new generation of planners in postsocialist countries may not only draw on good examples from western countries, but also on the legacy of the relatively high weight that evenly distributed UGBS had in the socialist planning agenda, and seek to recuperate some of these planning practices.

It is increasingly understood in postsocialist countries that UGBS are important for the quality of life and that all urban inhabitants need to be able to enjoy the benefits of a society that gets better off in general. This might even influence how injustices are seen in postsocialist societies and support all those in postsocialist countries who are concerned with creating cleaner, healthier, and more inclusive cities. Urban greening and blueing could provide more social justice as well. However, the contrary is also possible, with the emerging evidence of eco-gentrification in postsocialist cities. Nevertheless, in postsocialist countries, and their urban social environments, in particular, the awareness of EJ is slowly permeating the public debate. It is, therefore, worthwhile paying more attention to this topic in the coming years.

Author statement

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Acknowledgements

JK, EL, MB and DH acknowledge support within the project ENABLE, funded through the 2015–2016 BiodiverSA COFUND call for research proposals, with the national funders The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, Swedish Environmental Protection Agency, German Aeronautics and Space Research Centre, National Science Centre (Poland – grant no. 2016/22/Z/NZ8/00003), The Research Council of Norway and the Spanish Ministry of Economy and Competitiveness. AH acknowledges support from the EKSOC Fellowship Programme offered by the Faculty of Economics and Sociology, University of Lodz. DAO acknowledges funding from the Romanian Ministry of Research and Innovation, CNCS – UEFISCDI, project number PN-III-P1-1.1-PD-2016-2074 “Assessing the social equity of ecosystem services provided by urban green infrastructures.”

Appendix A. Electronic Supplementary Material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.cities.2020.102862>.

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