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Environmental Justice in the Context of Urban Green Space Availability*

Abstract: Environmental justice is a term that includes both exposure to environmental 'bads' as well as access to environmental 'goods' which might be unequally experienced by different socio-economic groups. In other words, environmental justice scholars study whether everybody can have an equal right to a healthy, nurturing environment which supports their development and well-being. The environmental justice movement arose in response to the so-called 'environmental racism' in the USA which affected communities of blue-collar workers, people with lower income and of Afro-American, Asian, Latin or native origins. Although initially environmental (in)justice was rooted in racial discrimination in the USA, nowadays it encompasses a wider range of issues, including problems at the local and global level, from degradation and pollution of natural resources to aspects related to spatial planning. Unequal access to environmental amenities – such as green spaces – was not the main focus of the discourse, however, it is gaining attention nowadays, especially in the context of urban environment. Urban green spaces influence health and well-being of urban residents, but access to them can be uneven in terms of socio-spatial heterogeneity. Growing challenges of living in cities, related to, among others, climate change, densification or sprawling of developments, urban heat islands, and other nuisances, require sustainable management of green spaces and provision of equal (socially just) access to benefits provided by these areas. Moreover, another important aspect of the discussion is linked to potentially beneficial planning decisions (e.g. increasing availability of urban green spaces) and their long-term consequences, which may eventually lead to gentrification and increased social inequalities (environmental injustice). Complexity of the problem related to availability of green spaces in cities needs an interdisciplinary approach which combines ecological, spatial and socio-economic aspects. The article reviews the current state-of-the-art literature in the field of environmental justice, with particular emphasis on green space availability in the context of urban environment.

Keywords: spatial planning, spatial economics, environmental equity, spatial justice

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1. Introduction

Environmental justice (EJ) is a term that captures the differential exposure to environmental ‘bads’ and access to environmental ‘goods’ experienced by different social groups (Schweitzer, Stephenson, 2007). It encompasses both a social movement – including activism – and a field of scientific research (Taylor, 2011). Sociologist Robert Bullard was one of the first academics to study the relationship between the location of hazardous sites and the social characteristics of nearby communities. He found that virtually all landfills in Houston, Texas were located in or near African American neighbourhoods (Bullard, 1983). Many studies followed his pioneer work, highlighting the socio-spatial inequities in urban environments and citing practices of urban segregation and housing discrimination as direct contributors to environmental injustice (for an overview, see Szasz, Meuser, 1997).

The concern of EJ research and activism with the consequences of environmental hazards for marginalised communities brings together questions of social and ecological justice, and, in doing so, expands our understanding of the ‘environment’ away from pristine ‘natural’ areas to include populated urban spaces (Schweitzer, Stephenson, 2007). Urban environmental justice seems of particular interest to some researchers, as the growing share of population currently lives in cities, which is related to an increasing number of environmental challenges affecting those residents. Therefore, EJ research has become an inherent part of the urban studies discipline (Schweitzer, Stephenson, 2007; Corburn, 2017). In this way, EJ work has succeeded in making issues of race, class, culture and gender important to the discourse and politics of environmentalism as well as in highlighting the ways in which physical environments can affect the quality of life of those who reside in urban places. The interconnections between an uneven distribution of ecological benefits amongst different socio-economic, racial or minority groups place the EJ research in a broader frame of political ecology, and specifically in this case – urban political ecology (Keil, 2003; Swyngedouw, Heynen, 2003; Heynen, Perkins, Roy, 2006). The background premises of environmental justice conflicts are socioeconomic, especially in the case of exposure to environmental hazards and negative externalities related to them (McGuire, Lynch, 2017; Banzhaf, Ma, Timmins, 2019).

The article reviews the current state-of-the-art literature in the field of environmental justice, with particular emphasis on green space availability in the context of urban environment. In Section 2 of this article, I present operationalisation of the environmental justice concept, and follow it with a review of the current literature on EJ in the context of urban green space availability in Section 3. Section 4 describes the topic of ecological gentrification as a specific area within the literature on EJ, relevant from the perspective of UGS availability. Section 5 offers closing remarks.

2. Operationalisation of environmental justice concept

In a broad sense, environmental justice is defined as “fair treatment and meaningful involvement of all people [...] with respect to the development, implementation, and enforcement of environmental laws, regulations and policies” (US EPA, 2019). EJ is often discussed with regard to key goals of sustainable development: environmental protection and social justice (Costi, 2003). Setha Low (2013) discusses EJ in three dimensions which got adopted by many researchers at the European level:

- 1) distributive justice – the fairness or equity of distribution of environmental benefits (e.g. access to green space) and environmental hazards (e.g. pollution and risk) between different socio-economic groups;
- 2) procedural justice – the fairness or equity of access to environmental decision-making processes;
- 3) interactional justice – how outcomes of environmental policies affect different socio-economic groups and whether they feel discriminated.

A great deal of EJ work has been historically framed by the specifics of the EJ movement in the USA (Walker, Bulkeley, 2006). Originally, EJ as a grassroots movement is often traced back to Love Canal, New York or to Warren County, North Carolina (Barnett, 2001; Matsouka, 2001). Both of these cases involved unprivileged groups of residents being exposed to dangers related to living in proximity to hazardous waste sites and pollution discharges. Eventually, the importance of proximity to environmental amenities for human health and well-being also gained attention and placed this aspect within the scope of EJ research (Tarrant, Cordell, 1999; Barnett, 2001; Boone et al., 2009).

However, apart from its roots, the concept of EJ has developed and spread around the rest of the world – far beyond the USA (e.g. Debbané, Keil, 2004; Walker, Bulkeley, 2006). In general terms, we can see EJ either as being closely tied to the movement’s origins and a focus on the socio-spatial distribution of pollution, toxicity and other forms of social-ecological harm or as being linked to a more comprehensive set of concerns or principles associated with multiple sites, forms and processes of injustice, articulated, in particular, through a sustainability lens (Agyeman, 2002; Walker, Bulkeley, 2006). In other words, EJ can be understood both as a theoretical frame and a civil-rights social movement (the initiative www.ejolt.org on mapping EJ might be an example of combining these two aspects). On the one hand, EJ attempts to explain how environmental harms and benefits are ethno-racially and socio-economically distributed among different groups of urban residents; but on the other hand, it proposes solutions to diminish these inequalities (Agyeman, 2005; Pellow, 2017).

3. Urban green space availability and environmental justice

The literature review presented in this article focuses on EJ in the context of urban green space availability. Urban parks are the most officially recognised (formal) category of UGS, also considered as the most attractive, therefore the availability of urban parks is the most often discussed aspect within the body of EJ literature. Green spaces other than parks, such as vacant lands, brownfields and other informal green spaces might hold a distinctive meaning and be attractive to some users (Rupprecht, Byrne, 2014; Rupprecht, Byrne, Ueda, Lo, 2015), however, they might be difficult to access (even illegal) or dangerous, as well as not maintained and neglected.

Even more methodological inconsistency can emerge, as ‘availability’ of UGSs can be also defined differently, ranging from the physical existence or the available amount of UGS, to more ambiguous ‘perception’ of its accessibility, or even mere ‘attractiveness’ (Biernacka, Kronenberg, 2018). There are different aspects of UGSs that should be distinguished for the sake of availability analysis. In their classification of urban economic indicators, Rodenburg et al. (2001) defined socio-economic criteria of UGS as utilisation of urban green, which was found to be the main reason for developing these spaces. Utilisation is a function of two elements: the use and visiting of UGSs. Whether green spaces will be visited and used by their potential users depends not only on their accessibility, but also on natural and cultural quality of their environment (Stanners, Bourdeau, 1995) or – more specifically – their attractiveness.

More detailed socio-spatial explanations for park use include:

- 1) the proximity of parks to the populations they serve;
- 2) people’s access to parks (e.g. presence or absence of impediments such as major road crossings);
- 3) the attraction of park facilities – both physical infrastructure and recreational services/programmes;
- 4) park landscape features (i.e. density of vegetation and topographic variability);
- 5) security and safety (the presence or absence of rangers or police);
- 6) park maintenance (how vegetation and park facilities and fixtures are maintained);
- 7) attractiveness of the neighbourhood, e.g. alternative recreational opportunities such as shopping centres; and
- 8) potential users’ knowledge and awareness of parks (Smith, 1980; Fesenmaier, Lieber, 1985; Spotts, Stynes, 1985; Talen, Anselin, 1998; Bedimo-Rung, Mowen, Cohen, 2005; Brownlow, 2006b; Saelens et al., 2006; Biernacka, Kronenberg, 2018).

An additional aspect of perception of UGS by visitors may also affect their use. Apart from aspects of cleanliness, attractiveness and affability, an important factor may be the perception of the character of park-adjacent neighbourhoods due to feelings of safety or vulnerability, affinity or difference (Ravenscroft, Markwell, 2000; Rishbeth, 2001; Gobster, 2002; Perez-Verdin, Lee, Chavez, 2004).

With regard to the urban environment, Heynen (2006) pointed out the relevance of the issue of access to natural resources present in the EJ literature. He argued that a lack of such access was a common injustice experienced by marginalised urban populations. Still, there was a gap to fill, leaving space for further research in terms of unequal access to environmental benefits in cities. Whitehead (2009) and Dooling (2009), in particular, sought to refocus attention on ordinary forms of social-ecological in/justice in terms of access to different kinds of urban nature, often collectively termed UGSs. It has been recognised internationally that UGSs are distributed inequitably within urban environments. Some previous work described this topic, showing evidence from the USA (Heynen, 2003; Brownlow, 2006a; 2006b) and the UK – where we arguably see a stronger research focus on the everyday features of urban landscapes (e.g. Ravenscroft, Markwell, 2000; Rishbeth, 2001; Stephens, Bullock, Scott, 2001, Lucas et al., 2004). In the USA (Holifield, 2001), the situation is often visible in the case of minorities of people of colour (e.g. African-Americans, Native-Americans, Asians and Latinos) who are also identified as socio-economically marginalised communities. White and more affluent residents have been found to benefit from better access to urban parks, while people of colour experience limited access to park space, make fewer visits to urban open spaces and use parks spaces differently (Floyd, Gramann, Saenz, 1993; Myron, Shiner, 1999; Gobster, 2002; Loukaitou-Sideris, Stieglitz, 2002). Other examples come from Australia (e.g. Timperio et al., 2007), Korea (e.g. Oh, Jeong, 2007) or Turkey (Erkip, 1997).

A substantial number of publications related to EJ with regard to UGS availability or accessibility describe directly how or to what extent different minority groups are affected by inequality/injustice. Generally, inequities in park acreage, quality and safety have been confirmed as an emerging issue in many cities of the Global North and Global South. Low-income ethnic minority communities often experience a disadvantage in that sense (Boone et al., 2009; Wolch, Byrne, Newell, 2014; Macedo, Haddad, 2016; Rigolon, 2016; 2017; Tan, Samsudin, 2017). However, while studies conducted in developed cities (of the USA, the UK, Germany or Australia) at the neighbourhood level show that low-income ethnic minority groups tend to live closer to parks than more affluent White residents, the latter are more advantaged in terms of acres of park, acres of park per person, park quality, park maintenance and park safety (Comber, Brunson, Green, 2008; Crawford et al., 2008; Boone et al., 2009; Sister, Wolch, Wilson, 2010; Vaughan et al., 2013; Kabisch, Haase, 2014; Wolch, Byrne, Newell, 2014; Hughey et al., 2016; Rigolon,

2016; 2017). Neighbourhood-level studies in cities of the Global South – in Eastern Asia, Africa and Latin America – confirmed these findings in the case of acreage, access and quality (McConnachie, Shackleton, 2010; Macedo, Haddad, 2016; Tan, Samsudin, 2017; Rigolon et al., 2018; Ye, Hu, Li, 2018); with some exceptions where associations between socio-economic status and park provision were not found (Wei, 2017) or better provision for disadvantaged groups was observed (Xiao et al., 2017).

Another aspect of UGS accessibility and attractiveness, affecting their utilisation, might be crowding. While in the USA, Afro-Americans, Latinos and low-income groups were found to live close to parks with higher potential of congestion, predominantly White, high-income areas were located nearby UGSs with lower levels of congestion (Sister, Wolch, Wilson, 2010). However, in that case, the authors applied the park service area (PSA) indicator, which actually assessed the *potential* congestion or demand for park use, that showed the ‘park pressure’ for each service area (which is based on an assumption that each resident of the PSA utilises the park closest to them). This means that areas with high park pressure, that is, areas with more residents sharing less park area (as well as its facilities), are supposed to be disadvantaged in terms of park provision. Similar findings were previously obtained by Wolch, Wilson and Fehrenbach (2005), who showed that low-income and high-poverty areas, including neighbourhoods inhabited by minorities of colour, had worse access to parks (defined as park area per capita within a 0.25-mile radius to a park) compared to White-dominated areas in the city of Los Angeles.

In the case of urban national parks in the USA, inequalities became even more evident, while these parks were deliberately designed to fulfil growing demands from impoverished and socially marginalised urban populations for access to green space (Byrne, Wolch, Zhang, 2009). Results obtained by Byrne, Wolch and Zhang (2009), based on an extensive survey, indicate that the United States’ largest urban national park (Los Angeles’ Santa Monica Mountains National Recreation Area) fails to meet the needs of those for whom it was created. People of colour had to travel longer distances to reach this destination, were less likely to visit the park again and felt more discouraged to use the park for active recreation. Similar results were obtained in the case of regional parks in the UK by Rishbeth (2001) and Ravenscroft and Markwell (2000). Moreover, another study on the topic (Byrne, 2012) documented that, apart from the previously mentioned reasons limiting the park use, ethno-racial and nativist barriers in terms of perception of the place may also occur. In the follow-up analysis by the same author (Byrne, 2012), Latino participants of the survey reported feelings of being ‘out of place’, ‘unwelcome’ and excluded from using the analysed parks. The most important factors which made them feel excluded were: identifying parks as being used mostly by White visitors, considering park-adjacent neighbourhoods as being ethno-racial, a lack of Spanish-language signs, fears of prosecution and direct experience of discrimination.

These findings show how even perception-based signs of inequalities and discrimination might severely affect the visiting of UGS by its potential users.

Therefore, it can be discussed whether in fact users choose to visit only the closest available UGS. Larger parks (such as urban regional or national parks) may attract visitors from a more geographically extensive area, or people may choose to visit UGSs because of reasons other than their proximity or size, such as benefits they provide or perceived safety (Brownlow, 2006a; Troy, Grove, 2008), but also due to this perceived availability of UGS in terms of psychologically experienced barriers. Hence, there is a need not only to develop and estimate appropriate indicators of equal UGS distribution and accessibility, but to evaluate their appropriateness by independent survey-based measures of park needs (Sister, Wolch, Wilson, 2010). In such a way, EJ research can support the EJ movement, bringing ‘power to the people’ not only in the sense of protests, but real empowerment, which gives them the ‘right to their neighbourhood’ (Anguelovski, 2013; 2014) and to constructively take action. Social involvement as well as inclusionary measures are an inherent part of accessibility planning in the EJ discourse (Lucas et al., 2004; Lucas, 2006; Dodge, 2009).

A crucial role of appropriate urban planning in order to provide more equitable access to healthier living environments should also not be underestimated (Krumholz, 1990; 1994; Campbell, 1996; Frumkin, 2005). Potentially, planners could play a key role in promoting EJ and equity in the distribution of public goods, however, a lack of systematic methodologies and practical applicability could undermine addressing EJ problems (Washington, Strong, 1997). Therefore, precise application of the ‘availability’ or ‘access’ measure is a prerequisite for appropriate diagnosis of (potentially) existing inequality in UGS distribution. Kimpton (2017), after testing different measures of accessibility, concluded that choice of access measure might influence the relationship between access and socio-economic indicators. Hence, studies which focus on the development of appropriate measures or indicators of availability and accessibility of UGS are an important part of EJ research worldwide (Van Herzele, Wiedemann, 2003; Comber, Brunsdon, Green, 2008; La Rosa, 2014; Raymond et al., 2016; Koprowska et al., 2018; Łaszkiwicz, Kronenberg, Marcińczak, 2018). Multi-dimensional indices to measure the availability of UGS have been also developed in many cities around the globe (Kabisch et al., 2016; Wüstemann, Kalisch, Kolbe, 2017).

4. Ecological gentrification as part of environmental justice discipline

The evolution of the EJ movement from environmental contamination and its impact on human health (including concerns related to locally unwanted land uses – LULUs – for an overview see Schively, 2007) took a course towards improvement of local communities. Eventually it resulted in the implementation of local greening initiatives which could potentially lead to the upgrading of previously disadvantaged neighbourhoods. Studies related to this topic are a specific and particularly important in an urban context strand of EJ literature. Additionally, this matter is closely tied to the EJ movement and activism, as a consequence of previous work related to improving access to environmental amenities for the unprivileged, as it has been presented in preceding sections of this article.

Improved green surroundings can attract activities of real estate developers and wealthy newcomers. Eventually this may lead to local increases in housing costs, property values and changes of an overall neighbourhood picture to suit the needs and expectations of the privileged residents. In turn, long-term and often low-income residents are forced to move out, because they cannot afford to stay and enjoy the benefits they have been waiting for (Łaszkiwicz, Kronenberg, Marcińczak, 2018). The process of displacement, driven by the introduction of greening initiatives is called ecological gentrification (Dooling, 2009), environmental gentrification (Checker, 2011; Curran, Hamilton, 2012; Pearsall, 2012) or green gentrification (Gould, Lewis, 2017). The definition proposed by Dooling (2009: 630) describes ecological gentrification as ‘the implementation of an environmental planning agenda related to public green spaces that leads to the displacement or exclusion of the most economically vulnerable human population while exposing an environmental ethic’.

In fact, greening projects are often supported and introduced by municipal planners and officials, which helps them to fulfil their sustainability agendas. They are part of a vision to build sustainable cities which includes incorporating, among others, concepts of mixed land use, biodiversity and greening. Unfortunately, the push towards green projects might be a political imperative with a high potential of pursuing inequality, rather than a response to the real needs of all urban citizens. Many cities in the USA (but not exclusively, as it is a trend recognised globally) have developed local programmes to transform themselves into greener and ‘more liveable’ environments (Bai, Roberts, Chen, 2010; Anguelovski, Carmin, 2011; Checker, 2011). Public investment in this case often takes the form of providing or restoring environmental amenities such as parks, waterfronts, playgrounds, etc. However, these plans seem to fail in addressing vulnerabilities of local communities and the potentially harmful effect on residents of low-income and/or of colour.

One example describes the situation related to the PlaNYC project in New York City. EJ activists raised concerns regarding the social impact it has on groups of the elderly, residents in rent-stabilised units and families supported by governmental assistance (Rosan, 2012). In fact, these groups turned out to be vulnerable and negatively affected by sustainability planning and brownfield restoration funded by PlaNYC (Pearsall, 2010; Checker, 2011). Other projects aiming at, for example, compact development (or ‘smart growth’) also pose a threat to the housing affordability and bring a question of how to change the neighbourhood so that the most socially vulnerable groups would not be displaced (Addison, Zhang, Coomes, 2013). It is such a paradoxical situation when green amenities introduced in the course of sustainability and greening agendas have a negative impact on the already distressed communities that they were supposed to serve. Anguelovski (2016) even argues that, due to this fact, newly introduced UGSs might be considered new LULUs – green LULUs. She calls greening a ‘double-edged sword’, pointing out that currently EJ activists have to deal with two kinds of LULUs – related to environmental toxic sites and green amenities – with an emerging issue of land speculation and redevelopment.

Nevertheless, development of some projects with potential harmful effects on local communities did not take place without protests and social mobilisation. EJ activists in many cases supported residents who opposed activities which may contribute to the environmental gentrification. This was the case of neighbourhood revitalisation and upgrading within the scope of smart growth policies in Austin, Texas (Tretter, 2013) or the initiative of street tree planting and other greening initiatives which could trigger green gentrification in Baltimore (Battaglia et al., 2014). However, there are successful stories where the ‘just green enough’ strategy of neighbourhood development can be implemented, such as in the case of Newtown Creek in Brooklyn, New York. Long-term residents together with local business owners defended industrial legacy of their neighbourhood in order to achieve environmental remediation without environmental gentrification (Curran, Hamilton, 2012).

Most of the studies on the topic of green gentrification considered a single urban site or a particular neighbourhood (e.g. Gould, Lewis, 2017). The recent research conducted in Barcelona by Anguelovski et al. (2018) revealed distributional inequalities at the city level, triggered by extensive greening and formation of new parks in the 1990s and early 2000s which followed the organisation of the Olympic Games in 1992. During this period, 18 parks were created and an overall amount of green space in Barcelona doubled as a result of multiple urban revival projects. The study indicates that several parks located in different parts of the city experienced strong environmental gentrification. Areas around some parks were subject to an above-average increase of residents with bachelor’s degree or higher, residents from the Global North, household income or home sale values, and a decrease

in the population over 65 living alone. However, the authors also considered other factors influencing social segregation dynamics in Barcelona, concluding that the introduction of new UGSs might have fuelled, but was not the only or primal driver of classical gentrification, although green gentrification trends were also observed.

The new direction of EJ activism and research, which is related to the problem of green gentrification, is pointing towards issues of affordable housing and creating green amenities at all cost, with exclusion of socio-economically vulnerable communities. Officially politically neutral urban planning, which is supposed to serve all urban residents, while being ecologically and socially sensitive, in fact – may sometimes sacrifice equity for profit-oriented development (Checker, 2011). However, such a turn in UGS development is not necessarily intentional, can actually become contrary to intended outcomes – unless it is a part of deliberate strategy, for example, to improve an overall image of the city. Preventing such dynamics in order to achieve cities ‘just green enough’ (Wolch, Byrne, Newell, 2014) poses a challenge for policy-makers, urban planners, as well as activists. A lack of planning for equity in municipal sustainability projects, followed by a lack of strong political leadership (which advocates for distributional and procedural equity), results in displacement and financial repercussions experienced by already socio-economically disadvantaged residents. The key players (often unintentionally) triggering green gentrification are local governments, real estate developers and agents, as well as privileged new homebuyers. However, municipal officials and sustainability advocates who uncritically accept call for a greening agenda might also play their role in creating new socio-spatial inequalities.

5. The environmental justice context in urban green space management and planning

Boone and Modarres (2006) explained the intertwined processes happening in cities, underlying the need for seeking solutions in appropriate planning of urban infrastructure, including aspects of EJ and green planning. Since the nineteenth century, parks have been recognised as important components of urban landscapes due to their health-giving and recreational characteristics. Moreover, social aspects of park use, such as park accessibility to different users, led to tensions that arose between the middle class and working class users. This laid the grounds for development of policies and management practices resulting in emergence of multi-functional UGSs, serving both passive and active users (Taylor, 1999). It is apparent that equity in availability of UGS has always been an important subject of discussion in urban planning. There is also a clear link between quality of neighbourhood (including availability or access to green areas), physical

activity and health or quality of living of urban residents where some groups might be more advantaged than others (Saelens et al., 2003; Abercrombie et al., 2008; Moore et al., 2008; Sallis et al., 2009; Kaczynski, Johnson, Saelens, 2010; Engelberg et al., 2016). Availability of UGS might be understood as urban green within a walking distance, with a positive impact on health and longevity of urban residents (Takano, Nakamura, Watanabe, 2002). Indicators of walkability have been developed that might be applied in order to translate the UGS – health – wellbeing message to decision-makers (Frank et al., 2006; 2010). However, even though the importance of equitable planning and of UGS has been widely recognised, disparities in availability of UGS still remain.

Improving quality of life and health (through promoting physical activity) of urban residents is one of the most important goals in practice of urban planners. In order to achieve long-term or population change, a multilevel interdisciplinary approach is required. Sallis et al. (2006) proposed to use ecological models and to focus at the individual level, as well as social environments, physical environments and policy making. Other authors also underline the role of legal and policy aspects in achieving improved park quality in low income and minority neighbourhoods, with high risk of overweight and obesity in children (Henderson, Fry, 2011). Another goal is ‘sustainability’, which also includes EJ elements, and has been incorporated into many municipal policy plans over the last thirty years. Nevertheless, it is questionable to which extent this sustainability goal is actually being implemented in different American cities (Pearsall, Pierce, 2010). The authors argue that EJ principles are being lost in wider discussions about macro-scale challenges (such as climate change), but also on a regional scale – in pursuit of competitiveness of environmental amenities, such as parks. Sustainable development might be recognised as ‘planner’s triangle’, which is a result of tensions between three fundamental aims: environmental protection, economic development and social equity (Campbell, 1996). Again, the argument of bringing together knowledge from different fields, such as social theories, environmental knowledge as well community oriented conflict resolution, is drawn as a conclusion.

Therefore, the question arises if (and how) equitable planning of UGSs and achieving ‘just cities’ is possible. The answer has been already indirectly indicated. If EJ is related to minority groups at the neighbourhood level, implementation of this principle should be also based on the local context, including participatory methods. Participation of the residents in auditing quality of urban parks has been already tested and brought promising results as a tool promoting empowerment in the field of community planning of UGSs (Kaczynski, Wilhelm Stanis, Besenyi, 2012; Gallerani et al., 2017).

Many research outputs in the field of equitable planning and management of UGSs come from the USA (which is the country of the original EJ grassroots movement) and Western Europe. Studies from Central and Eastern Europe are not

that numerous, especially in the sub-discipline of access to environmental amenities such as parks (Varga, Kiss, Ember, 2002). However, there are case studies describing discrimination of minority groups (e.g. Roma communities) in terms of exposure to environmental hazards (Steger, 2007; Steger, Filčák, 2008; Harper, Steger, Filčák, 2009; Filčák, Steger, 2014; Szewrański et al., 2018) or examples of conflicts and protests with an environmental background (Kurek, Faracik, Mika, 2001). There are also a few examples of research related to an unequal distribution of benefits and segregation in the cities of Hungary (Kovács, Hegedűs, 2014) and Poland (Korwel-Lejkowska, Topa, 2017; Połom, Beger, Topa, 2017). A relative lack of literature on the topic of EJ in Central and Eastern Europe might be understood through the lens of a different historical context. System transformation imposed the principle of economic development based on a market economy, threatening aims of environmental protection as well as social equity. Costs and benefits of environmental protection have been distributed unequally among citizens of these countries (Kurek, Faracik, Mika, 2001; Costi, 2003). The citizens are the main beneficiaries of economic development, effective protection of the environment and social equity, if these principles of sustainable development are being fulfilled. Therefore the role of society in the decision-making process should not be underestimated, specifically in the form of active participation. Increasing social awareness, inclusive policy making and community governance are being recognised as crucial elements in achieving EJ in CEE in the post-transformation era. This should be supported by appropriate legislative reforms and strengthened by international cooperation at the regional level (Costi, 1998). On the one hand, experience and good examples coming from the West might serve as a good reference point, however – on the other hand – local specificities will influence the way in which the objectives of sustainable development can be met. Based on the historically-derived economic as well as societal background, countries from CEE should develop their own formula in order to achieve sustainable development (and EJ as its effect).

6. Conclusions

EJ in the scientific literature has evolved from describing how environmental hazards affect socio-economically unprivileged groups towards ensuring equitable and just access to environmental amenities, with particular interest in urban environments. As physical availability of UGSs to residents has been investigated quite extensively, future research may focus on the psychologically driven perception and mental barriers affecting this availability. Moreover, evidence from the region of Central and Eastern Europe still remains scarce, therefore leaving space for prospective further research. Specifically, the topic of cities is still an impor-

tant part of EJ literature, with increasing population density pressure, deepening of socio-economic discrepancies between residents and intensifying environmental challenges related to quality of living. Therefore, prospective analyses should focus on the description of phenomena at a wider city level and not only cases at the level of a single neighbourhood. The current stage of EJ research with regard to equitable urban planning, including provision of equitable access to UGSs, calls for an interdisciplinary approach with an active involvement of all stakeholders. In order to provide valuable recommendations for policy-makers and planners, problems such as uneven access to UGSs and green gentrification should be considered in a wider perspective, as processes affecting whole cities, but not only limited to the area of greening or sustainability agenda.

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Sprawiedliwość środowiskowa w kontekście dostępu do terenów zieleni w miastach

Streszczenie: *Sprawiedliwość środowiskowa* to termin, który zawiera zarówno ekspozycję na zagrożenia środowiskowe, jak i dostęp do dóbr środowiskowych, które mogą być różnie doświadczane przez poszczególne grupy społeczno-ekonomiczne. Innymi słowy, sprawiedliwość środowiskowa bada, czy każdy może mieć równe prawo do korzystania ze środowiska, które zapewnia rozwój, zdrowie i dobre samopoczucie. Ruch na rzecz sprawiedliwości środowiskowej powstał w odpowiedzi na przejawy dyskryminacji na tle tzw. rasizmu środowiskowego w Stanach Zjednoczonych, której doświadczyły społeczności klasy robotniczej, o niskich dochodach, pochodzenia afroamerykańskiego, azjatyckiego, latynoamerykańskiego oraz rdzenni mieszkańcy. I choć niesprawiedliwość środowiskowa miała początkowo silny związek z dyskryminacją rasową w Stanach Zjednoczonych, obecnie jest to zagadnienie znacznie szersze, obejmujące problemy globalne i lokalne, związane z degradacją i skażeniem

zasobów naturalnych oraz planowaniem przestrzennym. Mimo że nierówny dostęp do dóbr środowiskowych – takich jak tereny zieleni – nie był początkowo głównym nurtem dyskursu, obecnie zyskuje na znaczeniu, zwłaszcza w kontekście miast. Tereny zieleni w miastach są istotnym czynnikiem stanowiącym o dobrym zdrowiu i samopoczuciu mieszkańców, jednak dostęp do nich może być zróżnicowany pod względem społeczno-przestrzennym. Z powodu coraz poważniejszych problemów dotyczących zarządzania i życia w miastach, związanych m.in. ze zmianami klimatu, zagęszczeniem czy rozlewaniem się przestrzennym miast, konieczne staje się zrównoważone zarządzanie zasobami terenów zieleni oraz zapewnienie równego (sprawiedliwego społecznie) dostępu do płynących z nich korzyści. Ważnym aspektem jest również związek między podejmowaniem pozornie korzystnych decyzji planistycznych w miastach (m.in. w celu zwiększenia dostępności terenów zieleni) a ich długofalowymi skutkami, które prowadzą do gentryfikacji i nasilenia niesprawiedliwości środowiskowej. Ze względu na złożoność problemu dostępności terenów zieleni w miastach zbadanie tego zjawiska wymaga podejścia interdyscyplinarnego, uwzględniającego aspekty ekologiczne, przestrzenne oraz społeczno-ekonomiczne. Niniejszy artykuł stanowi przegląd literatury tematu i obecnie prowadzonych w tym zakresie badań, ze szczególnym uwzględnieniem dostępu do zasobów terenów zieleni w miastach.

Słowa kluczowe: planowanie przestrzenne, ekonomia przestrzenna, sprawiedliwość środowiskowa, sprawiedliwość przestrzenna

JEL: R58, Q56, A12, P48

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