

The Right to the City: Developing a Framework to Analyze Environmental Justice

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Abstract

The unprecedented increase in urban population and the emergence of new issues in the lives of citizens have led to new concepts, such as “right to the city” in the urban planning literature. The answer to the several failures of plans and programs in various fields, including environmental justice, can be found in the light of this concept. This paper has focused on the issue of environmental justice through a comprehensive view of the social and economic dimensions of the lives of different groups of city dwellers, and “the right to the city” has been identified as the most appropriate context for this purpose. This descriptive-analytical paper has used documentary studies and a review of the theoretical literature associated with the right to the city and environmental justice to extract the conceptual model indicating the explanation of components and their relationships, using the content analysis model. Finally, the proposed model showed that the establishment of environmental justice in cities requires the realization of the components of the right to the city.

Keywords: The right to the city, Analytical framework, Environmental justice, Content analysis.

1. Introduction

The physical growth of cities and the rapid increase in the urban population have recently led to new issues in the lives of citizens, including urban sustainability and justice (Pupphachai and Zuidema, 2017). Urban dwellers suffer from social conflict from various aspects, and their rights are often overlooked (UNESCO, & UN-HABITAT, 2006: 49). Therefore, the thorough integration of justice and equality integrated into sustainability programs should be ensured (Agyeman and Evans, 2004; Agyeman, 2008; Agyeman, 2013; McLaren and Agyeman, 2015). The concept of the right to the city, first proposed by the French philosopher Henri Lefebvre, has traveled from Europe to other parts of the world (He, 2015: 673). The right to the city focuses on reclaiming the meaning and importance of the city to its dwellers, establishing a high-quality life for all, and building the city as a gathering point for collective life (Lefebvre, 1968), which would be a clear path toward sustainability and environmental justice.

Since the Industrial Revolution, human activities have caused serious damage to the natural environment on which humans depend for survival and development (Costanza et al., 1998; Sterling et al., 2013). Given such serious environmental challenges, the issue of urban sustainability was raised with an emphasis on environmental sustainability. Environmental justice emerged in the United States in the 1970s and 1980s in the form of civil rights movements against the disposal of hazardous waste (Schlosberg, 2003, 2004; Walker, 2012; Agyeman, 2013; Holifield et al., 2017; Svarsted and Benjaminsen; 2020). Environmental justice covers various urban areas, including the quality and distribution of

urban greenery, environmental pathology due to the uncontrolled urban development, pollution due to urban development manifestations such as the construction of highways or land uses which bring about noise, air, and visual pollution (Svarstad and Benjaminsen, 202), elders of urban neighborhoods (Day, 2010), ecosystem services (Sikor, 2014), biodiversity conservation (Martin et al., 2013; Lecuyer et al., 2018), urban climate change interventions (Bulkeley et al., 2014), and forest preservation carbon offset projects (Fisher et al., 2018). Spatial imbalance in the supply and demand pattern of ecosystem services has led to serious environmental injustice (Zhai et al., 2020:7). Several researchers have argued that recent sustainability programs tend to focus merely on the environment, with little regard for social justice (Agyeman, 2008; McLaren and Agyeman, 2015; Liu, 2018: 904). However, social injustice is often the source of environmental and economic instability (Middleton and O’Keefe, 2001; Liu et al., 2015; Liu, 2018). Other researchers believe that it is not possible to achieve urban environmental sustainability without social sustainability (Polese and Stren, 2000). Therefore, adopting an approach based on the rights to the city and citizenship for all citizens regardless of age, gender, income, ethnicity, etc. can resolve many objective and subjective conflicts, particularly in issues related to environmental conditions, which play a decisive role in human health. Accordingly, the issue of environmental and social justice can be examined from a new perspective. The right to the city is a powerful response to all cities, particularly those whose citizens are suffering from severe conflict (Safier, 2005). In many cases, this is a socio-economic right, including the right to housing, transportation, and natural resources such as water (He,

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2015: 674). Therefore, the present article has examined environmental justice using the theory of the right to the city because evidence shows that the policies made in the field of environmental issues lack a comprehensive view regarding the social and economic dimensions of the daily lives of various groups of urban dwellers, particularly in metropolitan areas, and the right to the city is not realized. Another main issue considered in doing this article is the lack of a comprehensive definition of the concepts of the right to the city and environmental justice in previous literature, which has led to the following research objectives:

- A review of the relevant literature and gaining knowledge on the dimensions and components of the right to the city and environmental justice;
- Establishing a relationship between the concept of the right to the city and the sources of environmental injustice.

The study seeks to answer the following questions: What are the components of the concepts of the right to the city and environmental justice according to global literature, and what is their relationship? How do social and economic characteristics manifest their effects through the theory of the right to the city to establish environmental justice in urban reality? Therefore, this descriptive-analytical article helps to illustrate the different dimensions of the two above-mentioned concepts by providing a conceptual framework derived from the review of valid documents, while it also tries to explain the relationship between these two concepts as much as possible. Data are analyzed using qualitative content analysis, after which the conceptual model of the research is developed based on the analysis results, and the items and their relationships are extracted.

2. Literature Review

2.1 The right to the city

The lack of a complete and comprehensive definition and instruction for the implementation of the concept of the right to the city is one of the problems faced in recent urban planning. As mentioned, the theory of the right to the city was proposed in 1968 by Henry Lefebvre in defense of citizens' rights. The right to the city is a prominent concept and perspective for the framework of rights and equality in the recent literature on urban studies and other related social sciences (Jabareen, 2014). As the inventor of this concept, Lefebvre recognized two components in right to the city: The first component includes the right to proper use of urban space or the right to allocation and ownership, which refers to the rights of citizens to access and use urban space (Fenster, 2005; He, 2015). Ownership includes the right of dwellers to access, own, and physically use urban space (Capron, 2002; Isin and Wood, 1999; Lamb, 2002; Salmon, 2001; Mitchell and Staeheli, 2002). It not only means the ownership of existing urban space but also reflects the right to produce urban space based on the needs of dwellers (Lefebvre, 1996: 179). The second component is the right to participation, which means that urban dwellers must have

the opportunity and power to redefine and transform urban space. According to this right, citizens must get involved in various levels of decision-making related to the affairs of the city and urban spaces (Fenster, 2005; He, 2015). Based on Lefebvre's original writings, Harvey (2012) argued that the right to the city is far greater than the individual's access to a particular set of urban resources: It is a right to make changes and innovations in the city (Vacchelli & Peyrefitte, 2018: 12). Also, the rights related to the city include the right to difference, including different races, ethnicities, classes, and cultures. In particular, the right to the city is granted to the oppressed and deprived people. The right to the city can turn into a powerful weapon against any kind of power and illegal hegemonic policies for these people (He, 2015; Marcuse et al., 2009). The right to the city is to reclaim the city from excessive bureaucratization and deep trust in consumption (Dikeç, 2001). The main component of the right to the city is the right to use cities without harming them, according to the principles of sustainability and social justice. This right is a collective right for all city dwellers, particularly those at risk or neglected (World Charter on the Right to City, 2004). At present, the concept of the right to the city is considered as an action to promote the rights of urban dwellers in most cities of the world (Purcell, 2014: 2), and the achievement of citizenship rights is considered a bio-legal necessity of the cities. The right to a city has the real potential of liberal democracy, elimination of deprivation, and social inclusion (Purcell, 2013).

2.2 Environmental justice

It is fair to say that it is not possible to achieve sustainable development without environmental justice (Salem, 2019:1). The United States Environmental Protection Agency (EPA) defines environmental justice as fair and respectful treatment of all people, regardless of their race, color, nationality, culture, education, or income level, in the development and enforcement of environmental laws, regulations, and policies (Nejac, 2004). The environment can be considered as the place where we live, work, and play, including the "larger natural world", not just the policies and actions (Y.K. Bredin et al., 2018: 2; Schlosberg, 2013). Most issues of environmental justice focus on improper distribution; poor, indigenous, and colored communities have fewer environmental advantages, more environmental sufferings, and less environmental protection (Lake, 1996; Shrader-Frechette, 2002; Akbari & Khosravaninezhad, 2014). The manifestation of injustice and pollution, more concentrated on the poor, leads to a higher motivation to fight against the inequalities of everyday urban life (Marcuse et al., 2009). The identification of social inequalities in the distribution of toxic pollution hazards — first in the United States and then globally — has shaped a social movement, political debate, and a large body of empirical research that addresses the issue of environmental justice (Mohai et al., 2009; Walker et al., 2012; Collins et al., 2019). Some of the issues in the area of environmental justice include access to parks and open green space for all people, exposure of farmers to

pesticides and the risk of chemical poisoning, social inequality in disaster preparedness and emergency response programs, health and safety at work, access to healthy and cost-effective food, more power of the local people to have control over the indigenous lands, biodiversity conservation (Martin et al., 2013; Lecuyer et al., 2018), urban climate change interventions (Bulkeley et al., 2014), and zero-carbon projects (Fisher et al., 2018). Studies on environmental justice have often examined the correlation between socio-demographic characteristics and environmental hazards (Anderton, Anderson, Oakes, & Fraser, 1994; Been, 1995; Bullard, 1990; Stretesky & Lynch, 1999a, 1999b). Urban sprawl is also considered one of the biggest threats to the efficiency of the urban environment (Koprowska et al., 2020:1). In the early twentieth century, a new generation of thinkers, including Patrick Geddes, Ebenezer Howard, Lewis Mumford, and others continued to argue against environmental degradation. However, the environmental revolution accelerated in the post-World War II period (Cuthbert, 2008). The Environmental Justice Movement, born out of the civil rights movement of the 1960s and 1970s, was one of the most successful movements of its time (Lester, Allen & Hill, 2001; Bullard, 2000), formed in the United States in the 1980s (Brulle and Pellow, 2006; Bullard, 2005). A significant part of the early studies of environmental justice was devoted to the work of the liberal philosopher John Rawls (Rawls, 1999; Singer, 1988; Wenz, 1988; Langhelle, 2000; Svarstad and Benjaminsen, 2020). The European Environmental Justice Research began in Scotland and was pursued by the United Kingdom (Laurent, 2011), focusing on the analysis of environmental risk and social exclusion (Mullin et al., 2018: 12). The environmental imbalance is based on the proximity of the socio-economic deprivation of the population from environmental resources and public health risks and has also extended to environmental pollution (Occelli et al., 2016). First contributions to environmental justice studies came from sociologists such as Robert Bullard, who published the paper on the Solid Waste Sites and the Black Houston Society in 1983, and Čapek (1993), who presented the basic social constructionist perspective on the environmental justice struggles (Svarstad and Benjaminsen, 2020: 2). Sociologist Paul (2002) then analyzed Chicago's landfill policy and showed how minority and poor communities bear the costs of this landfill in the face of health risks (Svarstad and Benjaminsen, 2020: 2). Paetzold et al. (2010) provide a conceptual framework for the assessment of ecological quality based on ecosystem services. They argue that the ecosystem service approach moves us forward to meet human needs and expectations in ecosystem assessment (A. Paetzold et al., 2010: 275). Villamagna et al. (2013) also presented a conceptual model to analyze the supply and availability of ecosystem services by considering the components of capacity, pressure, demand, and flow (A.M. Villamagna et al., 2013: 114). Ecosystem services have great potential to influence environmental decisions because they link ecosystem functions and conditions to the humanitarian interests of a wide range of people (Villamagna et al.,

2013: 114). Events related to the environmental justice movement, mainly in the 1980s, have seriously criticized health problems, particularly associated with the location and method of landfilling. Following these protests and studies, executive activities and the formation of institutions and approvals, such as the Environmental Justice Act (1992 and 1999), the Office of Environmental Justice (1992), and the Office for Civil Rights (1994), started in the 1990s (Zilney et al., 2006:53). More attention has been paid to the promotion of environmental justice through regulations or modification of green infrastructure preparation to reduce the damage caused by natural disasters and provide more protection to vulnerable groups (Herk et al., 2011; Mees and Driessen, 2011; Zimmermann et al., 2016). The focus on environmental justice in recent years reflects global concerns about the challenges of justice in the distribution of environmental benefits and threats (Pickett et al., 2013 and Zhu et al., 2019). Ignoring the social heterogeneity of societies based on class, group, minority, wealth, power, and other factors can lead to unfair access to environmental benefits and resources (Few, 2013). Accordingly, the most vulnerable people live in a highly polluted environment (Occelli et al., 2016: 781), while social justice means that the benefits should be greater for the disadvantaged majority (Denhardt and Catlaw, 2014). More democracy creates more equality (Young, 2000). Meanwhile, some social groups, including low-income people, minorities, the youth, the elderly, the sick (Boone et al., 2009; Rigolon, 2016, 2017), and families with children and adolescents need more environmental benefits.

The mainstream of environmental justice focuses primarily on patterns of social and environmental inequalities (Holifield, 2015; Svarstad and Benjaminsen, 2020: 2). Distributive justice refers to the distribution of the burden and benefits of environmental interventions (Svarstad and Benjaminsen, 2020: 1). The consequences of fair and equitable distribution can only be achieved through a fair process. Fair process or procedural justice refers to forms of participation, analysis of who participates in decision-making, under what circumstances, and how decisions produce equal outcomes (Gustavsson et al., 2014; Svarstad and Benjaminsen, 2020). Procedural justice includes issues of decision-making and power. In the general context of environmental justice, power is a key issue. Power is the ability of individuals to realize their will despite the resistance of others (Svarstad and Benjaminsen, 2020; Weber, 1968). Recognition, as the last important component of environmental justice, refers to who or what is recognized in the decision-making process, with respect for differences and avoidance of domination (Bohman, 2007). The concept of recognition in radical environmental justice is largely inspired by the work of Nancy Fraser (2000) (Svarstad and Benjaminsen, 2020: 4). In addition to the dimensions mentioned for environmental justice, a sense of place has recently found its way into the environmental justice literature (Barron, 2017; McKittrick, 2011). A review of the extensive environmental research shows that environmental quality

is socially distributed; in other words, low environmental quality and high environmental risk are commonly seen in economically disadvantaged societies (Mullin et al., 2018). Environmental researchers such as Bullard (1990) and Bryant (1995) emphasize that environmental justice refers to a set of cultural values and norms, behaviors, regulations, and public policies that support sustainable societies and healthy, nurturing, and productive environments. Likewise, environmental justice includes reasonable wages and secure jobs, high-quality schools, recreation, appropriate housing, adequate health care, democratic decision-making, personal empowerment, and communities free from violence, drugs, and poverty (Bryant, 1995).

3. Methods

Every scientific research requires a scientific method for the best and most correct path (Svarstad and Benjaminsen, 2020:2). The present study has used a descriptive-analytical method. The method of documentary research, including books and articles of popular scientific databases, was used for data collection, and the content analysis method was employed to extract the components as well as the conceptual model. In 1952, Berelson described content analysis as a research technique to describe the explicit content of relationships objectively, systematically, and quantitatively, and Krippendorff (2004) described the content analysis as a research technique to make reproducible and valid inferences from the text in the relevant context. Content analysis has several advantages compared to other data analysis and production techniques (Weber, 1990:10). Unlike qualitative research methods, qualitative content analysis is not associated with any particular knowledge and has fewer rules to follow (Bengtsson, 2016: 8). The goal of qualitative content analysis is to systematically change large volumes of text into very concise and organized summaries of key results (Erlingsson & Brysiewicz, 2017: 9). To implement the content analysis method, the collected materials from about 150 books and articles (mostly published in Elsevier scientific database) during 1967-2020, were reviewed and all parts of the texts that had keywords were extracted as a unit of meaning. Meaning units were then integrated and a code was assigned to each. According to the coding, classification was performed in the last step, and the basis of the conceptual model was obtained. Thus, 21 and 26 codes were extracted for the concepts of the right to the city and environmental justice, respectively. Finally, 5 and 12 categories were obtained for the right to the city and environmental justice, respectively (Table 1)(Table 2).

4. Findings: Environmental Justice from the perspective of The Right to the City

In the present article, the most up-to-date research related to the issue of environmental justice in different countries

has been collected and studied from the most popular international scientific databases to achieve a clear conclusion about the right to the city and environmental justice. Investigations showed that each article had examined one of the environmental components that contribute to justice and the proportional distribution of natural resources, including urban green spaces, proximity to polluting and disturbing uses, and natural hazards. These studies sought to establish a relationship between the distribution pattern of the environmental benefits and socio-economic conditions through analyses. However, no comprehensive research could be found on the components of the right to the city and environmental justice or the issue of injustice from a broader perspective. The present article shows that the concept of environmental justice is under the influence of the concept of the right to the city, and the reasons for the lack of environmental justice can be found by considering this concept. Environmental justice is not an issue achieved solely through the allocation of green space and ecosystem services but requires a broader perspective. From the perspective of the right to the city, environmental justice includes the right to sustainable and healthy neighborhoods, healing, high-quality health care, and so on(righttothecity.org). It can be said that the higher the levels of participation, ownership, and allocation of space by citizens in public spaces make the realization of the concept of the right to the city more possible (Friedman, 1995: 75). "Environmental justice" is also the right to a safe, healthy, productive, and sustainable environment for all. From a general perspective, the "environment" includes ecological (biological), physical (natural and artificial), social, political, aesthetic, and economic aspects. Environmental justice refers to the conditions under which such a right can be freely exercised, through which individual and collective similarities, aspirations, and dignities are preserved, fulfilled, and respected (Salem, 2019:2). Most studies show that racial minorities, people with low socioeconomic status, and other socially disadvantaged groups are at risk from technology (Collins et al., 2017; Downey and Hawkins, 2008; Grineski et al., 2015b; Grineski et al., 2017b; Grineski and Collins, 2018; Mohai et al., 2009; Walker, 2012; Zhao et al., 2018).

A review of the theoretical literature and application of the content analysis led to the conceptual model that shows the constituent components of the two topics as well as the relationship between them. The categories presented in the content analysis regarding the right to the city included the right to allocation and participation, each of which consisted of components such as inclusiveness and respect for differences, suppression of capitalism and class system, the right to participate in the current and future situation of the city, nurturing meaning and quality of urban life, the right to allocation and access, the right to produce space, and suppression of capitalism (Figure 1).

Table 1
Qualitative content analysis of the concept of the Right to the City

Class/Category	Code	Individuals	Integrated meaning units
Universality and respect for differences	Collective right	Harvey (2012)	The right to the city is a kind of collective right and opposed to private ownership.
	Ownership right	Purcell (2002)	The ownership right means the right of every dweller to live, play, consume, occupy urban space, etc.
	The right of access	Shenjing He (2015) Dadashpoor and Alvandipour (2020)	Broad concepts, including the right to political space, public space and housing, independence, and the right against the domination of government and politics.
	Social justice	Harvey(2008)	Strive for social justice and the rights of different social groups
	Inclusiveness	Brown and Kristiansen (2009)	Requires social inclusion and benefits all dwellers. It is part of human rights and includes all human beings.
	The right to difference	Shenjing He (2015)	Includes the right to difference, ie different races, ethnicities, classes, and cultures
	Social-economic right		It is a socio-economic right
	The right to participation and allocation	Lefebvre (1967)	Includes two rights of participation and ownership/allocation. Allocation: Access and use of city space. Participation: Urban dwellers must have the opportunity and power to redefine and change urban space
	The right of all citizens		Those who live and work in urban areas have the right to the city; They will have the right to create this space and change it.
	The right to access services		The right to adequate housing / a job / a family life/security against police attacks / a beautiful, comfortable, and healthy city with respect for the environment
	Sustainability and inclusiveness	World Charter on the Right to City (2004)	The right to use cities without damaging them, in accordance with the principles of sustainability and social justice, and as a collective right of all citizens, especially those at risk or neglected.
	Ownership	Capron, 2002; Isin and Wood, 1999; Lamb, 2002; Salmon, 2001; Mitchell and Staeheli, 2002	Ownership: access, possession and, physical use of urban space. And the right to produce urban space in accordance with the needs of dwellers.
	Allocation	Purcell(2008) Lefebvre, Kofman & Lebas (1996)	Allocation: Requires the right to be present in space and produce spaces to cultivate a dignified and meaningful life. Ownership/Allocation: The right to access, occupy and use space and to produce new space in accordance with the needs of the people
The right to participate in the current and future situation of the city	The right to change	Harvey(2012) Shenjing He (2015)	The right to apply changes and innovations in the city A set of tools to make fundamental changes in the city to meet the needs of citizens Change of the city for the full life of all the citizens
	Participation – allocation	Friedmann (1995)	Associated with the increasing levels of participation and ownership/ allocation by citizens in public spaces
Suppression of the power of capitalism and the class system	Democratic management	Harvey(1973)	Collective right to democratic management of urban resources
	Elimination of deprivation	Amin and Thrift, 2002; Dikeç, 2001; Harvey, 2008;	Topics related to dealing with deprivation, immigration, housing, citizenship, urban public space, and social deprivation

Class/Category	Code	Individuals	Integrated meaning units
		Mitchell, 2003	
	Against domination of power	Shenjing He (2015) Purcell (2013)	Removal of the existing social structure and system that supports the wealthy and powerful
	Against domination of inequality	Shenjing He(2015)	A powerful instrument to combat emerging urbanization dominated by extreme inequality and marginalization
	Against inequality	Safier (2005)	A response to the extreme urban conflicts
The right to allocation and access	Public space	Cuthbert and McKinnell (1997)	Public space is an important association for discussions on civil rights.
Nurturing the meaning and quality of urban life	Meaningful and high-quality collective life	Lefebvre (1967)	Reflecting the meaning and importance of the city to its inhabitants, establishing a high-quality life for all, and establishing the city as a gathering point for collective life
	The right to citizenship	Purcell (2014)	An action to promote the living rights of urban dwellers, and achieve citizenship rights as a bio-legal necessity of the city.

Table 2
Qualitative content analysis of the concept of Environmental Justice

Class/Category	Code	Individuals	Integrated meaning units
Unfair distribution of ecosystem services and natural endowments	Unfair distribution	Lake, 1996; Shrader- Frechette, 2002; Akbari & Khosravaninezhad, 2014	It often focuses on improper distribution. The poor and minorities receive less environmental benefits and more environmental suffering.
		Akbari & Khosravaninezhad, 2014	There are fewer environmental facilities and higher risks of environmental hazards in minority and less privileged communities.
		Denhardt and Catlaw (2014)	The deprived majority should benefit more, but they do not.
		Svarstad and Benjaminsen(2020)	The focus is primarily on patterns of social and environmental inequality. Lack of power of some people leads to unfair distribution.
		Zilney et al. (2006)	Unfortunately, disadvantaged groups are more likely to suffer from environmental hazards.
		LeaWatkins (2018)	Poor and minority communities are potentially deprived of public environmental benefits, including urban trees.
	Mullin et al.(2018)	Less use of green spaces by minorities and poor people	
Spatial imbalance	Zhai et al. (2010)	Spatial imbalance in the supply and demand pattern of ecosystem services	
Fair, inclusive, and equitable distribution of environmental benefits and harms, and recognition	Inclusive	Akbari & Khosravaninezhad, 2014	Demands the right of all workers to work in a healthy work environment.
	Fair distribution	Herk et al., 2011; Mees and Driessen, 2011; Zimmermann et al., 2016; Svarstad and Benjaminsen, 2020	Promoting environmental justice with green infrastructure to reduce the vulnerability of vulnerable groups. Distribution justice means the distribution of burdens and benefits related to environmental interventions
	Recognition	Svarstad and Benjaminsen, 2020; Schlosberg, 2007	Recognition: The focus is on respecting and paying attention to people as well as their views.

Class/Category	Code	Individuals	Integrated meaning units
	Participation		Procedural justice: Who influences the decision-making process?
	Valuing for people		Theory of capabilities: Focusing on the extent to which people can live with value.
	Fair justice and needs assessment	Sikor et al., 2014; He & Sikor, 2015; Fisher et al., 2018	Criteria: equality, need, and competency
	Needs assessment	Svarstad and Benjaminsen, 2020; Walker, 2012	The distribution of environmental benefits and burdens in proportion with the needs of the population.
	Justice	Lecuyer et al., 2018; Zilney et al., 2006	Recognizing the sense of justice among deprived people to achieve success. No group of people should suffer because of their class or income.
	Capabilities	Walker, 2012; Sen, Nussbaum, Schlosberg and Carruthers, 2010	Theory of capabilities as a central element of environmental justice
	Fair treatment	Salem (2019)	Fair treatment and purposeful engagement of all people, with respect for the development and implementation of laws
	Respect and needs assessment		Individual and collective similarities, desires, and dignities are preserved, fulfilled, and respected.
	Fair justice and participation	EPA, Office of Federal activities, 1998; Zilney et al., 2006	Fair treatment and purposeful engagement of all people means that no population is forced to bear the disproportionate burden of negative human health or the environmental effects of pollution or other environmental consequences due to policy or economic incapacity.
	Natural benefits	Mullin et al.(2018)	The benefits of the natural environment must also be considered in the analyses
	Access to utilities	Wolch, Byrne, & Newell, 2014; Xiao, Wang, Li, & Tang, 2017; Conway & Bourne, 2013; Pham, Apparicio, Seguin, Landry, & Gagnon, 2012; Raymond, Gottwald, Kuoppa, & Kytta, 2016; Morris et al., 2011; Davis et al., 2012; Mitchell & Norman, 2012	Includes access to green spaces, aquatic space, biodiversity, and clean places
The right to dominate and change the optimum environment	Dominance in the optimum environment	Steil and Connolly (2009)	Emphasis on environmental and social justice, understanding the environment to surround all living conditions, including air, water, recreation, housing, transportation, and so on.
	Transformation of relations with nature		Seeking the transformation of our relations with each other and with the earth
The right to an optimum environment	The right to a healthy, healing, and high-quality environment	World Charter on the Right to City (2004)	The right to sustainable and healthy neighborhoods, healing, and high-quality health care
Sense of place and emotional connection with it	Spatial attachment	Altman & Low, 1992; Petrovic et al., 2019	Spatial attachment as a positive emotional connection between people and their environment
Establishment of ecosystem services and green infrastructures	Green infrastructure	Heckert and Rosan, 2016; Xiao et al., 2016; Hansen and Pauleit, 2014; La Rosa and Privitera, 2013; McMahon and	Requires establishment of green infrastructure/green infrastructure means a network of multifunctional green spaces /green spaces are considered as an essential

Class/Category	Code	Individuals	Integrated meaning units
		Benedict, 2000; Xu, 2013; Zhu et al., 2019	part of sustainable urban development.
	Ecosystem services	NRC, 1996, 2008; EPA, 2009; Burger, 2019; Costanza et al., 2014	Nature and ecosystem services contribute to improving people's health and well-being/Sustainability depends on ecosystem services
Establishment of social justice	Social justice	Rigolon (2016)	A form of social justice that requires the provision of environmental facilities
Decentralized and local power	Against dominance of centralized power	Svarstad and Benjaminsen (2020)	Asymmetry in power relations between officials and dwellers
	Power		Power as a key issue in environmental justice.
Sustainable development	Sustainability	Salem, 2019; Bryant, 1995; Bullard, 1990	The prerequisite for sustainable development / the right to a safe, healthy, productive, and sustainable environment for all / a set of values and norms that support sustainable societies and healthy environments
Improving dwellers' quality of life	Quality of life	Bryant (1995)	Reasonable wages and safe jobs, high-quality schools and recreation, appropriate housing and adequate health care, democratic decision-making and personal empowerment, and communities free from violence, drugs, and poverty
Urban development	Urban sprawl	Koprowska et al. (2020)	Urban sprawl as one of the biggest threats to environmental efficiency / Urban sprawl increases the potential for environmental injustice.
Attention to the potentials of the natural environment	Natural capacity	Mullin et al. (2018)	Natural capacity to support health and well-being

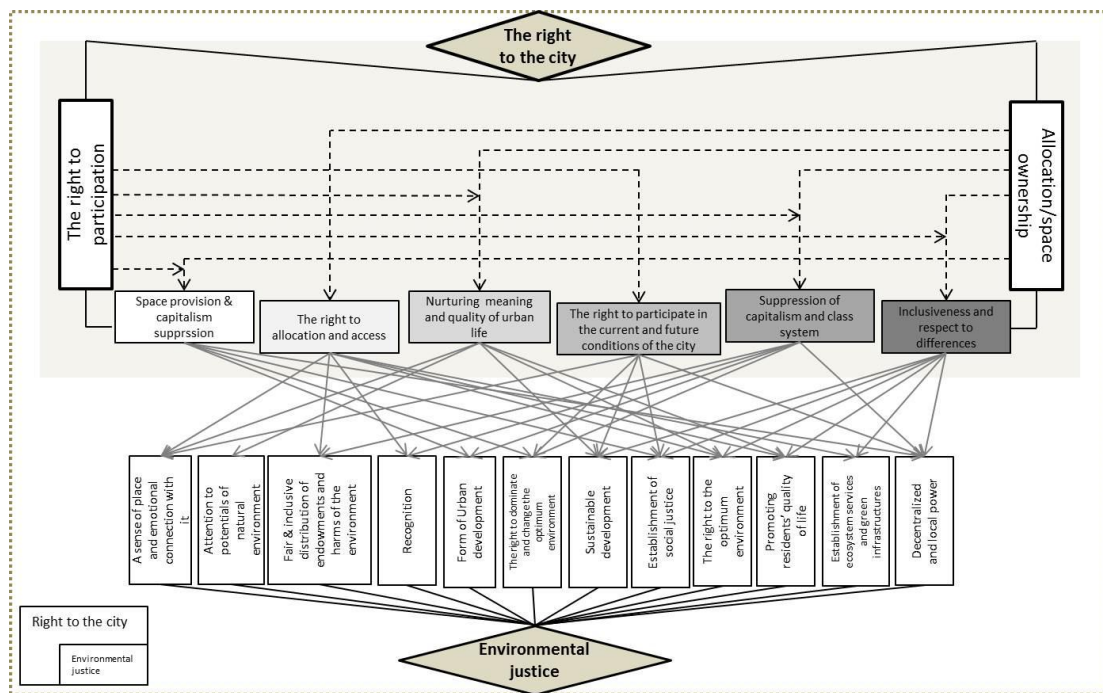


Fig. 1. Conceptual model indicating The Right to the City and Environmental Justice along with dialectic of their concepts

There is a significant relationship between strengthening citizenship rights and meeting environmental requirements. Creating urban space according to the tastes of urban dwellers and increasing their participation based on the theory of local democracy improves the quality of urban life and public satisfaction. Critical urban theory, devoted to the protection of the right to the city, requires revealing the prevalent sources of deprivation and dissatisfaction and to show the typical nature of the demands and aspirations of the majority of people. Pierce, Williams, and Martin (2016) drew on Lefebvre's concept of the right to the city and developed the approach of the right to the place. This approach recognizes that the establishment of the place occurs through "multiple experiences and meanings" and seeks to respond to competitive and shared rights which are demanded both within the place and in the larger political and spatial contexts. The allocation of resources requires the right to be present in that space, but it also requires the production of spaces that actively foster a dignified and meaningful life (Marcuse et al., 2009).

5. Discussion

The present papers aimed to find out the reasons for the inability to implement environmental justice. One of the important differences between this paper with other studies of environmental justice is the simultaneous attention to socio-economic data and their environmental benefits, under the light of the concept of the right to the city. Since justice has two objective and subjective dimensions and depends on the perception of citizens, it is worth taking great steps towards achieving justice by realizing the right to the city (Lefebvre, 1996), which requires the engagement of the dwellers and users of space in decision-making, producing, and reproducing urban spaces. As mentioned earlier, urban public spaces in various forms, such as parks (at all levels of urban physical divisions), local gardens, lawns, etc., are among the places that can play an important role in providing a sense of citizenship.

Another noteworthy point is the attention to the dialectic of power in space. According to some theorists, including Harvey (2012) and Lefebvre (1967), the dominance of power has played a very important role in the formation of urban spaces (Svarstad and Benjaminsen, 2020; Weber, 1968). Accordingly, when there is no apparent reason for some conditions in space, the power dominated there and taken control of space can represent the answer. If the components of the right to the city are realized, and bottom-up governance is implemented with respect for and recognition of all the social strata, as one of the components of environmental justice (Bohman, 2007; Svarstad and Benjaminsen, 2020; Schlosberg, 2007), we will have cities whose dwellers from any income, ethnicity, gender, or culture will feel satisfied, not marginalized.

Therefore, in line with one of the goals of this article, the existing socio-economic conditions, legal debates, and most importantly, the right to the city must be considered

in addition to the examination of urban physical conditions to interpret the sources of environmental injustice. We will fail to achieve environmental justice with a restricted perspective to provide green space per capita and protect the privileged urban areas against environmental harms and sufferings. The city belongs to all its dwellers, and all of them must be recognized and provided with the best living conditions.

Regarding the first research question, the conceptual model (Figure 1) illustrates the answer in detail. Considering the second research questions, a closer look at both concepts reveals that about two-thirds of the constituent categories of environmental justice are non-physical and fit into the socio-economic dimensions., including a sense of place and emotional connection with it (Altman & Low, 1992; Petrovic et al., 2019), inclusiveness (Brown and Kristiansen, 2009), recognition (Bohman, 2007; Svarstad and Benjaminsen, 2020; Schlosberg, 2007), the right to dominate and change the environment (Steil and Connolly, 2009), social justice (Harvey, 2008; Rigolon, 2016), the right to access optimum environment (World Charter on the Right to City, 2004), promotion of quality of life (Bryant, 1995), and decentralized and local power (Svarstad and Benjaminsen, 2020).

When social differences are overlooked, the needs and demands of disadvantaged groups are ignored and misunderstood (Dawson and Martin, 2015), leading to the inadequate meeting of their needs and even adding to their problems. The city belongs to everyone who lives in it, and access to urban services is a basic necessity to achieve freedom of choice and the inherent freedom regarding the right to the city.

In the field of environmental justice, the studies have not examined the reasons for the formation of this injustice and have only measured environmental justice in the study samples locally or through a limited physical and social perspective. There is a lack of a comprehensive study that examines the sources of environmental inequality and injustice from different perspectives in the context of new urban theories. Current cities can achieve justice and sustainability with the use of the power of citizens by recognizing their rights and thus taking local actions, despite the severity of inequalities, contradictions, and diversity.

6. Conclusion

Despite the ever-increasing number of studies in the urban planning field, a lack of advanced collective knowledge about multifaceted dimensions of spatial and environmental justice is recognized in current urban theories, especially when it comes to the context of policymaking and social planning. Hence force, a rising rate of social and environmental problems are come up in this field. One of the main causes of such problems is related to cultural, contextual, social, and demographic differences in both environmental justice and right to the city. In this research, a better understanding of the relationship between the concepts of the right to the city

and environmental justice achieved by analyzing more than 150 creditable scientific references in various urban scales and investigating definitions, policies, and plans in anonymous cities around the world. In this way, an accurate and discernible presentation of various dimensions of environmental justice is investigated along with inadequate current solutions in the establishment of environmental justice in urban spaces. Thus, introducing effective solutions in the policy-making process is studied to turn environmental justice and right to the city into a reality. In this paper, two key concepts of the right of participation and enclosure were inferred as the principles of the right to the city concerning environmental justice. A city is a place in which its inhabitants experience various socio-environmental issues (Heynen, N. Kaika, M. Swyngedouw, 2006, Certoma et al., 2019: 68). The right to the city refers to a set of methods and principles for fundamental adaptations in the city, by which a wide range of opportunities and spaces are provided for citizens to afford their needs (He, 2015). According to the majority of theorists, environmental justice is controlled by managers' and authorities' plans and policies based on accurate recognition of all stakeholders' needs and interests. In addition, to address the environmental imbalance, the environmental quality should be evaluated along with its related aspects about users (Occelli et al., 2016). Since urban public services plan determines the physical, social, and spatial structure, form, and nature of a city, considering justice in distributing such services in a way to supply all citizens well (especially the environmental services in metropolises) is a very important topic in the concept of the right to the city. Another issue in making environmental justice into reality is focusing on the participatory nature of decision-making and decision-making processes based on users' participation. In this respect, various classes of people had to be provided with adequate training to improve their awareness, so that the managers can leverage their capacities for realizing environmental justice (Chaudhary et al., 2018). An indication of confusion in environmental justice, especially in developing countries, is that the social and environmental costs of this issue are induced to suburbs and surrounding green areas, which violates the citizens' rights and disturbs the social justice in such areas by itself. In this regard, this paper proposes more focus on regeneration urban environmental spaces in plans rather than developing new ones. This finding is in agreement with those of other interesting research works such as Purcell who believes that the claims of the right to the city are dominantly seeking to explore and regenerate the city and its flourishing (Purcell, 2013). An increasing confluence is appearing in environmental issues and public green spaces in cities. But, one may conclude that setting policies based on socio-spatial solidarity can create a platform for socio-political organizations and authorities, which are a part of social capital, to not only do address social needs but also establish alternative processes for appropriate distribution of environmental resources in a hierarchical scheme.

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