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# An interdisciplinary perspective on environmental justice: integrating subjective beliefs and perceptions

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## Abstract

*In this paper, environmental justice is considered from an interdisciplinary and integrative perspective that combines theories and studies in geography, environmental policy and planning with a justice psychology approach. This opens up an integrated view, which takes into account both societal and individual aspects of the perception and evaluation of environmental justice. In this sense, notions of environmental justice(s) are seen as the result of discursive processes, historical contexts and a social localization and standardization that is shaped by both cognitive evaluation processes and emotions. Additionally, environmental justice in participation processes is considered in the context of environmental and sustainability policy and its implementation, first summarising the points of criticism of participation processes and then discussing environmental justice as an aspect of participation practice. From this, some key points for a more justice-sensitive design of participation processes in the context of environmental and sustainability policies and programmes (e.g. adaptation to climate change, urban planning, energy system transformation) are derived. This interdisciplinary analysis shows that there is not 'one' environmental justice, but a multitude of ideas and evaluations based on different concepts and perceptions.*

## Zusammenfassung

Der vorliegende Beitrag befasst sich mit Konzepten und politischen Praktiken im Kontext der Umweltgerechtigkeit aus einer interdisziplinären und integrativen Perspektive, in der insbesondere geographische und umweltpolitische Theorien, Forschungen und Erkenntnisse mit denen der Gerechtigkeitspsychologie kombiniert werden. Damit soll ein integrierter Ansatz ermöglicht werden, der sowohl gesellschaftliche als auch individuelle Aspekte der Wahrnehmung und Bewertung von Umweltgerechtigkeit berücksichtigt. Verständnisse von Umweltgerechtigkeit werden hierbei als Ergebnis diskursiver Prozesse, historischer Kontexte, sozialer Verortung und Normierung gesehen, die auch von kognitiven Bewertungsprozessen und Emotionen beeinflusst werden. Darüber hinaus wird Umweltgerechtigkeit in Beteiligungsprozessen im Kontext der Umwelt- und Nachhaltigkeitspolitik und ihrer Umsetzung betrachtet, wobei zunächst die Kritikpunkte an Beteiligungsprozessen zusammengefasst und anschließend Umweltgerechtigkeit als ein Aspekt von Beteiligungspraxis diskutiert wird. Daraus werden einige Eckpunkte für eine gerechtigkeitssensiblere Gestaltung von Beteiligungsprozessen im Kontext von Umwelt- und Nachhaltigkeitspolitiken und -programmen (z. B. Anpassung an den Klimawandel, Stadtplanung, Energiewende) abgeleitet. Diese interdisziplinäre Analyse zeigt, dass es nicht ‚eine‘ Umweltgerechtigkeit gibt, sondern eine Vielzahl von Ideen und Bewertungen, die auf unterschiedlichen Konzepten und Wahrnehmungen beruhen.

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### 1. Introduction

This paper deals with concepts and political practices in the context of environmental justice from an interdisciplinary and integrative perspective, in which in particular geographical, environmental policy and planning theories, research and findings are combined with those of justice psychology. This is intended to enable an integrated approach that acknowledges both societal and individual aspects of the perception and evaluation of environmental justice. Understandings of environmental justice are seen as the result of discursive processes, historical contexts, social localization and standardization, which are influenced by cognitive processes of evaluation as well as by emotions. After a brief definition and an illustration of the range of the term environmental justice, philosophical foundations of (environmental) justice are presented. Here the focus is on concepts from human geography, urban sociology and environmental planning. Subsequently, examples of environmental and sustainability justice as political practice will be presented, which are relevant for the later reflection of participation processes. Particular reference is made to existing conceptual and practical justice deficits, especially with regard to social justice. The following section is dealing with the perspective of justice psychology, which defines environmental justice as subjective belief. The importance of the 'belief in a just world' and the influence of emotions are shown here as important foundations for justice evaluations. Following these conceptual explanations, environmental justice in participation processes is considered in the context of environmental and sustainability policy and its implementation, first summarizing the points of criticism of participation processes and then discussing environmental justice as an aspect of participation practice. From this, some key points for a more justice-sensitive design of participation processes in the context of environmental and sustainability policies and programs (e.g. adaptation to climate change, urban planning, energy system transformation) are derived. This interdisciplinary analysis shows that environmental justice should be thought from a multiple-perspective approach, which is sensitive to the fact that justice evaluations also depend largely on individual evaluation processes and can therefore be very different. Notwithstanding the diversity of justice evaluations, the evaluation of whether something is considered just or unjust has a central importance on behavior.

The statements and conclusions in this paper refer first and foremost to informal participation processes in democratic societies in the Global North, as they are quite common in national, regional, and local planning and implementation processes. The focus here is on participatory processes that are initiated by political actors, within the framework of applied research projects or by professionals such as planners, and that generally pursue the objective of increasing acceptance for planned measures and their implementation. Formal participation procedures are not taken into account in the following as their strictly formalised procedure leaves no significant room for design options and requires separate consideration due to their structural characteristics. In this paper, the terms 'justice evaluation' and 'justice assessments' are used synonymously and both refer to processes of consideration in assessing whether something is perceived as just or unjust.

### 2. Definition and scope of environmental justice

Environmental justice is most commonly divided into two (distributive justice, procedural justice) or three (complementary: justice as recognition) basic concepts. Distributive justice defines the distribution of goods or bads in terms of harms and risks. The evaluation of distributive justice often follows quantitative, statistical approaches, e.g. measuring air quality in the neighbourhood of industrial production facilities and analysing particularly polluted parts of the city while at the same time taking into account the social structure of the affected neighbourhoods (Walker 2012: 10). Procedural justice in the sense of a broad, inclusive and democratic decision-making procedure is defined as a tool or even a prerequisite for achieving distributive justice (Walker 2012: 47 with reference to Schlosberg 2007 and Torres 1994). Justice as recognition as a third separate, but closely connected, concept focuses in particular on the consideration of potentially affected persons or groups of persons and their claim-making. It was introduced into the debate by Schlosberg (2004), defining recognition both as subject and as condition of justice. In his comparative analysis, Schlosberg (2007) argues both for the socio-critical consideration of social context and structural inequality as demanded by Young (1990) and Fraser (2000), and the socio-philosophical approaches of Honneth (1992; 1995; 2001) and Taylor (1994) which

emphasize recognition as a central aspect of personal identity and identity formation.

Furthermore, recognition does not (exclusively) have to relate to a human perspective on the current situation, but can also include recognition of the needs of future generations, or non-human species, or even ecosystems. In addition, there is also the question of the weighting of perspectives: is the well-being of 'the humankind' more important than the well-being of individuals? Or is there a path to preserving justice at both scales? For *Clayton*, the issue of justice is the most overarching question with regard to environmental justice though there are "multiple justices to consider" that makes it "impossible to satisfy all justice concerns simultaneously" (*Clayton* 2000: 473). Albeit, these conceptual distinctions are permeable; *Clayton* and *Opatow* (2003: 301) emphasize that the distinction between the concepts of distributive and procedural justice is not to be understood absolutely, but rather relatively. For example, engagement in a process can be defined as a social good, taking part in the decision making a resource itself (*Klein* and *Azzi* 2001). Also, procedures and distributions might intermingle in practice. The following section presents the philosophical foundations of environmental justice, focusing on contributions from geography, urban sociology and environmental politics and planning.

## 2.1 The philosophical foundations of environmental justice

Historically, the term environmental justice originates from the US-American environmental justice movements, which since the 1970s dealt with issues of the unequal distribution of environmental burdens/pollutions in terms of race, class, gender and national status (for a detailed analysis of the origins and development of environmental justice see *Walker* 2012 or *Agyeman* 2005). In the meantime, a broad spectrum of definitions and concepts has developed, referring to different socio-philosophical approaches. Since the 1990s, discourses on justice have increasingly been the subject of scientific consideration. The question of what (environmental) justice is, which principles and elements are or should be given what significance, is not only the subject of lively and controversial debate in political but also in scientific contexts. "Environmental justice, like sustainability, is a contested and problematized concept" (*Agyeman* and *Evans* 2004: 155), that is not easy to define. The concept of environmen-

tal justice has by now become more differentiated and can also be found as an element in other concepts of justice, in different areas such as just cities, energy justice or sustainable justice.

In geography, urban sociology, environmental politics and planning, questions of justice and equity were raised and examined especially in the context of critical urban research, with a focus on (in)justice in European and US-American urban development. In particular, authors from critical urban research have presented conceptual work on justice, notably *Harvey* (2009), *Fainstein* (2010) and *Agyeman* (2005).

*Harvey* (2009) focuses on distributive justice from a Marxist perspective, in particular on socio-economic inequalities that are embedded in the capitalist structure and the mechanisms of global economy markets. Territorial social justice refers in particular to distributive equality, that could be achieved under the following conditions:

- "1. The distribution of income should be such that
  - (a) the needs of the population within each territory are met,
  - (b) resources are so allocated to maximize interterritorial multiplier effects, and
  - (c) extra resources are allocated to help overcome special difficulties stemming from the physical and social environment.
2. The mechanisms (institutional, organizational, political and economic) should be such that the prospects of the least advantaged territory are as great as they possibly can be" (*Harvey* 2009: 116).

Under capitalist market conditions, *Harvey* sees no possibility of fundamentally changing or reducing inequalities. Instead, in his view, there is more of a danger that even well-intentioned approaches can turn into the opposite, such as infrastructural improvements of urban districts can lead to gentrification processes and thus to the (re)production of social inequality and displacement (*Harvey* 2009).

For her approach to develop a vision for a just city, *Fainstein* presented a profound analysis and reflection of social-philosophical approaches to justice. In doing so, she agrees with *Harvey's* critical analyses in two respects: with regard to the identification of urban distributive injustice and inequality and in that "the content of the term justice takes on different meanings depending on social, geographical, and historical con-

text" (Fainstein 2010: 23). At the same time, however, she criticizes his and other 'utilitarian' concepts, both from Marxist and liberal theory, for what she sees as a one-sided focus on economic equality and the failure to take social diversity into account. For this, Fainstein includes difference-theoretical approaches (referring to Young 1990; Fraser 1995) as well as the capabilities approach of Sen (1993) and Nussbaum (2000) in her considerations. Albeit, she stresses that the emphasis on social difference must not lead to socio-economic inequality being ignored. Another of Fainstein's criticisms relates to deliberative democratic approaches that address procedural justice by focussing on communicative and participatory processes. Hereby, she does not criticize the normative ideal of deliberative democracy that every opinion in the process should be heard and no particular group should be privileged. Instead, she doubts that this normative ideal is feasible in the face of social and economic inequality and thus different power relations. Furthermore, she points out that communicative processes alone are not sufficient to transform structures: "The aroused consciousness that puts ideas into practice requires leadership and the mobilization of power, not simply reasoning together" (Fainstein 2010: 33).

Yet, Fainstein sees potential for more just urban development under the given conditions and identifies three basic qualities which should serve as guidelines for just local urban planning processes: equity (in the sense of distributive justice and equal opportunities), diversity (i.e. recognition of cultural and social differences) and democracy (in the sense of participatory involvement of those affected). *Equity* is strongly influenced by Rawl's principle of difference and refers to "a distribution of both material and non-material benefits derived from public policy that does not favour those who are already better off at the beginning" (Fainstein 2010: 36). In doing so, she positions the principle of equity as a contrary to utilitarian approaches (liberal theory and Marxism): "the greatest happiness of the greatest number says nothing about the happiness of those not among the majority" (Fainstein 2010: 37).

*Diversity* "is a convenient shorthand, encompasses reference to the physical environment as well as social relations, and refers to policy ambitions that go beyond encouraging acceptance of others to include the social composition of places" (Fainstein 2010: 68). Diversity is not only about an objective, but also about how to deal with different or conflicting interests in

planning processes in a way appropriate to the context. "In sum, diversity as a planning doctrine reflects an aspirational goal; at the same time the desirability of pressing for it depends very much on the process by which it is achieved and the class and racial/ethnic context in which it operates" (Fainstein 2010: 76f.).

*Democracy* is an essential component of just urban planning, which creates the possibility of negotiating different perspectives and needs. This contradicts planning approaches in which technocratic expert solutions are preferred. Instead, Fainstein (2010) assumes that all interests are also shaped by self-interest (i.e. including those of the experts) and that no single actor can oversee all aspects and perspectives.

Fainstein limits the applicability of these guidelines to specific social contexts, namely to "societies with a preexisting commitment to democratic-egalitarian norms as well as a history of applying such norms, albeit through practice that may fall well short of the ideal" (Fainstein 2010: 171).

Another critical approach to procedural justice relates to post-political and post-democratic environmental and sustainability policies and calls for their re-politicisation. The term 'post-democracy' defines a form of democracy that is characterised by policy-making based on consultation with stakeholders rather than on political debate (Crouch 2008). Swyngedouw (2010; 2013) identifies *post-political* and *post-democratic conditions* in relation to climate change policy, and also focuses on inclusion and exclusion. Here, the act of governing is transformed into a "stakeholder-based arrangement of multi-scalar governance in which the traditional state operates institutionally together with experts, NGOs and other 'responsible' partners (while 'irresponsible' partners are excluded)" (Swyngedouw 2010: 227). These post-political negotiation processes take place within a framework of global and largely (neo)liberal capitalist structures, while "radical dissent, critique and fundamental conflict" are evacuated out of the political arena (ibid.).

### 2.2 Environmental and sustainability justice as political practice

Although concepts of sustainability include intergenerational and international justice, social differences are generally not considered. This partial blindness of sustainability and environmental policies with regard

to social (in)justices can be found in many different contexts, at various levels and among various groups of actors, for example in the context of green and sustainable urban development. Although, sustainability programs name different groups and call for adequate consideration of different needs (e.g. section 3 of the UN Agenda 21: strengthening the role of major groups, *United Nations* 1992a), there is a considerable discrepancy between political declarations of intentions and political practice. For example, in the area of sustainable consumption and production patterns, which has been a central issue since the beginning of the sustainability debate, social justice aspects are also largely ignored. This refers in particular to the consideration of power relations and gender dimensions: “The next immediate issue is how the various actors differ in terms of their power and ability to influence and shape the transformation or continuation of existing relationships and how these reflect gender inequalities” (*Weller* 2017: 341).

Another theoretical approach with its focus on social injustice and on justice as recognition comes from postcolonial studies. In the last decade, a growing number of studies have been carried out on this subject, particularly with regard to energy justice in countries of the Global South. They emphasize the importance of justice as recognition and call for a focus on socio-ecological dynamics rather than energy resources when designing and implementing energy transformations in countries of the Global South. One point of criticism is directed, for example, against Eurocentric modernization ideologies that devalue traditional energy uses (firewood, charcoal) per se and can thus lead to an increase in social inequality (*Hoffmann* 2016; *Munro et al.* 2017; *Castán Broto et al.* 2018). This modernization policy is not necessarily only ecologically motivated, but is also guided by economic interests, as *Munroe et al.* (2017) show using the example of the influence of the petrochemical industry (Total, BP) on energy transformation in Sierra Leone. Such modernization strategies may even contradict the climate and sustainability goals actually pursued (liquefied petroleum gas as a substitute for locally produced charcoal) (*ibid.*).

Post-political conditions can be found with regard to environmental gentrification processes in urban planning, which are characterized as follows: “[...] environmental gentrification operates through a discourse of sustainability which simultaneously describes a vision of ecologically and socially responsi-

ble urban planning, a ‘green’ lifestyle which appeals to affluent, eco-conscious residents, and a technocratic, politically neutral approach to solving environmental problems” (*Checker* 2011: 212). Also, the resulting upgrading processes can lead to or further intensify social injustices through the exclusion and displacement by rising rents of economically vulnerable populations, such as homeless people and low-income populations, which *Dooling* (2009) and *Checker* (2011) have investigated in case studies from US cities (Seattle and New York). The technocratic planning approach does not take sufficient account of the different needs of the various inhabitants and users of urban space and limits their opportunities for co-design. Other studies with a focus on eco-cities point to a “dilution of original ideas and concepts (with emphasis on social justice, civic empowerment and local democracy)” (*Joss* 2011: 278) and a development towards a dominance of technocratic (post-political) approaches with a strong emphasis on ecological ‘green’ aspects. Protest movements, e.g. in the eco-city of Freiburg, Germany, criticize the misuse of the eco-city concept to mask neoliberal ‘green growth’ strategies by focusing on shortages in the local housing market and rental price increases – though these movements are not questioning the sustainable consensus itself (*Mössner* 2016).

The poststructuralist analysis of sustainability as an ideological practice (*Davidson* 2010) reaches comparable conclusions with regard to the discursive displacement of social justice by primarily ecologically oriented sustainability: “Sustainability has replaced equality and/or social justice as the ideological pivot for urban planning” (*Davidson* 2010: 391). Such a pivot (point de caption) can serve to order disjunctured realities and thus function as a master-signifier in the sense of *Žižek* (2006). “The *point de caption* therefore brings order and perspective, funneling a diverse array of elements into a coherent stream and, as such, enables a making-sense-of-the-world” (*Davidson* 2010: 392). Through a discursive supremacy of the master-signifier, the different contents and their qualities fade into the background of the discourse. “The consequence of this is that we no longer have a marker that designates certain qualities; for instance, that sustainability is concerned with lower emissions, more community trust and more resilient economies. Rather, the master-signifier becomes the cause itself, losing its necessary qualities” (*Davidson* 2010: 392).

Here, parallels can thoroughly be drawn with environmental justice, which is invoked as a political demand and objective by the most diverse actors in the most diverse contexts. Nevertheless, there is an important structural difference between the concepts of environmental justice and sustainability: while environmental justice has emerged bottom-up particularly in the context of US environmental justice movements, sustainability has emerged in a global political top-down process (UN Sustainable Development Goals). Despite this structural difference, both terms need further explanations and definitions for the respective context, as they are hardly meaningful on their own.

In political strategy papers and public documents and argumentation justice is scarcely defined or concretised and leaves considerable room for interpretation. Furthermore, it sometimes seems “to indicate an idiosyncratic notion of what a person or an organisation consider to be the case from their particular viewpoint” (Syme 2012: 284). An analysis of justice aspects in strategy papers on climate adaptation in Germany has shown that although justice aspects are mentioned in climate adaptation documents, there are no concrete indications or recommendations for action on the systematic consideration of justice in the implementation of climate adaptation measures. This applies both to the general design of adaptation measures and their impacts and to the design of processes and participation procedures (Baasch 2012).

Also, the concept of environmental justice, more precisely its scope, is subject to criticism: Agyeman (2005; 2008), for example, advocates replacing the concept or focus of environmental justice, which in his view is too limited to address the questions of global inequality, with just sustainability. The just sustainability paradigm is intended to overcome the separation between the ‘green’ strategies preferred in countries of the Global North (including environmental protection, biodiversity) and the ‘brown’ strategies such as poverty reduction, infrastructure development, health and education, which are particularly demanded by countries of the Global South (Agyeman 2008: 753). Agyeman defines sustainability from an anthropocentric viewpoint, where the value of nature is derived from its function as the basis of human life: “the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems – which prioritizes justice and equity, but does not

downplay the environment, our life-support system” (Agyeman 2008: 753 with reference to Agyeman et al. 2003: 5). However, a mere shift in focus from environmental justice to sustainability justice does not necessarily lead to a more comprehensive appreciation of justice aspects as the examples at the beginning of this section show.

From various perspectives, environmental justice is nowadays assumed to be blind to social injustices. This is also the expression of a clear conceptual shift, for the term environmental justice arose in the context of social movements in which social inequalities were at the center.

### 3. Environmental justice as perception and subjective belief

In the following, justice is discussed from the perspective of justice psychology, which, in contrast to normative disciplines (e.g. philosophy), does not focus on the question of ‘what is just or unjust?’, but instead considers justice as a subjective belief: “All we can learn about justice has the status of subjective beliefs, which may be more or less well reasoned” (Montada 2012: 9). This view has far-reaching consequences insofar as it rejects the idea of any objective or objectifiable justice “[...] generally approved truths about justice – suggested by the exclusive use of the singular *the* justice – cannot be identified, neither empirically, nor normatively. What is true or not cannot be decided objectively it is a matter of subjective convictions” (Montada 2012: 9, accentuation in the original text). Clayton and Opatow define justice as “an abstract system of beliefs and standards prescribing appropriate relationships between people and their fates” which is “operationalized through law and legal procedures as well as less formally in shared norms (e.g. reciprocity) and values (e.g. equality)” (Clayton and Opatow 2003: 300). In this sense, justice is described as an anthropomorphic “malleable and fluid construct”, although it is “intuitively felt to be objective” (ibid.).

From this perspective there is no need to ask what is just or unjust, it is rather about how (in)justice is experienced and evaluated. In public equity or justice is used in particular when the issue of unequal or unjust treatment is raised (e.g. environmental justice movements see above), which means that concepts addressing justice (equity, equality, fairness) are most notably invoked in their perceived absence (Syme 2012).

However, considering justice as a subjective conviction does not mean that its significance is diminished. On the contrary, justice in the context of (environmental) behaviour is described in the justice-psychological literature as a central motive for the evaluation criterion both for actions, decisions etc. of others and for one's own actions (Montada and Kals 2000; Montada 2012). From the perspective of justice psychology, the striving for justice cannot be traced back to other motives such as self-interest but serves as an original primordial motive of human beings (Montada 2012). This view, based on empirical findings, contradicts the NIMBY ('not in my backyard') analogy which attributes opposition in participation proceedings to particular interests and assumes those affected have purely selfish motives (Devine-Wright 2012).

"While the justice motive is universal, the views about what is just and what is unjust are not at all universally shared" (Montada 2012: 11). The sense of justice is based on different cultural constructs and norms, variable definitions by individuals, and social groups, and it depends on diverse prioritizing like the importance of financial growth, practicality, or expedience (Clayton and Optotow 2003). Justice assessments are the central aspect in the development of social conflicts and as justice psychology points out, almost all social conflicts can be traced back to justice conflicts (Montada 2012). Justice-psychological debates emphasize that the sense of justice and its evaluation have a strong influence on behaviour, since the perception of environmental justice can motivate people to behave in an environmentally friendly way. Also, the experience of injustice motivates the need to resolve perceived injustices by compensating them through specific behavior (Baier et al. 2013: 273 with reference to findings by e.g. Kals and Russell 2001; Syme et al. 2006; Clayton and Myers 2009).

### 3.1 The belief in a just world as a basis for evaluating justice

The evaluation of justice as the result of subjective consideration processes is based on underlying norms and moral concepts. Particularly significant for explaining justice evaluations is the 'belief in a just world', which was first formulated 50 years ago. The concept of belief in a just world is based on the desire for justice which, in turn, is grounded in the need for control and security (Lerner 1980). It enables people to consider the world or, more specifically, their living

environment as predictable and the consequences of their own actions as plannable. The ideas about how a just world looks like vary among individuals due to socialisation. According to Lerner (1980), the belief in a just world fulfils an important social function by providing a basis for interpreting events and experiences that is perceived as stable and reliable. This view assumes that people want to live (and believe) in a just world, to avoid the threatening idea that there are instances in which people are suffering through no fault of their own (Hafer 2012). Believing in a just world provides people with a basic confidence to invest in long-term goals and also supports well-being (Hafer 2000; 2012 with reference to Dalbert 1999; 2001).

A just world is described as a world in which basically everyone gets what they deserve and deserve what they get. In contrast to the equity theory (Adams 1965; Walster et al. 1973), earning is not seen as a statement of a balance between investments and results of two partners, but as a conviction that there must be a correspondence between the deeds and the fate of a human being (Maes et al. 2012). Since the belief in a just world functions as a social orientation, attempts are made to maintain it even if there are events that are obviously contrary to it. The stronger a person believes in a just world, the more victims or losers are attributed responsible for their own fate (which is called 'blaming the victim effect', see Ryan 1971; Montada 2012) while the successful and the winners are admired and their social status is regarded as justly deserved (Hafer 2012). This effect has been shown in numerous empirical studies (Hafer and Bègue 2005).

### 3.2 The relevance of emotions

Emotions play a central role in environmental justice and environmental issues in general. On the one hand, the demand for less pollution and more climate protection is closely linked to the evocation of fear and rage, on the other hand, emotions such as fear and helplessness lead to denial of climate change (Norgaard 2011). In particular, (justice) psychological studies have dealt with the role of emotions in justice evaluations. The perception of justice is a result of consideration processes which are not only based on rational evaluation but also on emotions (Kals and Russell 2001). Yet the role of emotions in moral and justice evaluations has long been underestimated. Emotions play a pivotal role in the moral evaluation of both one's own and

others' actions and are an important link between the perception of fairness or unfairness and behaviour (Müller 2012). Perceived injustice triggers a variety of negative emotions (like anger, outrage, guilt), while the respective extent and strength depends on historical and social context and personality factors (e.g. Feather and McKee 2009).

While anger is the predominant emotion of people who perceive themselves as victims of injustice, guilt is the predominant emotion when one (knowingly and consciously) gains an advantage through injustice (Thomas et al. 2012). In her study on environmentally privileged people (based on case studies in the US and Norway) and their handling of guilt, Norgaard (2011) shows how guilt and feelings of helplessness are intertwined. To knowingly contribute (disproportionately) to climate change and at the same time live in a society that, from a global perspective, consumes an unfair amount of resources, not only causes feelings of guilt but also the experience of helplessness. Guilt is an emotion that motivates cognitive dissonance (Norgaard 2011). Cognitive dissonance (Festinger 1957) is a theory that "[...] predicts that information which is in contradiction to a prior perception, belief or decision causes the aversive state of cognitive dissonance and triggers defense motives" (Streicher et al. 2012: 190). As an emotional management strategy, reducing cognitive dissonance could lead to avoiding conflicting information and selectively searching for supporting information (Streicher et al. 2012).

Emotions are also a topic in geography. From a post-structuralist and feminist perspective, there is a demand to (re-)integrate emotions as an immanent part of geographical research: "[...] the challenge is to stop excluding emotion from geographic scholarship" (Wright 2010: 819). Here, emotions are regarded both as the object of research (e.g. emotional citizenship, race embodied in emotions, emotional experience of nation state and communal belonging: Wright 2010; re/productions of enmity and otherness: Askins 2019) as well as an important component of self-reflective research (on affectual intensities see Miltz et al. 2019).

Emotional aspects of justice evaluations are of considerable importance with regard to participation procedures. Perceived injustices can trigger strong emotions and thus have a negative impact on participatory processes or negotiations, for example, by leading to the hardening of conflicts and a refusal to act cooperatively (Müller 2012).

The previous considerations have given an impression of the diversity of different, sometimes contrary, justice perspectives in the context of environmental and sustainability justice. In sustainability and environmental debates there are usually very imprecise concepts of justice, which leaves much room for interpretation. It can be concluded that it is useful or even necessary to link the individual (subject) level and the social level. The subject level in particular is often overlooked here and instead the focus is primarily on the social level, which on closer analysis proves to be highly fragmented and contradictory. An integrated perspective can uncover perceived justice deficits at different levels and contribute to their understanding. In the following section these considerations about justice(s) will be discussed with regard to participation processes, focusing on informal participation procedures in the context of environmental and sustainability policies and planning.

#### 4. Environmental justice in participation processes

Since the UN Conference on Environment and Development held in Rio in 1992, where the increased participation of the population was recognized as an important part of sustainable development (United Nations 1992b), participation has become an indispensable component of a variety of environmentally relevant policies. The areas of application of participation procedures are as diverse as the scales of reference and participation levels: they range from national citizen dialogues via events, online participation and postcard campaigns to information and consultation processes in regional development to a variety of participatory approaches in urban planning. The focus of this paper is on informal participation processes (i.e. not legally regulated) in the context of environmental, climate and sustainability policies and planning (e.g. urban planning, the construction of renewable energy plants (especially wind farms) and adaptation to climate change or climate protection), which have become very widespread and are usually initiated top-down in the context of applied research projects, by political actors or professionals like planners (Baasch and Blöbaum 2017; Thorpe 2017). Although the formats and methods used vary considerably in practice (from information and discussion events to real-life laboratories), participation is predominantly used as a way of creating acceptance and improving opportunities for implementation in current political



and mostly scientific practice (Walk 2013). The underlying understanding of participation in practice is as heterogeneous as the contexts in which informal participation procedures are used: how is participation defined, who initiates which processes, who selects participants, and which methodological approaches, such as participation, are used, is mostly left to individual implementation actors (Baasch and Blöbaum 2017). Regardless of their popularity and widespread use, participation processes are often the subject of criticism, especially from a social science perspective as well as from environmental justice and right to the city movements.

### 4.1 Criticism of participation processes

“Yet, even though public decision making has become more participatory than in the past and authority is increasingly decentralized we have seen inequality grow, at least in part as a consequence of governmental actions” (Fainstein 2010: 35). Top-down initiated participation procedures (e.g. in urban development, location of wind farms, climate adaptation programs) are often criticised, for vague conceptions of participation as well as methodological weakness. The most frequent points of criticism of a lack of justice perspectives in participation procedures in the environmental context are (Baasch and Blöbaum 2017: 19):

- *Inaccuracy of concepts and terminology* includes inadequate definition of framework conditions such as the binding nature of results and/or the lack of definition of key concepts (such as transparency or justice);
- *selective actor involvement* which addresses issues of justice as recognition;
- *potential role conflicts* of involved actors, especially when actors define themselves as ‘neutral’, e.g. scientists who have a desire for scientific knowledge or underlying normative framings (like contributing to societal transformation);
- *inadequate method selection* which could relate to all three concepts of justice, depending on whether the methods are inadequate for the persons involved (justice as recognition), for the achievement of a just distribution, or to conduct a fair procedure;
- *selective handling of different knowledge bases and role assignments* which is often the case if ‘experts’ and ‘lay-persons’ meet in participatory processes;
- *selective production of results and/or lack of evaluation* depends on the responsibilities of the compila-

tion of results and their interpretation and whether participants were (equally) involved in them;

- *missing analysis of communication and group processes* which have a considerable influence on process results, but in practice are usually not taken into account when interpreting the results.

Inadequate participatory design could result in strengthening social and/or political inequalities (Few et al. 2007), e.g. common participatory approaches like group discussions may not be suitable for all target groups because they often require specific skills like verbal abilities. A more general critique of participation relates to the functions associated with such participative procedures. For example, many participation procedures are intended to serve regional or municipal actors to justify and legitimize their political actions as well as to reduce the risk of conflicts.

### 4.2 Environmental justice in participation practice

In environmental participation practice, however, justice evaluation usually plays only a minor role and is neither addressed directly or analysed in a differentiated way, nor systematically considered as a subject of discussion and evaluation (Baasch and Blöbaum 2017). Instead, very concrete issues of planning (such as the design of neighbourhoods) or the implementation of measures (e.g. energetic renovations, expansion of local heating networks) are often the focus of attention in participation procedures. Such a narrowed perspective can mask conflict potentials that are based on different justice evaluations. Particularly in participation procedures which a) are strongly aimed at conflict reduction and which b) are very strongly oriented towards a specific, previously defined problem (usually by experts), important justice evaluations can be overlooked, which can lead to a considerable intensification of the conflict. For example, this is visible in the controversial debates over the SuedLink, a high-voltage power line which should connect offshore wind energy from northern Germany to the production centres in southern Germany. In the course of the route planning of the SuedLink, a number of top-down participation procedures in which residents have the opportunity to contribute their opinions to the planning process, have been implemented. However, these are designed to relate only to specific locations and details of the route. There are no general discussions on alternative decentralised renewable energy system transformations. Con-

siderable resistance is already emerging here, especially in municipalities and regions that are focusing on decentralized renewable energy generation and who already claim to make their contribution to a sustainable energy transformation (Krack et al. 2017). Though, the desire or demand for participation is widespread: “Nowadays citizens, if personally affected by decisions, expect to be informed timely and extensively, to have the option to express their opinions and concerns, and to be treated with respect. Even if a final decision has followed the legal, democratic procedure, the violations of these fairness expectations can lead to strong resistance as two recent cases in Germany demonstrate: The refusal of farmers to give land for the Olympic Winter Games and the massive protests against a new main train station in the city of Stuttgart, both resulting in a delay of the construction works and jeopardizing the whole project” (Streicher et al. 2012: 194).

These examples illustrate how important transparency about justice aspects is both in political processes and participation procedures, not only for the prevention of conflicts but also with regard to other effects: “By being clear about what our justice principles are and by paying attention to how our formal and informal institutions function in endeavoring to deliver it, we have more of a chance of creating adaptive learning and resilience at local, regional, and international levels and thus avoiding at least some of the potential conflict” (Syme 2012: 284). In accordance with the normative objective formulated by Fainstein, participation processes are not seen here as an end in themselves or as a means of gaining acceptance, but rather as a means of achieving a fairer representation of interests: “The purpose of inclusion in decision making should be to have interests fairly represented, not to value participation in and of itself” (Fainstein 2010: 175).

Even if the concrete design of participation measures need to be context-specific, some relevant points for a more justice-sensitive design of participation processes can be identified from the above considerations. Here the focus is on the framework conditions, not on the concrete design of participation processes. There is considerable literature on this aspect, especially on the influence and consideration of procedural fairness (e.g. Syme 2012; Schlosberg 2007; Vermunt and Törnblom 2007). The importance of justice and the pursuit of (perceived) justice in the context of environmental and sustainability policies and measures is often un-

derestimated or is wrongly attributed to motives such as self-interest (Devine-Wright 2012; Montada 2012). The violation of a sense of justice can lead to strong emotional reactions and have a considerable conflict-aggravating or conflict-hardening effect (Müller 2012). In particular, the central role played by justice evaluations in the emergence and development of conflicts, including in participation processes, is overlooked. In general, there is a need for greater sensitivity to the fact that justice evaluations are subjective and can therefore vary widely. A consideration of multiple justices (Clayton 2000) requires the inclusion of different positions and actors, because no single actor can have such a comprehensive knowledge base that includes all different perspectives (Fainstein 2010).

## 5. Conclusion

Environmental justice shows a considerable range of concepts both in the theoretical debate and in the use of the term in the political-practical fields of application. In the context of sustainability and environmental policy, it usually remains undefined what is specifically meant by justice (Syme 2012). What is needed here are more differentiated definitions of environmental justice and the transparency of justice evaluations and their foundations. Such a definition or definitions require the consideration of different justice assessments by different actors – in line with Fainstein’s (2010) call for the consideration of equity, diversity and democracy in urban planning processes, which can also be applied to the context of environmental justice.

With reference to justice-psychological approaches (Clayton 2000; Montada 2012; Müller 2012), and according to Fainstein’s conceptual work in the context of a just city (2010), environmental justice should be thought from a multiple-perspective approach, which is sensitive to the fact that justice evaluations also depend largely on individual evaluation processes and can therefore be very different. Notwithstanding the diversity of justice evaluations, the evaluation of whether something is considered just or unjust has a central importance on behavior. This also applies to participatory processes in the context of sustainability and environmental policies. The mere fact that participatory measures are implemented is hardly meaningful in itself and does not per se imply more justice (Fainstein 2010). The range of what participation aims or should aim at ranges from post-political exclusion

strategies (Swyngedouw 2010), gaining acceptance (Baasch and Blöbaum 2017) to enabling learning processes (Syme 2012), actual empowerment and co-determination (Clayton and Opatow 2003). Nevertheless, participation processes offer potential to contribute to the visibility and consideration of justice evaluations, provided that they are appropriately designed conceptually and methodologically. Ideally, this can contribute to a re-politicization of sustainability and environmental policies, as participation processes can also have an empowering effect. At the same time, however, there is a need for increased consideration and political discussion of justice aspects in the context of sustainability and environmental policies. Today, there is a conceptual and also practical gap between the consideration of environmental justice and social justice.

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## An interdisciplinary perspective on environmental justice: integrating subjective beliefs and perceptions

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