Environmental Justice

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Introduction

The contextual background to justice theory labelled as environmental justice has a strong tradition in social justice movements related to race and environmental inequality in the United States. However, there are other strands that weave themselves into the thinking on justice theory situated within environmental justice. This includes earlier traditions that are rooted in what is now known as ecological justice, which tidily couples with environmental ethics and resource conservation as well as an older European tradition concerned with the health of urban populations and, more recently, global considerations of environmental justice in the context of international environmental concerns, such as climate change or transboundary pollution, for example (Kuehn, 2000; Taylor, 2000; Schlosberg, 2007; Villa et al, 2020). It is notable that the environment in the mainstream literature on environmental justice uses the term environment as an expression of one's surroundings over the use of the environment as part of nature and, as a result, the mainstream literature is centred on the human experience of their environment over justice for nature itself.

It is common within the environmental justice literature to focus on the forms of distribution, procedure, retribution and recognition across a range of vectors, including race, class, ethnicity, gender and disability, among others. The literature included within environmental justice is vast, situated within a range of disciplines, including sociology, law, geography, political ecology, and others. Much of this scholarship includes empirical and substantive studies of topics related to exposure and proximity to negative environmental indicators such as air pollution, toxic spills, noise, homeownership, water quality and energy poverty or access to positive environmental amenities such as parks, green infrastructure and other green spaces or benefits from

nature. However, there have also been efforts to theorise environmental justice (Schlosberg, 2007; 2013) or to frame a taxonomy for understanding the approach (Kuehn, 2000).

Environmental justice is defined through various expressions that attempt to capture the complexity and scope of what is included in this tradition, which includes battles against maldistribution, inequality in process, explicit or systemic discrimination and redress for harm to health and wellbeing. Kuehn suggests that '[e]nvironmental justice means many things to many people' (2000, p 10681), while Sze and London (2008) hold that 'environmental justice has struggled over the question of definitions' (p 1332) and 'can mean almost anything' (p 1347). A definition that is commonly subscribed to is provided by Bryant who defines environmental justice in the context of 'cultural norms and values, rules, regulations, behaviours, policies and decisions to support sustainable communities, where people can interact with confidence that their environment is safe, nurturing, and protective' (Bryant, 1995, p 589). In simple terms, environmental justice could be expressed as justice underlying decision-making on land-use outcomes.

While many scholars equate the tradition of environmental justice as the conceptual embodiment of the social justice movement in the United States emerging at the end of the 1980s, Bullard, dubbed the 'father of environmental justice', conceptualised these as separate strands with similar end results. In this regard, Bullard's approach to identifying the environmental protection campaign and the environmental justice movement as distinct methods reveals what different designations the subject of justice bring to the discussion. At times, these different approaches have been in competition with one another for resources and outcomes, albeit using different tactics to achieve their aims. But frequently they have learned to collaborate, support and even achieve mutual goals (Bullard, 1993). Scholars commonly suggest that environmental justice is the result of the merging of the conservation movement with the social justice movement with the 'linking of environmental goals to subgroup identity and social justice' (Dawson, 2000, p 22) and often, this is related to the home and to one's community (Hamilton, 1990).

The late 19th-century conservation movement in the United States focused on the preservation of natural resources and the protection of nature in terms of protection of the interests of future generations – not least for resource security, but also for biodiversity and ecosystem integrity. However, aside from an intensive setting aside of land and resources in national parks and national reserves, the environmental movement really had its springboard moment in Rachel Carson's *Silent Spring*, which highlighted the potential future ecosystem collapse that would result from pesticide contamination. While justice for nature is frequently absent in mainstream scholarship of environmental justice it does appear in Victorian ecocriticism studies

described as 'early environmental justice' (Hall, 2017, p 7), ecological theory scholars that promote 'putting more environment in environmental justice' (Clark et al, 2007, p 66) and, importantly, Indigenous scholars who suggest that environmental justice includes 'responsibilities toward the environment' (Robyn, 2002, p 213).

While both streams have the intention to improve the conditions of the environment at the heart of their objectives, the motivation stems from entirely different rationalities. In the environmental protection movement, nature is the subject of justice, while in the environmental justice movement, the subject of justice is a particular subset of society. The environmental movement has typically focused on attachment, enjoyment and preservation of land and nature while the environmental justice movement has focused on experiences and results of prejudice in the lived environment and 'framing of environmental issues in terms of discrimination against a particular population' (Dawson, 2000, p 23). Both streams have at their heart the ambition to change the trajectories and outcomes underlying the political economy of environmental decision–making.

Main ideas within the tradition

A key feature of environmental justice is that it begins in the environment and protection of the environment but ends in society with resulting benefits to both nature and humanity. Environmental justice is not limited to domestic contexts only, but expands into the international sphere, with connections between the displacement of environmental harms over international boundaries and the creation of geographic differences (Harvey, 1996) and intertwines 'three limbs of objection – human health, environmental protection and economic security' (Jessup, 2017, p 53). It reveals its key ideas through practices that champion the underdog in asymmetric power relations and support those with disadvantages in economic circumstances (Jessup, 2017). Its main tenets emerge in forms of justice related to distribution, procedure and correction, also including social justice as an underlying objective in its outcomes.

As Bullard notes, a notable difference between these two constituents of environmental justice is in the methods used to achieve their aims. While the environmental protection movement has relied on procedural interruption through legal interventions and lobbying, for example, the environmental justice movement has used direct action methods learned from the civil rights movement, such as public protests, demonstrations and petitions (Bullard, 1993). However, there is increasing cooperation between these two groups with 'technical advice, expert testimony, direct financial assistance, fundraising, research, and legal assistance' (Bullard, 1993, p 26), which resulted in a blurring between the methods and increasing uptake

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of grassroots movements to use legal interventions. Increasingly there is less division between the methods underlying the two streams and rather more differences between sites of injustice, where, in the United States, activism and the courtroom are common arenas for facilitating change, while within the United Kingdom, for example, it is still based in a growing discourse for non-governmental organisations and government (Agyeman, 2002).

While environmental justice has its roots in local appeals to remedy maldistribution and procedural injustice, there is a growing trend to link the methods, aims and ambitions used in local environmental justice actions to international and global efforts to fight transboundary issues that invoke both environment and social justice along both horizontal and vertical dimensions. While the main taproot of environmental justice is anchored in human-related concerns, in more recent years, and particularly from perspectives within critical environmental justice studies, the notion of non-human and more-than-human aspects has broadened the reach of justice considerations to include non-human entities such as air, water, worms or mountains (Pellow, 2018).

In its horizontal dimensions, environmental justice can be seen as the same types of justice aims in different geographic contexts. Examples of applications of environmental justice in other national contexts can be found in South Africa, where activist initiatives focus on correcting historical dispossession of ancestral homelands once seized during apartheid in the name of nature preservation (McDonald, 2002); in Sweden, where there is a focus on procedural justice in the disruption of the mining permitting processes in Indigenous reindeer herding communities; while in Australia, citizens fought against distributional injustices in the proximity and exposure to toxic waste dumps and chemical fires (Lloyd–Smith and Bell, 2003). In horizontal applications of environmental justice, the forms of justice can be actioned using similar methods and patterns.

In its vertical dimensions, environmental justice becomes global and transnational in its harms and in its corrective ambitions. In this regard, other substantive approaches to justice, such as climate justice or energy justice, can be perceived as corollaries to environmental justice, particularly at the global scale. In global environmental justice, 'environmentalism of the poor' becomes the 'environmentalism of the dispossessed' (Temper, 2014, in Martinez-Alier et al, 2016, p 732). Notable in global environmental justice is that while environmental harms can be local or transboundary (that is from resource extraction by multinational corporations or atmospheric pollution), that the scales of power asymmetries can see an additional degree of removal with decision-making on harms embedded across internationally situated regulatory jurisdictions.

Aspects of environmental justice from a distributive justice perspective are defined as the 'right to equal treatment, that is the same distributions

of goods and opportunities as anyone else has or is given' (Dworkin, 1977, p 273, in Kuehn, 2000). In distribution, the achievement of justice is reached through 'fairly distributed outcomes, rather than on the process for arriving at such outcomes' (Kuehn, 2000, p 10684). Issues emerge in distributive aspects of environmental justice because perspectives of just distribution can be contingent on time and place, rather than having a universal application, except in the context of regulated measurements for exposure to harmful substances.

Questions of distribution emerge in whether injustice is situated in the density of maldistribution for some populations or places, over even distribution of unwanted environmental hazards both geographically and across all demographics. In this, there is a tension between environmental justice requiring a good quality of the environment in all places or whether environmental justice requires 'relative deprivation', which, as Helfand and Peyton say, 'suggests that people are concerned about their standing in a community relative to their neighbours rather than about their absolute standard of living' (1999, p 70). The span between these two variations of distribution is based on the difference between conceiving of justice as fairness, and justice as including responsibility towards both man and nature.

Distributive components of environmental justice have both negative and positive features. The negative features emerge in proximity to environmental harms and in adverse effects on health and well-being due to risks and exposure to environmental hazards. In its distribution, environmental justice has a 'revived concern about toxicity and its impact on both people and habitat' (Jessup, 2017, p 56) and is considered in both the proximity to and from environmental harms or amenities or risk of exposure or adverse effects from environmental hazards. The areas purposefully allocated for environmental harm have sometimes been described as sacrifice zones, or an 'area that is considered lost due to environmental degradation and sacrificed for a higher (economic, national security, and so on) purpose' (Skorstad, 2023, p 97).

As a method for evaluating unjust distribution, proximity and exposure to environmental harms, common assessment methods have emerged within the field. These include 'unit based, distance based and exposure/risked based analyses' (He et al, 2019, p 2). These methods are useful for analysing maldistribution in quantitative measures against specific sociodemographic indicators. However, there are concerns that consideration of distributive features only, which is found in a large number of studies of environmental justice, 'ignores questions of causation and agency, and obscures underlying social processes' (Foster, 1998, p 778). These methods are useful for assessing quantitively the various aspects of harm but do less for measuring power asymmetries.

Procedural justice includes the right 'to equal concern and respect in the political decision about how these goods and opportunities are to be distributed' (Dworkin, 1977, p 273, in Kuehn, 2000). In its procedural aspects, concerns of environmental justice scholars linked resulting injustice to a lack of social power (Bullard, 1993) to influence or participate in processes that ultimately result in environmental harms and exposure to environmental hazards. This is highly correlated with race, income, jobs, education, assets and health, and is not related to environmental appropriateness for affected sites (Bullard, 1993). However, although dimensions of justice are related to procedural or participatory processes, it has been flagged that 'increasing community participation is no silver bullet' with real justice relying 'on communicative planning processes to neutralize preexisting power inequalities' (Garrison, 2021, p 7). It is recognised that participation in meetings does not always result in real participation in the decision-making and outcomes.

Researchers and activists who focus on achieving participatory advances in pursuit of environmental justice are 'less concerned about statistical significance or the appropriate unit of analysis', rather they are attempting to 'solve a specific social, economic and/or environmental problem ... to achieve local solutions' (Bryant, 1995, p 600). Increasingly, participatory methods include participatory research or citizen science, which empowers citizens through 'having played a greater role in the decision-making process, will also share the responsibility for outcomes' (Bryant, 1995, p 609). This aspect of environmental justice links research with activism where perspectives of just outcomes are rooted in 'the fairness of procedures leading to the outcome' (Villa et al, 2020, p 330, in Kuehn, 2000). However, even when progress can be made in achieving regulatory controls against polluters, Bryant noted that regulatory controls on environmental pollution still do not fundamentally address 'unequal distribution of power, wealth and income in society' (1995, p 598), which are at the root cause of environmental injustice.

A third feature of environmental justice is found in corrective or retributive forms of justice. Bryant proposes that procedural actions that seek to remedy maldistribution and exposure to the environment is not sufficient and that the remedy lies in 'changes in the structural underpinnings of society that give birth to environmental and social degradation' (Bryant, 1995, p 589). In this, corrective justice emerges as a remedy for environmental injustice and 'involves fairness in the way punishments for lawbreaking are assigned and damages inflicted' and 'attempts to restore the victim to the condition [they] were in before the unjust activity occurred' (Kuehn, 2000, p 10693). While restoration may be impossible in the case of health and well-being, compensation may alleviate suffering or prevent harm to future generations.

As ways to address corrective action in compensation or rectification for environmental harms and hazards, a number of principles have been promoted. One of these principles is the idea that the polluter pays. This has been levied in domestic settlements as a form of financial liability for impact from pollution or toxic spills, and is also considered within global environmental justice, not only for ground or water pollution from isolated events, but also for climate change and atmospheric pollution by greenhouse gases (see Chapter 10). However, it is a challenge that 'a significant amount of climate polluting activity took place over the last few hundred years and was carried out by countless different individuals and businesses' (Coventry and Okereke, 2018, p 364), making specific liability difficult to either determine or enforce.

Within global environmental justice, additional principles of corrective justice suggest that responsibility can be determined based on the ability to pay or that the beneficiary pays. Bullard notes in relation to distribution or correctional aspects of justice that 'the question of who pays and who benefits is central to analysis' (Bullard, 1993, p 21). While he was speaking specifically in regard to environmental racism, which has been at the heart of the environmental justice movement, the distributions of harms and benefits can also be associated with power asymmetries elsewhere, such as with environmental sacrifice zones or green colonialism. In their essence, '[e]nvironmental injustices are instances of not being asked, not being considered, not being recognised and hence, not having an equality of opportunity' (Jessup, 2017, p 62).

The principle of ability to pay has been referred to as the equity principle, but rather than facilitating corrective measures for environmental injustice has 'proven a constant source of disagreement and national rivalry' (Coventry and Okereke, 2018, p 369) in that this principle 'exposes developed countries to financial obligations what would not be politically acceptable' (Coventry and Okereke, 2018, p 370). This is because in an integrated global economy underpinned by the pursuit of growth, expansion and profit, 'it is difficult to realize environmental justice in the competitive market; environmental injustice is the normal state' (He et al, 2019, p 17). These principles, while helping to generate responsibility for environmental hazards, are also difficult to enforce across international boundaries when the site of harm or the benefit of developments falls across different jurisdictions, a difference which is frequently exacerbated by inequalities in geopolitical power (Parks and Roberts, 2007), such as between the Global North and Global South.

Elements of social justice also feature in the consideration of environmental justice in its concentrated 'efforts to bring about a more just ordering of society – one in which people's needs are fully met' (Rodes, 1996, in Kuehn, 2000, p 10698). In the social justice aspects of environmental justice, the environment is understood to be a critical site for 'creat[ing] the conditions for social justice' (Schlosberg, 2013, p 37).

Without a good environment and healthy nature, social justice, including all its components such as economic justice, health justice, energy justice, racial justice, and so on, cannot be achieved.

One concern of social justice in relation to the environment is concerned with the effects of cumulative impact from exposure to environmental harm and 'looks at risk in combination within the complex context of people's lived realities' (Sze and London, 2008, p 1338) and in their exposure pathways. The movement to achieve social justice through environmental indicators has been described as 'integrating environmental concerns into a broader agenda that emphasizes social, racial and economic justice' (Alston, 1990, in Kuehn, 2000, p 10699). Taylor has described the social movement for environmental justice as 'socially constructed claims defined through collective processes' (2000, p 509). In this, there is an opportunity for variation across different communities for defining healthy communities and well-being in their own terms.

Main critiques of the tradition

There are a number of criticisms related to both normative perceptions of environmental justice and of the objectives and methods of the environmental justice movement, more broadly. A dominant critique is that environmental justice efforts are too focused on causality. This criticism is especially targeted towards the US-based environmental justice movement in the need to prove intent and causality in courtroom battles. This is situated as a problem within substantive research and the focus on the maldistribution of environmental harms and hazards, where requiring evidence on deliberate causality 'conclusively proving "racial intent" (Agyeman, 2002, p 32) has proved difficult to achieve. In contexts beyond the United States, the civil rights context is different and less salient, there is more focus on either class or socioeconomic indicators, yet this variation can be seen to dilute the objectives of activists whose ambition is to make living conditions better for everyone downstream or for, in fact, enhancing 'pre-existing cleavages and increase the potential for conflict' (Dawson, 2000, p 22).

A second feature in this focus on causality is the problem that 'correlation is not causality' (Helfand and Peyton, 1999, p 68), which suggests that even if it can be proven that more substantial environmental harms do in fact exist, it does not mean that they were either intentional, or rather the effect of Ricardian rents. In this it is suggested that it is difficult to prove 'discrimination at the time of siting' or 'market dynamics that lead these groups to locate in areas that are already home to a site' (Helfand and Peyton, 1999, p 69), resulting in weak legal foundations for achieving redress (Kevin, 1997). While both are issues of justice, the latter may be an issue of structural

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injustice (Young, 2011) rather than specifically of environmental injustice, or as is sometimes inferred, environmental racism. However, this criticism is itself subject to scrutiny and criticism because it implied that exposure to environmental harm is a matter of choice and that the poor are responsible for their own exposure to environmental hazards, rather than victims of injustice through powerlessness.

A third criticism is that environmental justice is stuck in distributive justice. Schlosberg suggests that the scholarship on environmental justice frequently fails to take into account ongoing developments in environmental justice, especially from scholars such as 'Iris Marion Young, Nancy Fraser and Axel Honneth [who] argue that while justice must be concerned with classical issues of distribution, it must also address the processes that construct maldistribution' (2007, p 2). It is also suggested by Foster that empirical research also requires 'analysis of agency and causation in institutional and social processes that lead to distributive outcomes' (1998, p 790). This is relevant in bridging hierarchies of power that impose decision making resulting in maldistribution, not just at local levels, but also across global scales and in bringing capabilities and recognition to questions of environmental justice for both individuals and groups alike.

Another critique is that environmental justice is not either theoretical or methodological enough and is specifically criticised for 'being insufficiently theoretical about racism and how racism actually operates' (Sze and London, 2008, p 1341). This emerges in particular to the relationships between structure, power and geography that condition spatial relationships. This is especially directed towards what is frequently labelled as first-generation research on environmental justice emerging in the 1980s, which although undoubtedly important frontier research, was 'insufficient and inadequate to the tasks of both revealing inequalities and understanding the processes through which these are (re)produced' (Walker, 2009, p 516). In this regard, historical research is an important component in framing the long-term development of inequalities that emerge as the result of various vectors, including political contexts and time periods (Sze and London, 2008). The result is that this has a particular effect of limiting 'social justice claims and ultimately reproduc[ing] a racist social order' (Sze and London, 2008, p 1341). In addition, Bryant criticises the methodology emerging from scientific research on environmental harms where 'politicians, policy makers, or corporate managers decide upon end values', promoting participatory research, which today might be called co-production, as a more 'democratic research process'. In this process Bryant advocates for a spiral production of knowledge where truth is derived through a repetitive cycle of 'planning, acting on the plan, and then observing and reflecting on the results' (1995, p 600).

Environmental justice is also criticised for being too exclusionary. Although interests in the environment and justice have intersected for over a century, environmental justice owes its advent as a field of research or social movement due to the connection between the environment and the civil rights movement in the 1980s. However, when the concept of environmental justice is restricted to a narrow definition of environmental racism, it eliminates vast swathes of affected populations from the pursuit of justice from exposure to environmental harm by 'limiting the types of communities that could make environmental justice claims' (Schlosberg, 2007, p 5). In this regard, Jessup argues that 'if that narrative of environmental justice is adopted, then the community of environmental justice becomes narrow: excluding communities whose justice concern is not distribution or whose vulnerability is not grounded in race, ethnicity or class' (2017, p 49). Bullard also criticises the two different branches of environmental justice for not adequately meeting on issues of 'economic development, social justice and environmental protection' (Bullard, 1993, p 22) and that the environmental protection arm 'has not sufficiently addressed the fact that social inequality and imbalances of social power are at the heart of environmental degradation, resource depletion, pollution and even overpopulation' (Bullard, 1993, p 23), many concerns that are central to their end goals.

A final criticism with growing significance includes that there isn't enough environment in environmental justice where there is frequently a gap between the social and the ecological. It is becoming increasingly apparent that this gap results in an irreconcilable difference as environmental justice expands into the global agenda. In this regard bringing 'the environment back into environmental justice scholarship ... [is] a promising new direction' (Sze and London, 2008, p 1345). It is this gap that critical environmental justice studies address, at least in part, by allocating for the agency of non-human subjects of justice.

Conclusion

There are a number of considerations for the future of environmental justice. First, is that analysis of environmental justice researchers and activists must avoid narrow analyses of environmental harm. At its core, environmental justice is 'a matter of disproportion impact' (Garrison, 2021, p 8) of the distribution of environmental harms and amenities, inequality in decision-making, inadequate recognition of the role of unequal power structures and biases, and lack of measures to compensate or allocate responsibility for harm. It also must encompass 'the fair treatment of people with respect to the execution and application of environmental politics' (Pulido, 2017,

p 46). The dynamics of distribution, procedure, correction and recognition are critical in tangent for any evaluations or solutions for environmental injustices. As stand-alone components, they are individually insufficient for developing holistic pathways towards a meaningful environmental justice as the absence of any feature is likely to result in some other form of injustice. This is relevant for both environmental justice at the site of local and specific communities as well as across global scales.

Second, is that if environmental justice is to make substantial contributions to the quality of human life, it must also take the non-human aspects of environmental care and protection as seriously as it promotes social equity. With a focus solely on society and social justice, the instrumental relationship of man to nature will continuously result in the environmental justice movement treating the symptoms, rather than the causes, of environmental injustice. With a focus on social justice only, the fight will remain at the calculations for unjust distribution of proximity and density to environmental hazards or distance to green spaces. It will remain focused on procedural aspects that improve voice and equalise power in the decision-making on these (mal)distributions, meanwhile lacking recognition for the critical and unequal relationship between man and nature or the incapacity of polluters to ever truly compensate for environmental degradation, deterioration of individual health and negative impacts on community well-being. In this regard, environmental justice needs to move beyond its role as a method of social justice and become a method for whole-system justice through the integration of both man and nature and the inclusion of non-human subjects of justice.

Finally, environmental justice must be relevant and applicable across geographic scales and temporalities and 'a global understanding of environmental justice must focus on a "broader set of questions" (Sze and London, 2008, p 1343), and 'expand in scope to include global processes' (Nelson and Grubesic, 2018, p 8). It is important to reckon with the reality that as problems of refuse, pollution and toxic spills grow in scale and magnitude, transgressing geographic boundaries (that is, ocean plastic pollution and acidification, global warming through increasing concentrations of greenhouse gases, rising sea level and insecurity of water supply), we all, in fact, live downstream to any environmental hazards. While 'some live more downstream than others' (Tarter, 2002), eventually all of the environmental harms and lack of environmental responsibility will come full circle. Proximity will increasingly be a less clear divider for at-risk populations and access to procedural justice may become a moot remedy. In this regard, theoretical advances and empirical application of environmental justice should become transferrable across scale, time and place to remain effective as a method and practice for pursuing justice.

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