e-cadernos ces

17 (2012)
Desigualdades ambientais: conflitos, discursos, movimentos

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Referência eletrônica
Ilaria Beretta, « Some Highlights on the Concept of Environmental Justice and its Use », *e-cadernos ces* [Online], 17 | 2012, colocado online no dia 01 Setembro 2012, consultado a 16 Julho 2015. URL : http://eces.revues.org/1135 ; DOI : 10.4000/eces.1135

Editor: Centro de Estudos Sociais
http://eces.revues.org
http://www.revues.org

Documento acessível online em: http://eces.revues.org/1135
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e-cadernos CES, 17, 2012: 136-162

SOME HIGHLIGHTS ON THE CONCEPT OF ENVIRONMENTAL JUSTICE AND ITS USE

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Abstract: The article provides a review of the literature on environmental justice, aimed at showing the multifaceted character of the concept and how it has been used since the mid-80s, with special reference to its shift across the Atlantic and over time. It should help to clarify the concept of environmental justice. Several authors have pointed out that the concept has been understood in different ways and it is necessary to have a clear definition of its meaning.
I discuss the origins of the term environmental justice in the United States, analyze its use in the specialized literature, and examine how its meaning has changed in Europe, in other countries and through time. I then address the "distributional problem" and draw a brief conclusion.

Keywords: environmental justice – use, definition, debate, fissures and areas of consensus.

INTRODUCTION

The article provides a review of literature on environmental justice, aimed at showing the multifaceted character of the concept and its uses. I argue that, all too often, this notion is used without a proper definition of its meaning. I agree with Walker and Bulkeley that

> the notion of environmental justice, in part reflecting its roots in a social movement, has been subject to low interrogation and definitional precision. The way in which it has been deployed has been more as an instinctive gut reaction than as a closely argued concept. There are, of course, some extensive and rigorous treatments (e.g. Dobson, 1998; Low and Gleeson, 1998), but in the main the impulse has been to call for environmental justice as a response to perceived injustice, as judged through observations of unreasonable inequality in outcome

and lack of 'fair treatment' for, in particular, people and social groups that are already marginalised and disadvantaged. (2006: 656)

To begin with, it is important to understand the context in which the concept emerged and developed in order to determine its original meaning, something I discuss in the first section. Section 2 analyzes the different ways in which the notion of environmental justice has been used uses of the expression in the literature and section 3 focuses on its application in the context of European environmental justice discourses. Section 4 looks at the evolution of the environmental justice concept and use outside Europe and through time; Section 5 focuses on environmental policies and their lack of attention to environmental justice issues. Section 6 provides some conclusions.

1. Origins of Environmental Justice in the USA

The notion of environmental justice was conceived in the United States (US) in the mid-1980s, in the context of the struggle for racial equality (i.e. Ikeme, 2003). According to Taylor (2000), although it was not labeled as such, environmental justice activism has been an underlying frame in the politics of communities of people of color for more than a century.[1] Since the beginning of modern conservationism, environmental thinkers and nature advocates applied arguments about injustice related to environmental rights in making claims about human-environment relations, and advocated for environmental policies and action (i.e., Marsh, 1865; Muir, 1907; Leopold, 1921; Marshall, 1930; Carson, 1962). Thus, the environmental justice movement is only the latest in a series of environmental mobilizations that employ the notion of injustice but, unlike its predecessors, the environmental justice movement makes the injustice frame explicit. This is because it is the first branch of the environmental movement to examine human-human and human-nature relations through the lenses of race, class, and gender. In other words, environmental justice not only acknowledges the existence of environmental injustice in the form of humans harming nature, it also recognizes that environmental injustice arises from racial, gender, and class discrimination (Taylor, 2000).

By the 1980s, the environmental justice movement in the USA was gaining increasing visibility as people of color began to organize environmental campaigns, e.g. to prevent pesticide poisoning and to oppose the siting of noxious facilities in their

[1] Taylor (2000) explains that the historical record shows that since the 1800s, people of color have e.g. tried to improve housing conditions for slaves, opposed the abrogation of treaty rights and the sharecropping system, gone to extreme lengths to acquire land, and fought for workers' rights.

communities. In the same period, scholars, policy makers, and community activists began investigating the link between race and exposure to environmental hazards. Two important studies exploring this relationship found that Blacks and other people of color were more likely to be exposed to environmental hazards than Whites (U.S. General Accounting Office - U.S. GAO, 1983; United Church of Christ – UCC, 1987). The term "environmental racism" was coined to describe a variety of situations where racial factors influenced outcomes, and the term "environmental equity movement" was used to describe the growing movement to address environmental inequalities as related to race, gender, and social class.

In 1990, a seminal work on environmental injustice was published by African-American sociologist Robert Bullard (1990), while the Congressional Black Caucus, a bipartisan coalition of academics, social scientists, and political activists met with Environmental Protection Agency (EPA) officials to discuss its troubling findings, and investigate ways to address the perceived unfair treatment of minorities by EPA inspectors. In response, the EPA instituted the "Environmental Equity Workgroup" to investigate the allegation that racial minority and low-income populations bore a higher environmental risk burden than the general population. The resulting *Environmental Equity: Reducing Risk in All Communities* report which was published in June 1992, supported the claims made by earlier studies and the Congressional Black Caucus and proposed ten recommendations towards achievement of more fairness regarding environmental risks. One of these was the creation of an office to address these inequities. Also in 1992, the first official body addressing environmental justice was established – the Office of Environmental Equity (which in 1994 became the Office of Environmental Justice). Following this sequence of actions, involving a combination of civic activism, rigorous scholarship, and prompt decision-making, the environmental justice agenda not only increased its importance on the U.S. public debate, but most importantly was integrated as a general concern in all federal level public policies (Laurent, 2011).

By the early 1990s, the term environmental "equity" fell into disuse and was replaced by the term "justice" which activists felt was more inclusive, and incorporated such concepts as equity, equality, and impartiality. As Taylor (2000) explains, the movement was concerned with two kinds of justice: "distributive" justice, which addresses who should get what, and "corrective or "commutative" justice, which concerns how individuals are treated during a social transaction. The context in which the terms "environmental justice" and "environmental justice movement" were born was the meetings and workshops held between 1990 and 1991 to plan the 1991 First

National People of Color Environmental Leadership Summit, which ratified the "Principles of Environmental Justice" (1991).

Taylor (2000) disputes the restrictive depiction of the environmental justice movement as an antitoxic movement composed of a loose network of local grassroots groups opposed to the siting of hazardous facilities and exposure to toxic substances. Her work, in contrast, shows the broader range of issues faced by the environmental justice movement, and depicts the movement as, not only a protest, reactive group but also as a more complex faction with a significant ideological core that was having significant effects on environmental ideology. Taylor's article contends that, through analysis of the document "Principles of Environmental Justice", it was possible to identify a well-developed, environmental, ideological framework that explicitly links ecological and labor and social justice concerns. Taylor shows that the document includes six major thematic components: ecological principles; justice and environmental rights; autonomy/self-determination; corporate-community relations; policy, politics and economic processes; social movement building. Associated with each thematic area is a number of minor components and themes. This breakdown of the document shows that within the environmental justice paradigm,[2] there are several minor frameworks that further refine the framing of the issues. Together, these minor frames comprise a very complex ideological package or coherent body of thought, which significantly threatened the ideological hegemony of the New Ecological Paradigm,[3] presenting a radical new way of thinking about human-environmental relations and altering the way many thought about the environment (Taylor, 2000).

With the February 11 1994 Executive order 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"), the Clinton administration transformed a civic cause into a federal obligation, and a subsequent "Environmental Justice Strategy" was defined in 1995. As a result of these institutional developments, environmental justice is now a fully legally operational notion in the US, as demonstrated by the recent "Plan EJ 2014" implemented by the EPA.[4]

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[2] Following Kuhn (1970), a paradigm refers to a body of ideas, major assumptions, concepts, propositions, values and goals, in a substantive area, that influences the way people view the world, conduct scientific inquiry, and accept theoretical formulations. These paradigms are the basis for "normal" or day-to-day science. However normal science produces anomalies that cannot be resolved by existing paradigms and the resulting disjuncture creates an opening for a new paradigm to emerge to replace the previous one(s).

[3] According to Taylor (2000), since the mid-1800s, conceptualizations of human-environment relations have been dominated by three major environmental paradigms: the exploitative capitalist paradigm (ECP), the Romantic environmental paradigm (REP), and the new environmental paradigm (NEP). Throughout the history of the environmental movement, environmental thought has been strongly influenced by the REP and the NEP; the NEP has dominated environmental thinking and practice since the 1960s. However, some disagree about the assumed social dominance of NEP (i.e., Beretta, 2011).

[4] Plan EJ 2014 is 4-year plan initiated in July 2010 that will, in the wording of the EPA, "help move forward

The EPA provides a clear definition of environmental justice on the basis of which the U.S. government is able to take action. For EPA, environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across the United States this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work. In Laurent's (2011) view, two important dimensions of this definition should be highlighted: fair treatment, and meaningful involvement, pointing respectively to the traditional distinction between distributional and procedural aspects of justice. The EPA provides a precise definition of those concepts. Fair treatment means that no single group of people should bear a disproportionate share of the negative environmental consequences arising from industrial, governmental, or commercial operations or policies. Meaningful involvement means that: (1) people must have the opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the public's concerns will be considered in the decision making process; and (4) the decision makers must seek out and facilitate the involvement of those potentially affected.

However, the above EPA definitions by no means imply that environmental inequalities have been redressed, or that environmental justice has been achieved in the U.S. According to Bullard *et al*. (2007), the authors of a report marking the 20th anniversary of the 1987 United Church of Christ study, "Despite significant improvements in environmental protection over the past several decades, millions of Americans continue to live, work, play, and go to school in unsafe and unhealthy physical environments". In particular, the existing evidence suggests that those individuals and groups that already suffer social disadvantage, through – for instance – poverty or minority status, are more likely to experience adverse environmental effects whereas and that the decisions of government, business, and others may well perpetuate and even exploit this injustice. In what has been described as a smoking gun of environmental injustice, a report commissioned by government planners in California and written by Cerrell Associates in 1984 recommended that waste incinerators be located in areas where, due to social and economic disadvantage,

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to develop a stronger relationship with communities and increase the Agency's effort to improve the environmental conditions and public health in overburdened communities." Details available at: http://www.epa.gov/environmentaljustice/resources/policy/plan-ej-2014.pdf.

populations were less likely to mount effective opposition to siting. Similarly, a leaked memo from a World Bank chief economist in 1991 revealed environmental injustice. In the memo, the economist gave a number of reasons for increasing the trade in toxic waste and the migration of polluting industries to the developing world: some developing countries with low populations have comparatively little pollution; citizens in developing countries have a low life expectancy; and because they are poor, further harming their health makes sounder economic sense than harming the health of those with higher wages (Johnson, 2012).

In what concerns the procedural aspects of justice, the issue of enforcement is particularly telling because it is insufficient to have strong regulations against environmental injustice if discretion in their application effectively results in inaction or further injustice. Unfortunately, evidence of past practices within the U.S. Environmental Protection Agency indicates that this is precisely what has occurred. For instance, penalties for breeches of environmental regulations were generally higher and more likely to be implemented in Anglo-American as opposed to minority communities, and decontamination of toxic waste spills and sites was undertaken more quickly and effectively in neighborhoods with a majority of Anglo-American residents. Other common instances of procedural environmental injustice include cases in which apparently open public consultation processes are rendered effectively inaccessible and exclusionary because they are undertaken in a language that minority communities are not fluent in, or because they are held in remote locations and at inconvenient times. Conflicts of interest may also impede procedural environmental justice, in those cases in which judgment is biased by financial, personal or other obligations. For instance, politicians may have conflicts of interest due to campaign donations on the part of developers, who expect favorable outcomes on environmental impact decisions. Finally, access to justice frequently comes at a financial cost that is too great for the poor to pay (Johnson, 2012).

Nevertheless, it can be argued that the U.S. has the most advanced legislative systems the most advanced country in relation to recognizing and addressing environmental inequalities. In addition to the theoretical and legally operational dimensions of environmental justice in the U.S., the EPA has also developed a range of empirical instruments and indicators that allow the mapping of environmental inequalities in the U.S. territory. The EPA, together with other institutions, thus provides assessments of the geographical distribution of industrial waste facilities, chemical plants, and landfills and the socioeconomic characteristics of the areas affected, in order to evaluate the degree of environmental justice in a given location (Laurent, 2011).

We need to keep in mind remember that the political, legal, and technical advances made towards recognition of environmental injustices in the U.S. since the 1990s were accompanied by a vigorous academic debate about the link between racial and socioeconomic status and environmental inequalities. Amongst the analytical and methodological complexity of the debate (Mohai *et al*., 2009, provides a comprehensive survey), three points should be highlighted. Firstly, while many empirical studies have found a clear link between racial and socioeconomic status and environmental conditions (for surveys, see Bullard *et al*., 2008; Pastor, 2007), others (such as Banzhaf *et al*. 2006; Been, 1994; Lambert and Boerner, 1997) have argued that rational land-use planning and market dynamics are mostly responsible for environmental inequalities, leaving little role for injustice understood as the result of a deliberate will to outsource environmental hazards to deprived communities. The rationale is that although it is unfair to discriminate against on the basis of a characteristic that they cannot alter, such as race, it is not unfair to treat them differently if they are poor because this feature is not an intrinsic element of their identity and can be changed (Johnson, 2012). Secondly, disentangling social and racial factors in environmental inequality has proved problematic, and some studies argue that income trumps race in determining environmental outcomes (while others show that race still plays a role even *after controlling for income)* (Laurent, 2011). Finally, someone appeals to utilitarian reasons, arguing that the economic benefits that flow from decreased unemployment and cheaper housing by virtue of proximity to industry and undesirable land uses outweigh the burdens of living and working in a polluted or hazardous community. A kind of calculus is therefore engaged in which the economic interests of individuals and business trump concerns about health and well-being (Johnson, 2012).

In light of this U.S. rich background, the basic inputs to the environmental justice approach can be summed up as: a public policy arsenal aimed at social fairness that does not take account of environmental conditions will fail in an important dimension. The relation between environmental conditions, individual welfare, and social outcomes is straightforward: it is mediated by health issues and by the impact of environmental conditions and policies on the well-being of individuals more generally (Laurent, 2011).

2. The Notion of Environmental Justice in the Specialized Literature

In the literature on sustainability, the notions of equity, equality, distributive justice, procedural justice, and environmental justice are often used inconsistently. For example, the idea of environmental justice is sometimes understood as ‘equality’. In these cases, the ‘‘familiar and crucial practical question ‘equality of what’ is raised.

Should it be opportunities (after liberal convention), primary goods (after Rawls), resources (after Dworkin), capabilities (after Sen) or welfare outcomes?'' (Smith, 2000: 6). Of course, there are many concerns about a language of justice based on the premise of distributional equality. For example, in Walker and Bulkeley's (2006) view, given that most environmental goods much of the environment, broadly defined, are inherently and sometimes uniquely distributed in particular places and cannot sensibly be experienced equally or uniformly, it can be positively perverse to be seeking their 'even' distribution (whatever that might mean).

In other cases, the terms 'environmental justice' and 'equity' are conflated. As a result, the conceptualizations or domains of these constructs are unclear (Ikeme, 2003; Been, 1993; Arnold, 1998). In order to shed more light on this aspect, Ikeme (2003) explains that environmental justice should be considered as the broad, overarching concept encompassing all justice issues in environmental decision-making; it has 'distributive' and 'procedural' dimensions. The distributive dimension represents what is usually meant by equity and thus concerns people's outcomes in social exchanges (Brashear *et al*., 2002). The procedural dimension is concerned with procedures and processes (Sheppard *et al.*, 1992). As a consequence, it can be said that while environmental justice encompasses and transcends distributive concerns in order to include procedural justice (Szasz, 1994; Harvey, 1996; Been and Gupta, 1997; Kuletz, 1998), equity is purely distributive in its focus (Tol, 2001; Robinson, 2002).

In responding to the need for conceptual clarity, Ikeme (2003) explains that the construct of environmental justice can be rationalized by both deontological and consequentialist arguments.[5] For instance, Baden and Coursey (2002) distinguish between environmental injustice in outcome (ex post), and environmental injustice in intent (ex ante). Injustice in outcome has a consequentialist basis since it focuses on the consequences of action. In contrast, injustice in intent focuses on the morality of the action rather than its consequences, and thus is based on deontological reasoning. It also suggests inclusion of procedural concerns in environmental justice.

Following Ikeme (2003), environmental justice can be categorized into preventive, corrective and retributive types. Preventive environmental justice is exhibited in its forward looking nature. Instances of preventive characteristics of environmental justice

[5] Briefly, deontological theories emphasize the values which guide the decision-making process, so that "whatever arises from a just situation by just steps is itself just" (Nozick, 1974: 151). The consequentialist or welfarist paradigm acknowledges the priority of good over rights, thus actions and policies are judged solely in terms of their consequences and effect on the targeted general good (Ikeme, 2003). Utilitarism is the strand of the literature most commonly referred to but there is also a nonutilitarian basis for consequentialism. This is found in the measurement of wellbeing and development economics where health, length of life, and educational attainment are considered consequences that are important to wellbeing irrespective of income or other proxies for welfare and pleasure (Sen, 1987, 1999, 2000).

occur in international law and national environmental policy. For instance, Principle 21 of the Stockholm Declaration of 1972, as modified by Principle 2 of the Rio Declaration, recognizes the right of countries to exploit their own resources pursuant to their own environmental and development policies, provided that their activities do not damage the environment of other states or the global commons (United Nations Conference on Environment and Development (UNCED, 1992). Environmental justice also seeks remedies or corrective action for environmental injustice. For instance, Simbulan (2000) reports a *New York Times* editorial in the December 25, 1998 issue, which showed that the U.S. was ‘‘removing hazardous waste or paying to do so at military and air force bases within the U.S. and overseas”.[6] Finally, environmental justice also has retributive characteristics. Environmental enforcement fines and penalties are common features of environmental regulation in national policy. In the US, there is some evidence of a trend towards stiffer sanctions including jail terms and, since 1983, EPA referrals of cases for criminal prosecution have increased significantly (Ausubel and Victor, 1992).

Although some authors (such as Ikeme) appeal for conceptual clarity and a ‘unifying framework’, debate is open and there are some who think that the ethical and ideological character of justice theory can serve only to maintain plurality, and that alternative perspectives are likely to be more or less appropriate to different practical and analytical contexts. Furthermore, use of the term ‘equity’, rather unhelpfully, slips too easily between the descriptive sense of inequality and the normative sense of justice, providing a further complication in the search for language clarity and meaning (Walker and Bulkeley, 2006).

More generally, recognition of the plurality of the meanings and principles of environmental justice poses a challenge to those who seek to identify a set of universal principles of justice and sustainability. For some, “notions of justice and notions of movements linked to justice struggles are highly diverse and can not be measured or expressed in universal terms” (Debbané and Keil, 2004: 209). For others, acceptance of different concepts of justice leads to the kind of relativism that makes any notion of justice in the first instance meaningless (Low and Gleeson, 1998).

[6] He cites a survey by the U.S. Air Force showing that the U.S. spent $2.13 billion for clean-up of bases in the United States in 1998 alone and, as of 1990, had spent $8.400.000 out of a projected total cost of $61.400.000 for 21 installations in Canada; $920.000 out of a projected cost of $30.751.000 for 6 installations in Germany; $1.201.000 out of a projected cost of $1.559.000 for installations in Greenland, and $70.000 out of a projected cost of $1.580.000 for installations in Italy, among others.

3. Environmental Justice from the US to Europe

As already stated said, the concept of environmental justice was born in the USA, and during the 1990s represented the central political mobilization of the civil rights movement. Apart from the first racial, gender and class discriminations, more recently some authors have expanded the environmental justice framework to include "smart growth" and transportation planning equity (Bullard and Johnson, 2007); Sze (2007) discusses the history of planning and zoning inequities in New York, and Corburn (2005) describes how community-based organizations use their contextual knowledge to address local environmental justice issues, also in New York; Maantay (2001) provides additional insights into how discrimination in land use planning and zoning plays a major role in the geographic distribution of environmental hazards.

However, the terminology of environmental justice has traveled beyond the U.S. and the sites of grassroots activism from which it emerged. Moreover, the interest in environmental justice has reached the political and the academic spheres, and the principles of environmental justice have begun to feature within the work of mainstream institutions (Walker and Bulkeley, 2006). As a consequence, the environmental justice debate, and more generally the intertwining of environmental and social perspectives is beginning to develop in the European Union (EU). The institutional beginnings of this approach date back to the drafting of the UNECE *Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*, adopted at the Fourth Ministerial Conference in the "Environment for Europe" process, on June 25th 1998 in Aarhus. Article 1 of the Convention states the objective "to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being" to "guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention". Specifically, true integration of environmental justice concerns into social policy in Europe took place first in Scotland and then in England in the early 2000s (Laurent, 2011). For example, in the UK, environmental justice has been included in the strategic priorities of the main environmental regulatory agency, the Environment Agency (Chalmers and Colvin, 2005), and features repeatedly within the new national strategy for sustainable development (DEFRA, 2005).

More generally, Laurent (2011) argues is of the view that contrasting the U.S. and European (in the Scottish and British versions) conceptions of environmental justice leads to three arguments. The first is that, in underlying philosophies of public policy, the U.S. approach traditionally recognizes the universality of the natural rights granted to individuals, and aims to curb discrimination of individuals in exercising those rights,

while the focus in European countries is usually to correct the social processes that produce situations of inequalities (see Laigle, 2006).

The second point is that environmental justice in Europe is more likely to be perceived, analyzed, and framed through class/income than through racial and ethnic categories This should not be understood as meaning that environmental inequalities do not have a racial dimension in Europe: of course they do, like all social inequalities in racially diverse societies, as research on environmental inequality affecting the Roma community in Central and Eastern Europe shows (see, for instance, Steger and Filcak, 2008; Harper *et al*., 2009), or as a recent study documenting environmental racism in France suggests (Viel *et al*., 2010). However, the cultural and legal background to public policy in the U.S. and the EU differ on this issue. There are both historical and institutional explanations for this difference. As already mentioned, environmental justice in the U.S was born in the context of the broader civil rights movement, and thus was "racialized" from the outset. Furthermore, only racial minorities (and not low-income communities) are recognized as legally bounding categories by U.S. federal law, thus rendering race a basis for court action, whereas income levels are not (see Pastor, 2007).

The third argument regards the possibility to conceive not only a European approach, distinct from the that of the U.S.-approach, but even an integrated or harmonized European Union approach to environmental justice, bringing together the different (young) national traditions in this domain of public action. The problem here is the fragmented nature of those national traditions (see Laigle, 2006). This finally raises the question of a European definition of environmental inequalities, understood as the tangible outcomes of environmental injustice (Laurent 2011).

Combining the approaches in OECD (2006), UK Environment Agency (2007), and Pye *et al*. (2008), we can define environmental inequalities as a fourfold problem:

- Exposure and access inequalities: the unequal distribution of environmental quality between individuals and groups (defined in racial, ethnic but most likely social terms), whether negatively (exposure to environmental nuisances, risk and hazard) or positively (access to environmental amenities); this category includes the issue of vulnerability to ecological disasters – latent inequalities in terms of exposure and sensitivity – and the risk of multiple and cumulative impact of social and environmental inequalities;
- Policy effect inequalities: the unequal effect of environmental policies, i.e. the unequal distribution not of environmental good or bad but of the income effects, for instance, of regulatory or tax policies among individuals and social groups;

– Impact inequalities: the unequal environmental impact of the different individuals and social groups with regard to their incomes and/or lifestyles, i.e. the fact that some people and groups inflict greater damage on the environment than others; some scholars suggest labeling this type of environmental inequalities "ecological inequalities" (see Emelianoff, 2006);

– Policy-making inequalities: the unequal access to environmental policy-making, i.e. the unequal involvement and empowerment of individuals and groups in decisions regarding their immediate environment.

Alongside the above mentioned institutional/social factors, one aspect which may help explain the origin in the U.S. and late adoption in the EU of the concept of environmental inequality is their different political frameworks and cultures. In the U.S. the left/Marxist has always been a minority scholarship, whereas in the EU its stronghold led to the rise of the 'political ecology' framework of the environmental mobilization/intellectual streams in the 1970s, and to the support for environmental struggles from parts of the left (more often extreme left) parties. Up to the 1990s, the role played in the U.S. by the environmental justice discourse was being played in the EU by the political ecology discourse. The spread of environmental justice in Europe might (at least partially) be explained by the general decline of the left since the 1980s, which became progressively marginalized by the spread of neoliberalism. As already noted, the spread of environmental justice is significantly related to governmental policy strategies and discourses narratives that developed in the 1990s and especially the 2000s, as related to the spread of neoliberal 'roll-out' policies. In Peck and Tickell's (2002) view, neoliberal discourse seems to have shifted from the pattern of deregulation and dismantlement dominant in the 1980s, which could be characterized as "roll-back neoliberalism", to an emergent phase of regulatory reform – an ascendant moment for "roll-out neoliberalism." In the course of this shift, the agenda gradually moved from a preoccupation with the active destruction and discreditation of Keynesian-welfarist and social-collectivist institutions (broadly defined), to a focus on the purposeful construction and consolidation of neoliberalized state forms, modes of governance, and regulatory relations.[7]

[7] About connections between neoliberalism and environment, see, among others: Bakker (2010); Bernstein (2002); Castree (2008a, 2008b, 2010a, 2010b); Heynen *et al*. (2007); McCarthy and Prudham, (2004).

4. The Evolution of the Use of the Environmental Justice Concept

In breaking away from its origins and initial framing in the U.S., the concept of environmental justice is evolving to become broader in scope, and more encompassing in the forms and processes of injustice with which it is concerned. On the one hand, this evolution led to a particular relevance of the 'local' aspect (territory, local community values, etc.). In Europe, for instance, local mobilizations against infrastructures and industrial development in the past two decades have often applied an environmental justice framework. A prominent example is the NO TAV (High Speed Train) movement based in the Susa Valley, *in Piedmont*, opposing the construction of a new railway line between Turin and Lyon (Della Porta and Piazza, 2008; Pellizzoni, 2011; Sasso, 2006). This new railway is part of a EU project which plans to connect Lyon to Budapest and then onto Ukraine. According to Beria and Grimaldi (2011), the project has been proposed as a response to the problem that rail freight transport in Italy occurs at an average speed of 19 km per hour, since trains are often diverted and parked in transit stations, to provide priority to passenger trains. This is the main bottleneck requiring improvement. It's a nonsense for commodities to arrive from France at a speed of 150 kilometers per hour and have to stop and spend most of their time in a transit station when they arrive in Italy.

On the contrary, the principle behind the movement is that a new high speed railway line in the Valley is completely useless and not needed, its only purpose being the profit of the many private companies that have shares in it. A study commissioned by the Mountain Community of the Susa Valley carried out by a Transport Engineering Company shows that the line would be justified only by a 40 million tons of freight traffic per year, translating into a total of 350 trains per day, one train every 4 minutes at the speed of 150 km/h, alternating with passenger trains at 300 km/h.

The NO TAV claims that the current railway line between Piedmont and France is more than sufficient, considering that traffic in the area has never been incredibly high. More importantly, construction works would utterly and irreversibly destroy a huge part of the Susa Valley, causing not only an environmental but also an economic and social disaster, with businesses closing down and villages being completely disfigured or disappearing.

On the other hand, in becoming more globalized, the environmental justice agenda is extending into questions of distribution both between and across nation-states (Stephens *et al*., 2001; Newell, 2005). In addition, the term 'justice' is becoming more inclusive and is comprising gender and age differences, and the rights of future generations (Buckingham-Hatfield *et al*., 2005; Dobson, 1998). 'Generational environmental justice' refers to the concept of sustainability (including global ecological

integrity and global environmental justice) and the responsibility of current generations to ensure a healthy and safe environment for future generations. It implies avoiding environmental degradation, which brings injustice on future generations for the sake of short-term economic gains (Johnson, 2012).

Similarly, notions of the environment have broadened to include access to environmental goods and resources such as water, energy, and green spaces (Lucas *et al*., 2004; Heynen, 2003), and the threat of natural as well as technologically produced risks (Walker *et al*., 2006; Adger *et al*., 2003; Pelling, 2005). Some environmental justice scholars are also trying to extend the discourse to the 'food justice problems', which includes issues related to health, globalization, workers' rights and working conditions, disparities in access to food and land use, and respect for the land, and ultimately, how food production, transportation, distribution, and consumption systems are organized (Gottlieb, 2009).

Specifically in the area of public health, some authors are focusing on the differential exposure of disadvantaged populations to environmental hazards and health resources (i.e. Williams and Collins, 2001; Lopez, 2002; Gee and Payne-Sturges, 2004; Morello-Frosch and Jesdale, 2006). For example, Wilson (2009) builds on the body of scientific inquiry in which the emphasis is shifting from individual level factors to macro and meso-level factors and spatial processes (i.e. segregation, suburbanization, urban sprawl, urban revitalization) to demonstrate the importance of place and environmental context in the examination of environmental justice and community health issues. Concerning environmental health disparities, two mechanisms have to be considered regarding how socioeconomic factors may have an impact on environmental health: exposure variation and effect modification. In the first place, exposure to environmental burdens as well as access to environmental benefits may differ according to socioeconomic position. Disadvantaged communities often face greater likelihood of exposure to ambient hazards. Secondly, given a certain level of harmful environmental exposure, socioeconomic factors may modify the health effects by influencing individual's vulnerability. Factors such as existing medical conditions and access to health care, to transportation, or resources (i.e. fresh foods) have been suggested to be vulnerability factors that link social conditions to environmental hazards. These vulnerability factors characterize differential preparedness and differential ability to recover from exposure to environmental hazards.

Cases of environmental injustice have been recorded and studied also in Africa and Asia. In fact, as more and more environmental resources become scarcer, the increasing burden in hazardous environmental conditions imposed by more affluent countries in developing countries touches on an important issue of international

environmental justice. Therefore, the concept of environmental justice has been taken up in many countries. For instance, the turbulent situation in Nigeria's Niger Delta region has been cast as a struggle for environmental justice because it involves ethnic minorities outside the powerful political, military, and corporate elite fighting for a just share of the vast revenues that flow from Delta's oil and gas reserves. Extraction of these resources has occurred at a significant cost to the Nigerian environment, with oil seepage and spillage common, and the country has the highest gas flaring rate in the world. The Nigerian people have also borne a large burden, with environmental degradation impacting on communities that depend on fishing and agriculture for sustenance. In recent decades, Nigeria has become synonymous with violence and human rights abuses associated with the extraction of its resources, while the multinational oil company Shell has become infamous for its role in the region. Shell has given financial support to the Nigerian military and has been implicated in bribery, corruption, and violent suppression of dissent (Johnson, 2012)

5. The Distributional Deficit in Environmental Politics

Among environmental justice claims, several focus on either procedural justice or the fairness of decision making processes, or distributional justice, namely the social patterning of costs and benefits (Schweitzer and Valenzuela, 2004; Grimes, 2005; Watson and Bulkeley, 2005; Dodds and Hopwood, 2006; Wolsink, 2007).

In principle, impact assessment tools (broadly defined), including social impact assessment (SIA) (Vanclay, 1999; Burdge, 2003), might be better suited to address questions of environmental justice in decision-making settings (Connelly and Richardson, 2005). Processes of impact assessment enable inclusive stakeholder participation and thereby contribute to procedural justice, particularly in Social Impact Assessments: (Buchan, 2003); moreover, impact assessment processes provide for systematic analysis of the social patterning of the impacts and benefits of projects, plans, and proposals.

In the UK, a research identified 16 different forms of impact assessment as potentially relevant to environmental justice concerns[8] (Walker *et al*., 2005; Walker, 2007; Walker, 2012). Based on an evaluation of the guidance documents relating to each of these 16 impact assessment methods, there is a general consensus among researchers that there was a 'distributional deficit' in the policy and impact appraisal tools being applied to environmentally significant decision making in the UK. In

[8] The number of different tools reflects the breadth of interpretation of environmental justice in the UK to incorporate a wide range of inequalities in both the distribution of negative environmental impacts and the access to environmental resources and benefits (Bulkeley and Walker, 2005).

particular, the three methods with statutory status at the time of the research (Health Impact Assessment, Health Equity Audit, and Equality Impact) paid only small attention to distributional analysis. Moreover, SIA (Social Impact Assessment), whose established methodologies explicitly analyze patterns of impacts on people and communities (Burdge, 2003), has no statutory status and is very rarely applied in the UK. Finally, whilst in the case of several tools substantial and fairly detailed guidance on how to conduct distributional analysis was available, it rarely included examples or discussed issues related to conducting distributional analysis in relation to environmental impacts (Walker, 2010).

In Scotland there was debate around the implementation of Strategic Environmental Assessment (SEA) and translation of the EU Directive into national legislation, which focused on the extent to which the EU requirements could be extended to include environmental justice concerns. Connelly and Richardson (2005) show that even if there had been no recognition of the need to consider distributional issues in the EU SEA legislation or related Guidance, the Scottish political context is distinctive in recognizing environmental justice as a cross-government objective (Scandrett *et al*., 2000; Scandrett, 2007), making it possible to go beyond the bare minimum of the EU requirements. However, Jackson and Illsley (2007: 620) note that whilst the procedural dimensions of environmental justice are provided for, the principles of distributive or substantive justice 'have yet to be adequately articulated', and that consequently 'Scotland will not be able to use its innovative system of SEA to deliver substantive environmental justice'.[9] It has been shown that, in the UK, attention to the social distribution of environmental outcomes in impact assessment processes is rare. This is in part due to the limited profile of methods that have become institutionally embedded in the UK (the SIA addresses distributional issues it is not included in the UK profile) and in part due to the implementation of more common assessment methods, such as EIA and SEA (Walker, 2010, 2012).

Walker (2010) goes on to explain that the US context differs due to a 30-year period of grassroots environmental justice mobilization and protest, often focusing on the outcomes and consequences of public policy measures. The length and intensity of attention in the US to matters of distributional inequality have resulted in the development, in the EPA and other federal bodies, of specific methods of environmental justice or environmental equity appraisal. Executive Order 12898 refers specifically to the need for every federal agency to 'analyze information on the race,

[9] In England and Wales the profile of environmental justice in policy is less pronounced, and does not feature so explicitly in debates on impact assessment and policy appraisal, despite some lobbying by local environmental movements.

national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations'. Accordingly, guidance was developed by the EPA as to how the distribution of environmental impacts should be assessed (Environmental Protection Agency, 1998). These appraisals are typically applied in relation to the location of industrial and waste facilities, or transport infrastructures, and the guidance lays out the approach to be used to analyze community characteristics and patterns of 'disproportionate impact'. They are used routinely but for only a restricted range of environmental concerns, and have been subject to criticism about the limited and inconsistent way in which environmental justice issues and communities are defined (Holifield, 2004; Office of the Inspector General, 2004).

Walker's (2010) analysis shows that there are strong arguments about how distributional and environmental justice concerns do matter, and how they should be an explicit part of impact assessment processes. Perhaps the most convincing aspect to these arguments is the need to pursue values that protect the most vulnerable and that ensure that disadvantaged and politically marginalized social groups are not systematically burdened in relation to environmental issues (Connelly and Richardson, 2005). The potential consequences of a move in this direction could be to productively inform decision making processes such that the impacts on particular groups or communities are identified, and are addressed through a choice of alternatives, mitigation, negotiated agreements, or compensation measures. In this way conflicts over the potential injustice of outcomes for different parties might be reduced or ameliorated.

Walker (2010) explores the implications of the inclusion of distributional concerns related to environmental justice for the practice of impact assessment processes, in particular to assess whether or not conflicts over the inequality and injustice of environmental outcomes would be productively addressed or ameliorated. He asked:

> If impact assessment methodologies are used to produce evidence on the social distribution of environmental benefits and burdens, does this in some way enable conflicts to be addressed, informing debate between competing interests and moving towards finding more consensual outcomes? There are several lines of reasoning in this direction. Each centers on the notion that more information is intrinsically a 'good thing,' providing for a dispassionate assessment of the evidence of distributional inequalities, and thereby enabling informed and reasoned debate about the rights or wrongs of a given situation and how impacts

> on particular communities can be addressed. The rationale here is partly that conflict arises from lack of reliable evidence. Were that evidence available, better debate would ensue and all parties could negotiate on the basis of some degree of shared understanding. (*ibidem*: 135)

In the author's view, whilst several opportunities and possibilities exist for using evidence of distributional patterns as a positive catalyst for responding to conflict and progressively addressing inequalities, there are other more critical lines of reasoning, in different directions. First, hidden patterns of disproportionate impact on particular groups may be revealed and become politicized; second, evidence of distribution is not uncontroversial in either the methods or the processes of its production; third, and most fundamentally, there may be different interpretations of 'what is just', embedded in different values and understandings of what is at stake. These possibilities, as many argue, make it clear that environmental decision making is not just a technocratic process but that there is an inevitable normative politics involved. As a consequence, Walker (2010) concludes that incorporating distributional analysis of winners and losers, benefits and burdens, might make an important part of this normative politics more explicit but the result may be to emphasize difference and disagreement rather than to enable negotiation and consensus building.

CONCLUSIONS

This review of the literature on environmental justice was conducted to show the multifaceted character of the concept and the way it has been/is used, with special reference to its move across the Atlantic and over time.

In section 1, I showed how its meaning and purpose change depending on the geo-historical context. The notion of 'environmental justice' was born in the U.S. in the mid-1980s in relation to the struggle for racial equality, when it was first recognized that environmental injustice not only related to humans harming nature, but also occurred in racial, gender, and class discrimination. The expression 'environmental racism' was coined and was swiftly replaced first by 'environmental equity' and then by 'environmental justice', a term that activists felt was more inclusive and incorporated such concepts as equity, equality, and impartiality.

Currently, the EPA provides a clear definition of environmental justice on the basis of which the U.S. government is able to take action. To some scholars, this definition by no means implies that environmental inequalities have been redressed or that environmental justice has been achieved in the U.S., also because the political, legal, and technical advances towards recognition of environmental injustices in the U.S.

since the 1990s were accompanied by a vigorous academic debate about the link between racial and socioeconomic status and environmental inequalities. Nevertheless, this Nation is the most advanced country recognizing the need to address environmental inequalities.

In section 2, I analyze the notion of environmental justice in the specialized literature. Regarding the use of this notion, authors are divided into two groups. On one hand, some scholars argue that the notions of equity, equality, distributive justice, procedural justice, and environmental justice are often used inconsistently. By consequence, the domains of these constructs are unclear and there is a need for conceptual clarity. In order to shed more light on this aspect, some authors (as Ikeme) explain that environmental justice should be considered as the broad, overarching concept encompassing all justice issues in environmental decision-making; they highlight the 'distributive' and 'procedural' dimensions of the concept; they clarify that the construct of environmental justice can be rationalized by both deontological and consequentialist arguments; and they categorize environmental justice under preventive, corrective, and retributive types. On the other hand, there are authors who think that the ethical and ideological character of justice theory can serve only to maintain plurality. Furthermore, the use of the term 'equity' slips too easily between the descriptive sense of inequality, and the normative sense of justice, providing a further complication in the search for clarity of language and meaning.

In section 3, I compare the USA and Europe, and I show that their conceptions of environmental justice differ in relation to their underlying philosophies of public policy, perception of the issues involved, and the possibility of conceiving a harmonized approach. Trying to gather a European definition, environmental inequalities can be characterized as a fourfold problem: exposure and access inequalities, that is, the unequal distribution of environmental quality between individuals and groups; policy effect inequalities, namely the unequal effect of environmental policies; impact inequalities, that is, the unequal environmental impact of individuals and social groups with regard to their incomes and/or lifestyles; and policy-making inequalities, that is, the unequal access to environmental policy-making.

In section 4, I try to rough out the evolution of the use of the environmental justice notion. In fact, the concept of environmental justice is evolving to become broader in scope and more encompassing. On the one hand, this evolution led to the particular relevance of the 'local' aspect (territory, local community values, etc.), whereas new local mobilizations against infrastructures and industrial developments have often applied an environmental justice framework, a prominent example being the no-TAV movement in the Susa Valley. On the other hand, in becoming more globalized, the

environmental justice agenda is extending into questions of distribution both between and across nation-states. In addition, the term 'justice' is becoming more inclusive and is comprising gender and age differences, the rights of future generations, access to environmental goods and resources, such as water, energy, and green spaces, the threat of natural and technologically produced risks, and the problem of 'food justice'.

Finally, in section 5, I focus on some European countries' environmental policies to question whether they consider distributive problems as related to environmental justice. It seems that there is a 'distributive deficit' in the policies applied to environmentally significant decision making. In particular, in the UK, the three methods with statutory status at the time of the research (Health Impact Assessment, Health Equity Audit, and Equality Impact) paid only small attention to distributional analysis. Moreover, SIA (Social Impact Assessment), whose established methodologies explicitly analyze patterns of impact on people and communities, has no statutory status and is very rarely applied. Contrastingly, the Scottish political context is distinctive in recognizing environmental justice as a cross-government objective and the procedural dimensions of environmental justice are provided for by SEA (Strategic Environmental Assessment). However, the principles of distributive or substantive justice have yet to be adequately articulated and, in practice, Scotland has not been able to use its innovative SEA system to deliver substantive environmental justice.

From the above I can conclude that the concept of environmental justice is multifaceted, not always well defined, and sometimes still ambiguously used. Although academic and institutional communities have made progress towards the clarification of this concept, more research is needed to resolve any vagueness in its use, and more studies have to be conducted in order to shed light on its meaning. In my opinion, research should be focused on the theoretical conceptualization of environmental justice, providing answers to answering questions such as: which other concepts (as 'equity', 'equality', etc.) does the concept of environmental justice encompass, and which does not? What is its main 'character' (normative or descriptive)? How many dimensions does it have? How can these dimensions be categorized? Only in this way could we have a theoretical concept really useful to the understanding and interpretation of the very different forms in which environmental injustice takes shape in different contexts.

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