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Equity, environmental justice and sustainability: incomplete approaches in climate change politics

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Abstract

The diversity of the different takes on the ethical concepts of equity and environmental justice in the environmental literature requires that a unifying framework, to properly map their theoretical and conceptual loci in environmental ethics, is defined. Specifically, the concepts of equity and environmental justice have often been conflated into one even though they rest on different philosophical foundations and have different denotations, connotations and implications. The inconsistent use of these constructs is perverse in both scholarly discussions and global environmental policy formulation and detracts from conceptual clarity and their analytical usefulness. The aim of this paper, therefore, is to provide a mapping of the different takes to the moral aspects of global environmental decisions. Attempt is made to clarify the conceptual and philosophical denotations of environmental justice and equity from the point of view of philosophy, law and moral ethics. Our analysis leads to the construing of environmental justice as a broad overarching concept encompassing all justice issues in environmental decision-making, including both procedural and distributive justice, which is what is usually meant by equity. The resulting framework allows us to grasp the competing, conflicting and incomplete approaches to environmental justice as captured in the North–South conceptions of the construct more effectively. It is our hope that our conclusions would be valuable to researchers of global environmental change and politics.

Keywords: Equity; Environmental justice; Climate change; Sustainability

1. Introduction

It is of utter relevance that words used to describe ideas or concepts in literature convey the intended message. Arguments are perpetuated, misunderstanding is stoked, and knowledge obscured when intention and meaning are counter-positioned. In the literature on sustainable development, it will be difficult to find a concept that is as misused and misinterpreted as that of equity and environmental justice. These terms have often been conflated into one and thus, to be found all over the sustainability literature are equations of environmental justice to equity (USEPA, 1992; Foster, 1993; Coughlin, 1996; Ridgley, 1996; Chinn, 1999). In these studies and many others in the literature, the notions of equity, distributive justice, procedural justice and environmental justice are used inconsistently. As a result, the conceptualisations or domains of these constructs are unclear.

Other authors have also identified the conceptual confusion in the environmental justice/equity literature. Been (1993) has pointed out that valence terms like "fairness" are vague and general, and as such behind calls for "fairness", "justice", and "equity" are divergent conceptions about what is fair, just, and equitable. Arnold (1998) highlights the failure of environmental justice theorists to identify whether the goal is preventive, corrective, or compensatory. The diversity of the different takes on these ethical concepts in the environmental literature requires that a unifying framework, to properly map their theoretical and conceptual loci in environmental ethics, is defined. The danger inherent in the continuing failure to make clear distinction among these constructs is perverse in both scholarly discussions and global environmental policy formulation.

The purpose of this paper, therefore, is to provide a mapping of the different takes to the moral aspects of global environmental decisions with particular emphasis on the climate change politics. It is pointed out that equity and environmental justice rest on different

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philosophical foundations and do have different denotations, connotations and implications, and thus warrant clarification. We seek this clarification from the point of view of philosophy, law and moral ethics. Conceptual clarity and analytical usefulness of this exercise for researchers of global environmental change and politics is the motivation for this paper. The structure of the paper is as follows. The next section analyses the philosophical basis for moral decision making as expressed in the deontological and consequentialist philosophies. This provides a basis for locating the concepts of environmental justice and equity to their philosophical and theoretical roots which is done in Section 3. Following that, we attempt a practical application of the resulting framework to the climate change debate in Section 4. This allows us to illuminate in a more concrete way on the competing, conflicting and incomplete approaches to environmental justice as captured in the North–South conceptions of the construct. Section 5 draws lessons for the international community, especially with regard to reaching a consensus on the climate change debate. Section 6 concludes.

2. Deontological and consequentialist philosophies

Rationalisation of ethical judgements is usually based on two broad paradigms of moral philosophy: deontological (rights-based) and consequentialist (goal-based) paradigms (Dasgupta, 1990; MacDonald and Beck-Dudley, 1994). Deontological or rights-based reasoning upholds the priority of the right over the good (Kant, 1948; Hayek, 1960; Nozick, 1974). At the centre of this paradigm are principles of justice, basic rights, duties, obligations, responsibilities, proper conduct and inherent natural rights of others (Akaah, 1997). Deontological reasoning requires that a decision-maker takes actions which are good standing alone without deriving justification from the consequences of the action (Laczniak and Murphy, 1993). It also holds that all humans have a sphere of inalienable rights in which no one, including the state, is allowed to interfere, irrespective of the consequences (Nozick, 1974). Justice demands respect for these rights or a remedial action once these rights are infringed upon. Thus it can be said that deontological evaluations focus upon the morality of actions themselves, not upon the consequences and their harmfulness (Baron, 1994).

Carter (2002) argues that deontological theories imply that the ''means justify the ends,'' and that the 'rightness' or the 'wrongness' of an act is completely independent from what is achieved, brought into being or intended to be brought into being. Thus deontological theories emphasise the values which guide the decision-making process so that, in the strictest application, deontological frameworks assert that not only are the consequences of an action not the guiding principle of what to do, but that they are completely irrelevant in terms of what to do. Instead, an act can only be justified when it adheres to some a priori governing rule, and this alone determines whether or not an action is morally justifiable (VanDeVeer and Regan, 1987; Edge, 1994).

The deontological position has been largely ascribed to the works of Immanual Kant (Fennel and Malloy, 1999; Carter, 2002). Kant summarised the notion of duty in what he termed the categorical imperative. This essentially refers to the absolute duty to act upon certain principles or rules, as illustrated in Kant's instruction, ''Act only on that maxim which you can at the same time will to be a universal law'' (Kant, 1948). This oft-repeated quote summarises Kant's basic premise, which holds that for a particular action to be considered justifiable, the application of that action in like circumstances must always be considered justifiable (Carter, 2002). This view is also supported by Nozick's argument that 'whatever arises from a just situation by just steps is itself just' (Nozick, 1974, p. 151).

Consequentialist or the welfarist paradigm on the other hand acknowledges the priority of good over rights (Ross, 1930; Rawls, 1972; Dworkin, 1978, 1981a b; Fried, 1978). It includes those positions that emphasise the ''rightness'' or ''wrongness'' of a situation based on application of some judgement focused on end results. Under this theory, the society simply identifies desirable social goals, for example the maximisation of aggregate welfare, and insists that agents in the society ought deliberately to seek and realise an aggregate of them. Thus, actions and policies governing actions are judged solely in terms of their consequences and effect on the target general good. And where a conflict arises between the general good and individual or group rights, the general good is given priority. The consequentialist focus on outcomes is aptly summarised in Dworkin's assertion that 'justice is a matter of outcomes: a political decision causes injustice, however fair the procedures that produced it, when it denies people some resource, liberty or opportunity that the best theories of justice entitle them' (Dworkin, 1993, p. 140). The problem with consequentialist frameworks is deciding what should constitute the overriding social goal as dispute may arise concerning the right social welfare objectives (Carter, 2002). But once this is agreed, operationalising consequentialist frameworks is relatively straightforward.

Strands of consequentialist paradigm abound. Utilitarianism is the most common strand that is usually resorted to in the literature. This theory is most closely associated with John Stuart Mill, and stresses the maximisation of some good, usually understood as some measure of utility, which Mill expresses as the 'Greatest Happiness Principle'. By happiness, Mill is

referring to that which produces or creates the greatest amount of pleasure and/or the least amount of pain, and thus identifies the right or morally justifiable action for a given situation (Carter, 2002). Thus, for Mill, an action is moral or right when it produces a good (i.e., pleasure), which is maximised for the most number of people. An individualist variant of this, termed hedonism, seeks the greatest pleasure and the least pain for the individual (Fennel and Malloy, 1999). But Mill was adamant that his utilitarian philosophy should not only be considered in terms of the individual, but for the larger social community as well (Carter, 2002).

Classical utilitarianism seeks the maximisation of the sum of individual utilities or welfare (Sigwick, 1907). Pluralist consequentialist theories, on the other hand, not only seek to maximise aggregate welfare, but also equal distribution of welfare (Barry, 1965). Rawl's difference principle (1972) asks us to maximise the welfare of the worst-off person. There is also a non-utilitarian 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 of welfare and pleasure (Sen, 1987, 1999, 2000). One uniting thread running through all strands of consequentialist theories is that actions and policies are judged in terms of an aggregate evaluation of their consequences.

In summary, the difference between deontological and consequentialist paradigms of moral philosophy can be said to lie in two characteristics: (1) the level of importance attached to the rights of individuals or groups that make up the society; and (2) difference in emphasis given to 'outcome' and the justness of the procedure towards achieving the social objective. Clearly, a requirement is right-based if it is generated by concern for procedures and some individual interest, and goal-based if it is generated by concern for outcomes and something taken to be an interest of society as a whole. So what is the link between these two different paradigms of moral philosophy on one hand, and environmental justice and equity on the other?

3. Environmental justice and equity

The association of environmentalism and the principle of justice is quite a recent phenomenon. Environmental justice is a term coined and extensively used in the scholarship that has focused on different exposure of minorities to environmental stresses and risks. This is especially the case in the US where the citing of locally undesirable land uses escalated into a racial issue in the 1980s. It refers to the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income with respect to the development, implementation, and enforcement of environmental laws (Bass, 1998). The basic premise of this facet of environmentalism is that certain elements of the population face greater risks from exposure to environmental hazards than do others'' (Buchanan and Mathieu, 1986). At the international level, the practice of exporting hazardous wastes for disposal in developing countries has also been described as environmental injustice on a global scale (Lipman, 1998). The Basel Convention, if ratified, forbids such export of hazardous waste from rich countries except for recovery of raw materials or for recycling (Martinez-Alier, 2001). Calls for environmental justice are essentially calls for equality (Been, 1993). It is aimed at remedying existing or imminent injustice in the distribution of environmental costs and benefits (Lazarus, 1994); to eliminate unfair, unjust and inequitable conditions and decisions (Bullard, 1999) on the grounds that all men are equal and have equal rights (Reich, 1992).

To be gathered from the above is the fact that the environmental justice concept has been used to deal with issues of both distributive and procedural nature. It is also apparent that rationalisation of the environmental justice concept can be based on both deontological and consequentialist reasoning. For instance, Baden and Coursey (2002) distinguishes between environmental injustice in outcome (ex post), and environmental injustice in intent (ex ante). Injustice in outcome has a consequentialist basis as it focuses on the consequences of action. In this case it would not matter if the set of decisions or actions that resulted in the unjust condition were in themselves just (Williams, 1999). To the contrary, injustice in intent shows a focus on the morality of the action rather than the consequences and thus is based on deontological reasoning. It also suggests inclusion of procedural concerns in environmental justice. For instance, the usual arguments of environmental justice movements is that the poor bear much of the environmental risks due to low representation, access to power and decision making, implying procedural unfairness (Kameri-Mbote and Cullet, 1996; Camacho, 1998). The reasoning is that intent to marginalise a section of the society can only be harboured and effectively executed by an authority if the affected group have little or no representation and influence on the decision-making process. Stakeholder participation in decision-making is thus considered an important way of protecting the interest of all (Williams, 1999). In this sense, an act is justified not by the consequences but based on whether or not it adheres to some a priori governing or procedural rule and value system, and thus exemplifies a deontological justification for environmental justice.

Similarly, equality which is one of the major normative guidelines of environmental justice can also

be a deontological or consequentialist guideline. From the viewpoint of deontology, equality would be considered good in itself as all men are created equal and as such are supposed to have equal rights (Reich, 1992; Been, 1993). It is on this basis that environmental justice activists deplore the disproportionate exposure of ethnic minorities and the poor to hazardous facilities and toxic releases (Martinez-Alier, 2001) as it violates their equal right to non-hazardous environment as enjoyed by ethnic majorities. However, for consequentialists, equality is good only if it results in good consequences. In the event that it fails to achieve good outcome, the arising situation would still be considered unjust. For instance, even though some research have found that in some instances, the preponderance of the poor around toxic facilities are not as a result of deliberate marginalisation, but a consequence of the impersonal forces of the market economics which, by devaluing properties near contaminated neighbourhood, makes it cheaper and thus more economically attractive to the poor (Been, 1994; Lambert and Boerner, 1997), the emergent scenario is still considered unjust just because of the skewed outcome. Under the consequentialist criteria, the fact that market processes are standard and accepted means of social exchange is not enough to justify an undesirable consequence.

In its practical application, environmental justice exhibit preventive, retributive and corrective elements. Preventive characteristic of environmental justice is exhibited in its forward looking nature. Instances of the preventive characteristic of environmental justice can be found 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 recognises 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 Nation's Conference on Environment and Development (UNCED, 1992)). This provision is forward-looking and is geared towards preventing the transfer of environmental burdens across national borders, which is a common source of environmental injustice. Similarly, prompted by environmental justice movement, the US government and some state legislatures have established policies to address future inequity (Williams, 1999). This include the establishment of an Office of Environmental Justice in the US Environmental Protection Agency (EPA) (USEPA, 1992), and the issuance of Executive Order 12898, mandating all federal agencies to consider environmental justice issues in policies and actions (Cutter and Solecki, 1996). These policy measures stand to serve preventive purposes and provide guidance for avoiding or adjudicating environmental disputes. Instances abound where the invocation of such legal provisions have successfully halted alleged inequitable siting of noxious facilities in communities of colour. A good example is the decision of US Nuclear Regulatory Commission to turn down the Louisiana Energy Services Corporation's application for a license to build the Claibourne Nuclear Enrichment Center near a small rural community of Homer, Louisiana (Bass, 1998). The proposed site was located near two communities populated primarily by low-income, minority families that were descendants of freed slaves. The Commission turned down the license application, on the grounds that racial and economic discrimination played an unacceptable role in the project's planning. In these instances, proactive justice provisos are created or used to check environmental injustice.

Environmental justice also seeks remedies or corrective action for environmental injustice. For instance, Simbulan (2000) reports an editorial of New York Times of December 25, 1998, which shows that the United States is "removing hazardous waste or paying to do so at military and air force bases within the US and overseas. He cites a survey by the US Air Force (1992), showing that the US government spent $2.13 Billion for clean-up of bases in the United States in 1998 alone, and as of 1990, had spent US $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; $70,000 out of a projected cost of $1,580,000 for installations in Italy; $200,000 out of a projected cost of $650,000 for installations in Japan; 568,000 out of $986,000 for South Korea; and for United Kingdom, $500,000 out of a projected cost of $1,950,000, among others."

Evidence of the corrective element of environmental justice also abounds in the national arena. In the US, the 1980 congressional law, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, also known as the Superfund) is set up to correct situations where there has been a release, a threat of release, or a migration of hazardous substances into the environment by past activities of individuals or companies. Using its enforcement authority, USEPA investigates who is responsible for the release, identifies the potentially responsible parties, and negotiates with them to do the clean up. A party who disagrees to do the clean up can be ordered to do so by EPA or be forced to pay the cost if done by EPA itself. Further, this provision also exhibits elements of retroactive liability as corrective action is still required by law even when the responsible party was unaware of the consequences of its actions at the point of its perpetration.

Finally, environmental justice also possesses retributive characteristics. At the international level, there is discussion on the use of sanctions and other punitive

measures to deter nations from non-compliance or to entice compliance to international environmental agreements (Eglin, 2001). Issues of effective verification of compliance would, however, need to be resolved before the retributive action can be taken for environmental injustice at international level. Environmental enforcement fines and penalties are also common features of environmental regulation in national policy. In the US, there is some evidence of a trend towards stiffer sanctions including jail terms. Since 1983, for instance, EPA referrals of cases for criminal prosecution have increased significantly (Ausubel and Victor, 1992).

In summary, the important points to be noted from the above discussion is that the environmental justice construct has distributive and procedural dimensions, can be rationalised by both deontological and consequentialist arguments, and can be compartmentalised from preventive, corrective and retributive perspectives.

Equity, on the other hand, has its origins in the functioning of the courts and has dealt with hard distributive choices. The standard definition of equity is that given by Aristotle in the famous Fourteenth chapter of the fifth book of his Nichomachean Ethics: "And this is the nature of the equitable: a correction of law, where law is defective by reason of its universality" (Aristotle 1925, p. 133). Common law was supposed to deal with past injuries so as to restitute or make the injured parties whole. The role of equity in law is to provide remedies in particular circumstances where the application of law would not produce just outcomes.

The International Court of Justice (ICJ) points out that "equity does not seek to make equal what nature has made unequal" (ICJ, 1985). If this is reversed on top of its head, it appears to suggest that it is only situations or circumstances artificially made unequal that falls within the mandate of equitable remediation. Thus Nozick argues that 'the complete principle of distributive justice would say simply that a distribution is just if everyone is entitled to the holdings they possess under the distribution' (Nozick, 1974, p. 151). The key word here is 'entitled' suggesting a meritocratic basis for equity which would imply that equitable distribution is based on what each agent owns, deserves, or rightfully earned. Other authors propound a 'need' basis for equity (Smith, 1776; Malthus, 1798; Marx, 1875). The 'Needs Principle', is based on the belief that all humans have the rights to some core basic needs. The Marxist imperative of "to each according to his needs" is the most famous articulation of this position. Protection of the weak, the powerless and the poor also provides grounds seeking distributive equity (Le Grand et al., 1976; Konow, 2001).

These equity perspectives have influenced international environmental equity debate. Calls for equity in the international environmental policy have largely been focused on the need to equalise access to environmental goods and services (Rose, 1990; Byrne et al., 1998). Thus, just like in law, equity in environmental policy has mainly dealt with distributive issues (Banuri et al., 1996). Several approaches to the question of equitable distribution can be found in the literature:

- The 'no envy' principle—which conveys the ideal of equal opportunity of consumption and defines a situation where no agent would prefer someone else's consumption bundle to his own (Diamantaras and Thomson, 1990). Thus its requirement is that every active agent should bear the same cost or enjoy the same gain (Varian, 1974).
- The 'just deserts' concept—which seeks remedies that are proportionate to the weight of the injustice. So remedies for injustice should not engender a secondary inequity.
- The total equality approach—which argues that everyone should have the same income, i.e. the bottom 10% of the population should receive 10% of the income (Le Grand et al., 1976; Stymne and Jackson, 2000).
- Meritocracy—inequality is accepted if everyone has had equal opportunity at initial allocation and differentials is only accounted for by difference in effort and hard work (Konow, 2001).
- Minimum standard or basic need approach—which is concerned only with the poor in the society and argues that nobody's income should fall below a certain minimum level (Le Grand et al., 1976; Stymne and Jackson, 2000).

Apparent from the wide array of equity principles outlined above is the fact that, just like environmental justice, equity have both deontological and consequentialist foundation. Equity rules such as "Just deserts" and "no envy" described above are outcome based and so can be said to have their roots in the consequentialist philosophy. The same goes for the basic need approach and the total equality approach. Though arguments for them are based on the belief that they will engender some form of equality in access, they emphasis the good consequences of the outcome more than the process leading to the outcome. However, meritocracy principle is purely deontological given its emphasis on how initial allocations are made. Once the initial allocation is equitable, future differences from the initial equal allocation is not considered inequitable, as it is considered an outcome of the efforts of the hardworking agents of the society, who then deserve higher benefits. So under the merit criterion, what matters is whether the resources which allowed the rich to be well off are justly appropriated or not (Bhaskar, 1995).

Equity can be ascribed with, corrective and preventive ramifications. Its role in providing remedies when the application of common law would not produce just

outcomes establishes its corrective element. This provision is similar to the application of equity in international and national environmental policy. The concept of "common but differentiated responsibilities" seen in the framework Convention on Climate Change is itself geared towards correcting for obvious differences in abilities to pay for climate protection and historical emissions among countries and to avoid exacerbating current inequities. Equity can also be forward looking. Once the rules of equity to be adopted are determined in law or in international resource allocation, the rule becomes a preventive criterion as it can now serve as guidelines for future equity issues.

From the above discussion and analysis, it can be seen that while environmental justice encompasses and transcends distributive concerns to include procedural justice, equity is purely distributive in its focus. Thus, whereas environmental justice has been used to refer to questions of both spatial and procedural justice (Szasz, 1994; Harvey, 1996; Been and Gupta, 1997; Kuletz, 1998), equity has largely been confined to dealing with hard distributive choices (Tol, 2001; Robinson, 2002). However, both Environmental justice and Equity can be rationalised by either deontological and consequentialist arguments. This suggests that a more theoretically consistent way of construing environmental justice is to consider it as the broad, overarching concept encompassing all justice issues in environmental decision-making. Environmental justice, thus understood, would be deemed to have distributive and procedural dimensions. The distributive dimension represents what is usually meant by equity and will thus have to do with outcomes people receive in social exchanges (Brashear et al., 2002). The procedural dimension, on the other hand, is concerned with procedures and processes (Sheppard et al., 1992). Within this big picture of environmental justice, it is then possible to approach environmental justice from various directions, including: preventive, corrective and retributive justice. It is within this broad picture of Environmental Justice that the North–South climate change politics should be viewed.

4. North–South climate change politics as partial and conflicting claims on environmental justice

The climate change politics provides a good framework for practical illustration of the partial and conflicting claims to environmental justice in the literature. The climate issue is based on the belief that anthropogenic emission of greenhouse gases is the major driving force behind the changing climate. Due to the far reaching and multi-faceted nature of the potential impacts, climate change has become the most important and dangerous, and certainly the most complex global environmental issue to date (Kandlikar and Sagar, 1999; Hamilton, 1999). The projected impacts of a warmer earth include changes in the global climate and the consequent disruption in the temporal and spatial distribution of temperature, precipitation, evapotranspiration, clouds and air currents as well as the consequent shift in the vegetational belts and rise in sea level which could adversely effect low-lying areas (Karl and Knight, 1998; Sokona and Denton, 2001), and the synergy among these discrete effects (Myers, 1997).

Controversy over climate change has centred on economic, ethical and political issues. This is because the distribution of climate change impacts is at variance with the historical responsibility (Sagar and Banuri, 1999; Tol, 2001). While the majority of the impacts are expected to have greater intensity in the developing countries (Jodha, 1989; Fischer et al., 1994; IPCC, 1998; Smit and Yunlong, 1996), the increased concentrations of GHGs in the atmosphere are due overwhelmingly to the activities of developed countries (Fuji, 1990; Smith, 1991; Bhaskar, 1995; Hamilton, 1999). Further, whereas the developing countries who are more heavily at risk have little capacity to confront the challenges imposed by climate change (Ebohon et al., 1997), the less-threatened developed countries have the wealth, the technical know-how and capacity to bear the burden of climate change (Sagar and Banuri, 1999; Sokona and Denton, 2001).

For most purposes therefore, the major environmental justice and equity issues facing the climate change debate are: distribution of impacts; distribution of responsibility; and distribution of costs and benefits. Fundamental to our purpose here is the fact that the North and the South act on different conceptions of equity and environmental justice in confronting this issue. The focus of the South has been on equality, distributive injustice and corrective justice for historical emissions (Agarwal and Narain, 1991; Hyder, 1992; Ghosh, 1993). The North, on the other hand, focuses mainly on the most economically efficient path for minimising climate impact and delivering global ecological health and stability (Wigley et al., 1996; Azar and Rodhe, 1997; Manne and Richels, 1998; Tol, 1999). This has also resulted in the North and the South broadly subscribing to opposing burden sharing formulas. It is commonly recognised that equal rights per capita entitlements is the most favoured allocation option by the South, while the grandfathering rule is generally preferred by most countries of the North (Neumayer, 2000) and hence their decision to adopt its principles in the Kyoto Protocol where caps are based on the 1990 emission levels. These two competing and, in many instances, incomplete conceptions of environmental justice mark the dividing line in the North–South climate politics.

4.1. The Southern conception of environmental justice

A survey of the literature show that the Southern conception of environmental justice emphasises three elements: (1) The past must play a fundamental role in addressing present entitlements—*corrective/compensatory justice* (Mwandosya, 2000; Sokona and Denton, 2001); (2) Immediate equal rights to GHG emission to be accorded to each individual in the world—*distributive justice*, (Agarwal and Narain, 1991; Gupta and Bhandari, 1999); and (3) Adoption of fair procedures and inclusive framework in the process of reaching decisions—*procedural justice* (Sagar and Banuri, 1999; Kandlikar and Sagar, 1999).

So broadly, one can say that the Southern perspective has greater deontological flavour with emphasis on rights and procedures, with the belief that this is the only path that will deliver the right consequences. The first condition emphasises the importance of the past to the present. Usually credited to the Brazilian delegates to the climate negotiations and hence the tag 'Brazilian Proposal' (den Elzen et al., 1999; Torvanger and Ringius, 2000), this position suggests that bygones are not bygones, the historical emissions legacy must be revisited for corrective or rectificatory purposes. As proposed by Brazil, this criterion suggests a methodology for linking contribution to emission control with contribution to global warming. In this way, historical emissions form the main basis in the sharing of the burden of emission control. This position can be justified with Aristotle's condition for rectificatory justice which holds that "goods (or 'bads' in this case) should be divided in proportion to each claimants contribution" (Young, 1994). It also resonates with Barry's (1965) assertion that "the principle of equity is that equals should be treated equally, and unequals unequally." Thus, if the developed countries are responsible for the present damage, then it is their responsibility to clean the mess. This has also come to be known as the 'polluter pays principle'. Also since the excessive appropriation of the assimilative absorptive capacity by the developed countries now stand to constraint development opportunities in the South, it also demands that the North compensate the South for depreciating their mutual atmospheric capital base.

This conception of environmental justice echoes the legal concept of 'remedial constructive trust' which aims to extend remedies to hitherto unrecognised or unacknowledged areas of wrongdoing (Wright, 1998). Under this theory, a party can recover or regain title to a property, benefits or gains which is withheld from the party without legal justification, to the benefit of another party. The remedial constructive trust operates by imposing on the person in possession of the property a duty to surrender the benefit or gain by transferring specific property or the due portion of the property to the claimant. Further, the improper gain may also entitle the claimant to trace the property to which he or she has a prior claim when it has been converted into other forms of property.

Applied to the climate change issue, the globally owned common property of atmospheric assimilative capacity has been appropriated disproportionately by the developed countries and this has been converted into higher levels of wealth, economic development and standard of living. Justice, in the Southern conception, will include a North–South transfer of wealth based on this historical atmospheric asset debt. This reasoning is behind the ecological (or natural) debt concept highlighted by both (Fuji (1990) and Smith (1989, 1991) which argues that the developed countries owe the developing countries an 'ecological debt' and so compensation must be made. However, this position has been described as immoral on the argument that past actions were made in ignorance and by actors who are now dead (Beckerman and Pasek, 1995). They argue that this debt died with the actors who incurred them. Bhaskar (1995) denies this claim of ignorance. 'If current generations in the North accept assets from their parents,' she argues, 'then it is incumbent upon them to also accept the corresponding liabilities'. She likened the situation to one where a parent takes an object not knowing that it belongs to another person and afterwards hands it down to the offspring. The real owner is still entitled to reclaim it once it is ascertained that he is the owner, even though neither the offspring nor the parents are thieves. This element of the Southern position is clearly deontological in view of its focus on the natural rights of equal access and appropriation of a common resource. It is also retributive in that it demands remedy for historical wrong.

The second element of the Southern conception of environmental justice is demand for distributive justice. For example, the governments of China and India and the G-77/China indicated the primacy they accord to equitable allocations of emissions entitlements by linking it, in the discussions during and following Kyoto, with the acceptance of emissions trading (Neumayer, 2000). This position has a natural root in the equal rights approach of deontological paradigm. According to Barkham (1995), the ethical starting point to equity is that the value given to a human life is the same throughout the world. Each individual in each generation has equal right to emission of GHGs. This demands two conditions. Firstly, for the present generation and onwards, allocation of emission entitlements should be on per capita basis. Secondly, for the past generations and in line with the intergenerational scope of equity, a calculation of the overshoot in per capita entitlements by the developed countries since, say 1800, is necessary, and this is to be reflected in fashioning out an equitable distribution of costs and

benefits of atmospheric resources today (Bhaskar, 1995). This offers an analytical framework for the calculation of the ecological debt, for it is the accumulation of the overshoot in per capita entitlements in the developed countries over time that has translated into higher standards of living and wealth (Fuji, 1990; Smith, 1991). Note the clear distinction between per capita entitlements today and historic ecological debt as a result of historic per capita overshoot, two issues which has often been conflated in the literature. Under this argument, allocations based on equal per capita entitlements today has not accounted for historic emissions and so does not represent an equitable distribution of climate change benefits and burdens nor environmental justice.

Finally, the South seeks increased participation in the climate change response process (Kandlikar and Sagar, 1999). They argue that perceived fairness or equitability of an outcome rests on the legitimacy of the process by which it is determined. Rawls (1972) concludes that a fair bargaining would always produce a fair result. A fundamental ingredient of a fair bargaining process is broad-based participation. The procedural justice requirement of equity asserts that the distribution of costs and benefits of the atmospheric resources can only be equitable if it results from a process that is agreed upon by all parties. Those who are affected by decisions should have some say in the making of those decisions. This is of critical importance because, to date, climate negotiations have been less about protecting the global environment than about protecting national interests (Kandlikar and Sagar, 1999). The importance attached to participatory equity by the South might have to do with the feeling that they have not had a significant impact in the climate change agenda and processes, as evidenced in their low representation in IPCC and other agencies of climate protection. However, the major point to be noted is that procedural justice is a pure deontological criterion given its emphasis on how allocation decisions are made. In conclusion, therefore, it is apparent that the Southern perspective of environmental justice is broadly deontological in orientation.

Objection to the Southern conception of environmental justice is usually targeted at the first and second elements and are based on practical reasons. Grubb et al. (1992) argue that boundary changes that have taken place over the years makes it difficult to attribute past emissions to current states. However, Neumayer (2000) disagrees that this pose serious problem to allocating burdens for historical emissions. He argues that the boundaries of many of the major emitters in the past such as North America, Western Europe, Japan, Australia and New Zealand, have been relatively stable over time. Besides, even where countries have had boundary adjustments, as in the case of former Soviet Union, he sees no reason why a new nation state should not be held accountable for emissions that were undertaken within its territory for its economic benefit. The second major objection considers demand for immediate transition to equal per capita emissions politically unviable because of the cost it imposes on the North who will have to make substantial resource transfers to the South for the purchase of extra emission rights (Barrett, 1992). US government is a major opponent of any burden sharing formula that imposes significant cost on her economy.

4.2. *The Northern conception of environmental justice*

The overriding focus of the Northern conception of environmental justice has been largely consequentialist, and largely geared towards ensuring the most economically efficient path for minimising climate impact (Neumayer, 2000). A look at the range of climate burden sharing formula proposed by Northern countries show that they are mainly based on the consequentialist approach. Some of these suggestions include allocation based on equal emission reduction, equal net welfare change across nations, net welfare change proportional to GDP per capita, opportunity to abate, and ability to pay. These allocation criteria are predominantly directed at minimising burdens and ensuring economic efficiency. Little emphasis is placed on the historic distributive inequities and constraints it now poses to the development prospects of developing countries since bygones are merely that, bygones, and the rightness of actions now must be evaluated solely on the basis of their present and future consequence.

The Kyoto target to curve GHG emissions down to 1990 levels reflect the grandfathering logic as it was more or less close to equal emission reduction with little reference to difference in historical emissions. This resulted in the three major groups of emitters in Annex B (US, EU and Japan) having similar absolute emission reduction targets relative to the 1990 baseline (−6%, −8% and −7%, respectively), even though their historical emission profiles differ markedly. In reaching the Kyoto target, the only consideration was the ability of countries to meet their targets given economic status and prospects, which led to some countries such as Russia getting soft targets. This lends credence to our earlier observation that welfare principles dominate Northern conception of environmental justice. In this light, the Northern condition for environmental justice in the climate protection could be summarised thus: Costs and benefits should be shared in such a way as to minimise overall costs while maximising total welfare across the globe. The strategy would thus focus on reducing emissions where it is most cost effective and where the greatest opportunity for emission reduction obtains.

It is worthy to note that a strictly welfare-driven condition in environmental justice would still require

progressive cost allocation to match burden with capabilities. As we pointed out earlier, Rawl's "difference principle," for example, would allocate social goods so as to result in the greatest benefit or least burden to the least advantaged social classes. In terms of costs, therefore, the North accepts that advantaged nations would bear more of the burden that climate change imposes than poor nations. Similarly, North–South transfer of wealth, relevant technologies, scientific knowledge, management and adaptation skills is called for, but not based on the historic culpability of the North, rather based purely on the ethical principles of 'care-sensitivity' and care-practices' (Warren, 1999). In this sense, the poor have the right to be helped and the rich, therefore, have the ethical duty to help the poor, because a world with many poor is ethically inferior to one with fewer poor (Schokkaert and Eyckmans, 1999). Most importantly, the starting point is 'now', rectification for the past is discounted. All that this conception of justice appeals to here is the North's sense of charity. Note that this produces the same result as the demand in the deontological position of the South that wealth should be transferred in compensation for the ecological debt. The only difference is the premise upon which the action is based.

The procedural path towards climate protection enjoys less relevance in the Northern conception of environmental justice. Once the overall consequence maximises general welfare, the means is not really of critical importance. Evidence for this observation can be found in the manner in which the political, scientific and technical processes of global climate enterprise have proceeded which suggest that the North is more disposed towards using the most suitable resources and capabilities wherever they are to deal with the issues rather than seeking procedural fairness. Thus, it was deemed proper for the North to dominate the political and scientific agenda and processes of climate protection. For instance, the ministerial conference in Nordwijk (1990) was very exclusive with the participation of only 70 countries (Andresen and Wettestad, 1992). The 1990 Washington Conference was even more exclusive with only 17 nations invited. Also recall our earlier recognition of the low representation of the South in the IPCC. Even to the limited extent there is Southern participation in the IPCC, it is not clear that their input shapes to any significant extent the content or the process of the assessments. As reported by Kandlikar and Sagar (1999), a majority of contributors from the developing countries interviewed felt that they did not have much influence over the IPCC agenda. They also report that much of the initial agenda such as chapter headings, outlines, were all handed down by the Northern agencies, especially, US Department of State (Kandlikar and Sagar, 1999). While, the need for leadership is highly desirable, actions that suggest monopolisation of solution to a global-wide problem could weaken the commitment of the excluded. More importantly, this lends credence to the view that the orientation of the North in international climate protection processes is purely consequentialist as it emphasises the rightness or effectiveness of the outcome rather than the justness of the steps towards it.

5. Lessons for the global climate change project

It is interesting to note that both the consequentialist and deontological moral positions adopted by the North and South reach the same conclusion: greater burden for climate protection should be borne by the North, and North–South transfer of resources should be used to facilitate climate protection and adaptation in the South. This corroborates the analysis of other authors (Bhaskar, 1995; Schokkaert and Eyckmans, 1999). One might be tempted to ask: If both deontological and consequentialist reasoning prescribe the same approach to climate change resolution, why emphasise their differences?

Understanding the different ethical standpoint from which the North and the South conceive justice in climate politics is necessary to enhance understanding and consensus. It will help researchers in the field and the international community to strengthen and clarify their objectives. Also, by sharpening the applications and analytical usefulness of equity and environmental justice, our conceptual analysis of the ethical foundations of the two concepts will enhance policy debate and formulation. The current lack of coherence among the various environmental justice constructs can only perpetuate the atmosphere of endless chaotic theorisation with no positive effect on the evolution of a consensus. This provides a sound rationale for seeking clarity.

Secondly, our analysis provide a window into the basis for the moral positions adopted by the North and South in the global environmental debate, a necessary step towards eliciting the much needed paradigm shift by the two parties towards consensus. It explains the intolerance expressed by each party for the view of the other and the mutual suspicion between the two parties on the respective motives behind the actions of the other party. The deontological perspective of the South's perception of fairness in global environmental debate informs their emphasis on basic rights which extends to historical rights and accountability; and the procedural fairness of the processes leading to the outcome. The consequentialist view of the North is responsible for the emphasis on the outcome of climate protection strategy and less on the procedure; their pre-occupation with economic efficiency; and their disregard for (or muted recognition of) historical responsibility. The self-interest

behind the adoption of each position is not hidden, but their different philosophical backgrounds are miles apart.

However, it must be recognised that all notions of justice are normative constructs, and hence have merits and drawbacks relative to each other. Differences of opinion about what is moral or ethical, measurement difficulties and data limitations, and the politics of self-interest, will all mitigate against the elevation of one notion of justice over all others (Ridgley, 1996). So rather than stoking the embers of discord, opportunities for harmonising positions should be sought. This will be best achieved if negotiating parties focus primarily on the ultimate objective of sustainable development and be willing to make sacrifices. Allowing for multiple justice principles in the negotiation process is one way of doing this. Our discussion in this paper suggests that in many cases, such sacrifices will not substantially alter the final outcome from that initially sought by the party.

6. Conclusion

The urgency for consensus on climate protection strategies demands the obliteration of all clogs in the wheel of this process. Best solutions can only be crafted if the bases for different positions are understood and opportunity for harmonisation explored. In this regard, this paper set out to achieve two purposes. First, it provides a mapping of the different takes on the moral aspects of environmental decisions. Particularly, we sought a clearer understanding of the twin concepts of equity and environmental justice which is usually conflated as one in environmental literature. This was done by tracing their philosophical origins and historic usage in the environmental literature. Our analysis leads to the construing of environmental justice as a broad overarching concept encompassing all justice issues in environmental decision-making, including procedural justice and distributive justice which is what is usually referred to as equity. Second, our analysis allows us to illuminate in a more concrete way on how the two concepts should be construed in evaluating propositions towards tackling global environmental issues and understanding the source of North–South debate on distribution of climate protection burdens. It is our belief that clear understanding and delineation of the different ethical basis for the differing North–South conceptions of environmental justice would eliminate situation where negotiating parties talk at cross-purposes, hence will facilitate productive dialogue between parties.

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