Chapter 1

Beyond Distribution and Proximity: Exploring the Multiple Spatialities of Environmental Justice

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Introduction

Over the last decade environmental justice has evolved both as a political discursive frame and as a focus of academic study. The material and sociological themes of concern for activists and researchers are now extending far beyond the local distribution of pollution, risk and race to include many other environmental concerns and many other forms of social difference. The spatio-cultural and institutional contexts in which justice claims are being made and justice discourses are being articulated are globalising far beyond the USA to include, for example, South Africa (London 2003), Taiwan (Fan 2006), Australia (Hillman 2006), the UK (Agyeman and Evans 2003), New Zealand (Pearce et al 2006), Sweden (Chaix et al 2006), Israel (Omer and Or 2005), and global contexts (Adeola 2000; Newell 2005). In addition, the established representation of environmental justice as only a matter of socio-spatial maldistribution (Dobson 1998) is being replaced by a conceptualisation that is more open to other notions of justice figuring in the evidence gathering and claim making of environmental justice activists and academic researchers (Schlosberg 2004, 2007; Wenz 1988).

In this chapter I argue that this substantive and theoretical pluralism has important implications for geographical inquiry and analysis, meaning that multiple forms of spatiality are entering our understanding of what it is that makes and sustains environmental injustice in different contexts. In this light the simple geographies and spatial forms evident in much "first-generation" environmental justice research are insufficient and inadequate to the tasks of both revealing inequalities and understanding the processes through which these are (re)produced. Instead a multidimensional understanding of the various ways in which environmental justice and geography are co-constituted is needed. Following Harvey's (1996:5) observation that concerns about justice

"intertwine with the question of how to understand foundational geographical concepts", I argue that spatialities of different forms, of different things and working at different scales need to be integral in our understanding of the multiplicity of contemporary environmental justice concerns and claims. I develop this argument by examining a purposefully diverse range of examples of socio-environmental concerns that have been the focus of recent and more established research and political activism. This breadth stretches the spatialities involved from simple local proximities to more complex scaled spatial relations and flows, and brings forward multiple ways in which wellbeing, vulnerability and environment are spatially intertwined. Space, as many others have argued, is constructed by and through social practices, including those of activists and researchers. Given the variety of spatialities available (Leitner, Sheppard and Sziarto 2008) the chapter therefore seeks to identify systematically those that are being deployed within the evolving environmental justice frame and to consider the implications of both the particularities and the diversity that is revealed.

The framework used to structure this analysis draws on justice theory to move through three understandings of what defines the "justice" in environmental justice (Schlosberg 2007). First, distributional understandings of justice in terms of the unequal distribution of impacts, the unequal distribution of responsibilities and the spatialities that are implicated within these. Second justice as recognition (Fraser 1997; Honneth 2001) in terms of the processes of disrespect, insult and degradation that devalue some people and some place identities in comparison to others. Third, justice as participation and procedure (Hunold and Young 1998; Young 1990) in terms of how geography plays into the inclusions and exclusions of environmental decision-making. In using this framework I seek to promote a move beyond the distributional in geographical research towards a fuller and more integrated understanding of what the spatiality of environmental justice can constitute.

I begin the discussion by mapping out in more detail how the scope and meaning of environmental justice has broadened and pluralised over the last decade. This then provides the context for considering the spatiality of environmental justice as revealed within different conceptualisations of justice and across a diversity of environmental justice concerns.

Pluralising Scope and Meaning

The history and origins of environmental justice as a term, a set of ideas and a focus for political activism in the USA are well known and well documented (Bryant 2003; Bullard 1999). The core concern with the burdens of pollution and risk associated with waste and industrial

sites, and how these sites were distributed, particularly in relation to race, was distinctive and challenging to conventional environmentalism (Shrader-Frechette 2002) and in many ways particular to time and place. The overwhelming majority of the "first-generation" research literature on environmental justice worked within this frame and conception, documenting the distribution of hazardous sites and racial groups, the historical evolution of these socio-spatial patterns (eg Hurley 1995) and the successes, failures and strategies of place-based environmental justice activism.

While this particular conceptualisation of environmental justice remains influential in the USA (Bullard et al 2007) and has, to some degree, reproduced itself as the environmental justice frame has moved into other countries, over the last decade there has been a broadening of the scope and understanding of what environmental justice constitutes (Walker and Bulkeley 2006). This has both substantive and more theoretically driven dimensions. In substantive terms there has been a broadening of the environmental and social concerns positioned within an environmental justice framing moving beyond only environmental burdens to include environmental benefits and resources in various forms (Laird, Cunningham and Lisinge 2000; Mutz, Gary and Douglas 2002; Schroeder 2000). A review of the content of activist group web sites in the USA identified 50 distinct and varied environmental themes (Benford 2005) and recent writing in the USA has focused on increasingly diverse concerns—including, for example, access to food (Williams 2005), flood disaster (Sze 2006), forest management (Carey 2002) and transport (Targ 2005). A similarly pluralistic and expansive framing of environmental justice also exists in the UK, one of a long list of countries in which the discourse of environmental justice is now appearing. A review of evidence of the relationship between environmental and social justice undertaken in 2004 covered 21 topics encompassing environmental goods (such as greenspace, food and water) as well as bads, and issues of environmental consumption and service provision (Lucas et al 2004). An earlier agenda-setting report produced jointly by a UK research council and Friends of the Earth England and Wales (Stephens, Bullock and Scott 2001:3) also firmly sought to go "beyond the US approach", incorporating international and global environmental concerns, such as climate change and resource extraction, and intergenerational justice issues. The coming together of sustainability and environmental justice discourses, in part through the conceptualisation of "just sustainability" (Agyeman and Evans 2003), has been a significant part of this broadening and globalising process. In parallel, the initial concentration on intentional environmental racism has also shifted to encompass more nuanced understandings of structural racism and intersections between race

and class (Pulido 1996, 2000); and attention has been increasingly given to many other forms of social difference. These have included research focused on environmental justice in relation to poverty and deprivation (the dominant concern in the UK; Walker et al 2003), age (Chaix et al 2006), disability (Charles and Thomas 2007) and gender (Buckingham-Hatfield et al 2005; Kurtz 2007).

Alongside this broadening of scope a more developed and richer understanding of the multiple meanings of environmental justice has emerged. In part this has stemmed from better recognition that environmental justice activism has always been concerned with more than questions of distribution (Wenz 1988). While distributional justice—who gets what in the environment—has undoubtedly been the dominant mode of representing the claims of environmental justice activists, particularly in the USA (Schlosberg 2007), there has always been a strong procedural justice dimension to stated environmental justice principles and objectives—the "reclaiming democracy" of Shrader-Frechette (2002). Justice claims have routinely extended beyond the distributional to include matters of fairness in process and regulation, inclusion in decision-making and access to environmental information (Dunion 2003; Hampton 1999; Hunold and Young 1998; Lake 1996; Petts 2005). Wider developments in justice theory have similarly moved beyond the distributional to emphasise the role of process, procedure and recognition in underlying the production of unequal outcomes (Fraser 1997; Young 1990). The work of David Schlosberg (2002, 2004, 2007) has been particularly influential in integrating different theoretical perspectives into a plural understanding of environmental justice and demonstrating how both procedure and recognition[1] are evident components of environment justice discourses (discussed further below).

In these ways environmental justice has become increasingly different to when and where it began. As the objects of attention and our understandings of the ways in which justice claims act as normative evaluations of socio-environmental conditions have diversified, a more intrinsically involved field of study has emerged. For all forms of disciplinary scholarship this has implied the need to rethink or refashion tools of analysis, including those of geography, which has made a significant contribution to the research field. It is therefore to matters of geography and the ways in which the spatial is conceived and entwined within a pluralised understanding of environmental justice that the rest of the chapter now turns.

Geographies of Distribution and Inequality

Distributional notions of justice for a long time dominated justice theory and thinking, and have been central to much engagement within

geographical scholarship (Smith 1994). In cities, in rural spaces and in the global economy, distributional inequalities, including those of the environment, have a demonstrable spatial expression and constitution. However, this spatiality is not unproblematic or given. Rather the ways in which environmental inequalities are understood, the nature of the socio-environmental relations that are at issue and the evidence that is used to give credence to claims of injustice gives importance to the spaces of different social and environmental categories and to different notions of space itself.

Space as Proximity

For the early headline claims of the environmental justice movement, spatially articulated socio-environmental inequalities were absolutely central. Studies of the socio-spatial patterning of the locations of waste, landfill and industrial sites and their proximity to populations of different racial make-ups were enormously influential in providing evidence for activists seeking to interconnect, systemise and upscale local protests against the siting of such facilities in black and poor communities. Various reviews have documented the enormous number of GIS-based studies undertaken in different parts of the USA (Bowen 2002; Brown 1995; Bullard et al 2007; Holifield 2001) in which the test of environmental injustice (and for some of environmental racism) was distributional and statistical, seeking evidence of disproportionate bias in locations of particular types of installations towards racial minority populations (Low and Gleeson 1998). As documented by Holifield (2004) for the US Environmental Protection Agency this translated into problematic attempts to statistically codify what constituted in these terms an "environmental justice community". Space was central to these research and policy tasks, conceived in flat, Cartesian terms—straight line proximity, or coincidence of site grid references within census boundaries. People were given a racial and sometimes class identity, and counted and compared in aggregate to establish patterns of over or under-representation in spatial terms.

This simple notion of geography and simple epistemology of inequality proved sufficient and effective when environmental justice remained in its initial narrow conception, and provided for some time, within the geographical research community and beyond, the core of environmental justice scholarship. However, its limitations have had consequences for the obscuring of what are in practice far more involved and multifaceted relations between environmental features and human wellbeing, and the potential hiding of forms of inequality that do not fall into such a simple and particular spatial form.

Remaining, for the moment, within the territory of pollution and technological risk, there are evident limitations in using census

boundaries or circles drawn around grid references to estimate who is somehow "at risk" from a waste site or factory producing pollutants. Pathways of pollutants are far more involved than this, leading to exposures and potential impacts that cannot be captured through simple proximity measures (Bowen 2002; Bowen and Wells 2002; Brown 1995; Liu 2001; Zimmerman 1994). More sophisticated analytical techniques which take better account of the more complex, dynamic and fluid spatialities of dispersion as pollutants move, are transformed and received by people located in different spaces and their resulting disease epidemiology have consequently been called for (Buzzeli 2007; O'Neill et al 2003). However, it is not simply a matter of developing better scientific tools that work with more involved notions of the spatial relation between pollution source and person, which can establish the spatiality of "who gets what" in a more sophisticated manner (Pulido 1996). It is also necessary to understand how the body, the household and wider social context are also implicated in the social patterning of impacts on health and wellbeing.

Kuehn (1997), writing from within an environmental justice framing, gives rare attention to the body (although see also Getches and Pellows 2002), arguing that risk assessment practices being widely applied in the USA and beyond were failing to recognise that bodies of different ages, races and genders were sensitive to and harmed by pollutants to different degrees. Locked into applying assessment methodologies to an "average white male reference man" he claims resulted in a "risk assessment characterisation that fits far less than half the nation's population, because the majority are women, children, the elderly, sick or people of colour" (Kuehn 1997:268). This institutionalised bias and lack of attention to the corporeogeographies of pollution and inequality (Longhurst 2001) has become all the more significant as the social differences of environmental justice have extended beyond race to include gender, age and disability. Furthermore while all bodies are not physiologically equal, neither, clearly, is the social context for people in households, living and working within communities with differential access to resources, to healthcare, to healthy and good-quality food and so on. Pollution is socially contextualised, intersecting with life course, class and poverty so that impacts of "equal doses" are not equally experienced or coped with—an observation that extends to the unevenness of the psycho-social as well as the physiological impacts of living with sources of risk (Bickerstaff and Walker 2003; Gee and Payne-Sturges 2004).

While these may seem like obvious points, it is rare to find them made within geographical scholarship on environmental justice (see Cutter 1995 for an early exception). Much of the classic geographical contribution has been so locked into a frame concerned with the

spatiality and politics of siting, of discriminatory intent in locating unwanted land uses, that it is has neglected to provide a full account of the ways in which accumulated environmental inequality then play into the social and the everyday—something that, in contrast, activist groups have centred on (Sze 2006). This insight moves us towards a recognition that environmental injustice arises not simply from unevenness in the spatial distribution of risk, from a politics of Cartesian geographical patterning, but from how this interacts with unevenness in socio-spatial distribution of vulnerability and wellbeing.

Spaces of Vulnerability and Wellbeing

The need to capture the interplay between vulnerability and the distribution of environmental bads has become more evident as the objects of attention within environmental justice discourse have diversified. For example, flooding is a threat to wellbeing that became part of environmental justice activism in the USA only after Hurricane Katrina devastated New Orleans in 2005 (Sze 2006; Pastor et al 2006). As a form of environmental risk for which there has been a deep engagement with concepts of vulnerability (Blaikie et al 1994; Cutter 1996; Pelling 2003) flooding clearly demonstrates the need to go beyond the socio-spatial patterning of risk in order to understand inequality. In the UK statistical environmental inequality analysis has been carried out to establish whether or not people who are experiencing multiple deprivation are more likely to live within the geographical boundaries of flood risk zones (Fielding and Burningham 2005; Walker et al 2003, 2007), showing that for coastal flooding in particular there is a strong spatial bias towards deprived people living in flood risk zones (Walker et al 2007). While this evidence of geographical patterning is partially revealing of inequality, its significance has to be seen in interaction with socio-spatial patterns in who is most vulnerable to flood impacts and how this vulnerability is being produced and reproduced for different people and communities. Here a catalogue of contributory dimensions of vulnerability need to be brought together—access to insurance, availability of resources to see through recovery, pre-existing health problems, infirmity, social isolation, the performance of emergency response and so on (Tapsell et al 2002; Walker et al 2007). In this light, inequality is not only a matter of the spatial distribution of risk—who lives on the floodplain and how they get to live there—but also of how each of these contributory dimensions to vulnerability also play out across space and time.

Similarly if we consider the environmental justice dimensions of greenspace, a form of environmental good, it is clear that the geographies involved again extend beyond simple proximity and socio-spatial patterning. A number of recent studies have used an environmental

justice framing to consider "greenspace" (of different forms) as an environmental contribution to wellbeing. These studies have mapped the distribution of greenspaces in urban areas, analysing their prevalence in some parts of the city, near to some social groups, and their absence elsewhere (eg Fairburn, Walker and Smith 2005; Wolch and Wilson 2005). But evidently it is not simply presence that matters and that may or may not contribute to diminished wellbeing and the creation of a distributional injustice. The socio-cultural and scaled geography of meaning and significance also has to be part of the normative evaluations that are made (Heynen 2003). Greenspace is not an entirely uncontested and unproblematic "good thing" that contributes equally to wellbeing for all; rather there can be important cultural, gender and other differences in how particular forms of greenspace are viewed and the functions and services that these perform (Low, Taplin and Scheld 2006). It is also well recognised that there are many factors that can act as barriers to the access and use of greenspace for people in different social groups and contexts, such as fear of crime and of others, physical barriers to mobility, and conflicts between different uses and users (Gobster 1999; Risbeth and Finney 2006; Schmelzkopf 1995). It follows that how the meaning and impact of greenspaces on wellbeing shift across the city and over time (Brownlow 2006) may be *just* as significant as the geography of greenspace availability. In this light proximity is only one dimension of spatialised narratives of difference and inequality.

Space and Distribution Intertwined

Moving across the three examples used in this section of the chapter—pollution, flooding and greenspace—we can see that it is not just the socio-spatial patterning of the environment that matters to the distribution of outcomes and impacts on health and wellbeing. Other forms and scales of spatial relations are in interaction with this patterning, contributing to how vulnerability is constructed and wellbeing is diminished or improved. This has two implications for how the spatial is intertwined with environmental justice claims. First, it is clear that injustice, in terms of distributional outcomes, cannot be reduced simply and solely to tests of unequal spatial patterning and disproportionate proximity. Other distributional inequalities may compound these or, crucially, may constitute the basis for environmental injustice claims *even where* seemingly equal and even socio-spatial patterns of environmental goods or bads are observed (eg an "equal" distribution of pollution, flood risk or greenspace). Indeed overreliance on simple and uni-dimensional geography in environmental justice analysis may serve to obscure inequalities that are constituted and spatialised in different ways.

Second, as we move from concern to concern *and* from context to context, we can expect shifts in both the spatial relations that are seen to be significant and in the nature of justice claims being made. This is not simply because of the different material circumstances and situations involved, although these are important—Harvey (1996:6) argues that "different socio-ecological circumstances imply quite different approaches to the question of what is or is not just". It is also because there may be quite different understandings of the environmental goods and bads themselves—echoing Walzer's (1983:6) observations about the necessary pluralism of justice concepts—and because acts of claim-making are strategic and situated (Harvey 1996; Wenz 1988). For these combined reasons and as returned to in the conclusion, different constructions of the spatiality of distributional inequality will become more or less relevant and productive for actors in justice debates.

Geographies of Responsibility

While inequalities in the distribution of outcomes and impacts on wellbeing have to be central to a concern for justice in general, and for environmental justice in particular (Low and Gleeson 1998; Schlosberg 2007), questions of distributional justice may also centre on responsibility for the production of these outcomes. Distinctions can be made in justice theory (and everyday justice practice) between situations in which distributional inequalities are the consequences of the actions or informed choices made by the same people who are affected by them, and those where there is a dislocation between those benefiting from and suffering from patterns of distribution (Barry 1989; Wenz 1995). In particular, when harm or diminished wellbeing is experienced by already marginalised groups as a direct consequence of the actions of those that are more advantaged, then claims of injustice become particularly powerful. These questions of the relations between patterns of responsibility and patterns of outcome can have distinct spatialities to them that are a significant part of the normative evaluations that are made.

For example, in the case of waste the geography of responsibility and the spatial relations between sites of waste production, transformation and disposal have been important to catalysing environmental justice activism. The first generally recognised case of environmental justice protest in Warren County, North Carolina was stirred not *only* because the host community was predominantly black and poor (Shrader-Frechette 2002), but because the toxic soil waste to be disposed of was coming from 14 other counties where polychlorinated biphenyls (PCBs) had been illegally sprayed onto roadside soil (Bryant 2003).

This was not the waste of Warren County, but waste produced by others. Similarly in the UK, the first local protest action most explicitly using the language of environment justice, at Greengairs in Scotland in 1998 (Dunion 2003), was catalysed by a plan to dispose of the toxic waste of "others" in an extension to a major cluster of landfill sites. In this case the waste was not only coming from England, crossing a border that, at the time, was becoming increasingly suffused with political and cultural significance, but was being transported from Hertfordshire, one of the wealthier "home counties" near to London. Here the disconnected geographies of responsibility and outcome deeply mattered to the claim of injustice. The waste involved was not anonymous, but carried its identity with it as it travelled and crossed significant political boundaries. In this case a politicised inequality of flow, movement and responsibility intersected with an inequality of population proximity to landfill sites in the construction of an integrated justice claim.

Geographies of responsibility have emerged in a different form in establishing claims of injustice related to the socio-spatial distribution of air quality. Various studies in the UK have identified that the worst quality is typically found in the most deprived communities, both in terms of average concentration levels and exceedences of air quality standards (eg Mitchell and Dorling 2003; Walker et al 2003). While such distributional evidence may in its own right substantiate a claim of injustice, in particular when geographically coincident with heightened levels of vulnerability (as argued above), the spatiality of responsibility for poor air quality is also embroiled. Stevenson et al (1998) take the example of London, and argue that "clear" injustice arises because the poor air quality experienced in the most deprived areas of inner city London is the responsibility not of the people living in those areas—who have low levels of car ownership—but of those commuting in and out of the city to more wealthy suburbs and outlying towns. Mitchell and Dorling (2003) provide a similar analysis for Great Britain as a whole and conclude that while the poor, in general, do contribute to the worsening of air quality, wards with the very worst air quality were the poorest in the country and contributed the least to emissions—a situation which they conclude is "patently unjust". Here, as with waste flows, the spatialities of consumption and production both matter. The particulates and nitrogen oxides emitted from passing cars, accumulating in the atmosphere and inhaled into vulnerable lungs, are given a social and spatial identity that is disconnected from the communities experiencing unequal health outcomes.

There are many other examples of how the co- or dislocation of the consumption and production of environmental inequalities are central to justice claims, including international and global issues such as the transfer and disposal of hazardous waste and mitigation

and adaptation to climate change (Ikeme 2003; Paavola and Adger 2002), both of which have been positioned within an environmental justice frame. How the spatialities of responsibility are conceived at such scales can be significant to the construction of competing justice claims and to the principles that are advocated for political and regulatory responses (Newell 2005). In campaigns and policies on climate change, greenhouse gas emissions are assigned a nation-state identity, through the construction of national emission inventories, the estimation of national totals and per capita indicators, and the assignment of national emission reduction targets. How nation-states are then blocked into regional or other groups and the extent to which the historical and the geographical are combined to take account of "legacy emissions" are central to the intense debates that have played out in international negotiations (Roberts and Parks 2007). For the regulation of international trade in hazardous and e-waste (Adeola 2000; Smith et al 2006), a nation-state responsibility is also assigned, with the Basel Convention requiring disposal of waste to take place within the national borders of where it is produced. A national identity is given to the waste as part of establishing what constitutes a just and equitable solution to dealing with it—even though when seen through a different scalar lens, that solution will ultimately involve a distribution of risk that is local and particular to a place, rather than national and collective in scope.

These examples leave us with a provisional view at least of how the simultaneous, interconnected analysis of the socio-spatialities of responsibility and impact can be a crucial part of environmental injustice claims. The geographies involved in mapping the distribution of responsibility and construction of injustice claims again shift from case to case; in some cases they are concerned with the spatiality of flows and the carrying of identity across politically or culturally significant boundaries; in others they are concerned with spatial fractures between the sites of consumption and production of environmental bads and goods using established hierarchic, but also potentially far more fluid notions of scaled comparison and difference (Newell 2005). Here again there are different constructions of space involved and opportunities for activists and institutions to work with the spatial in different and strategic ways.

Geographies of Recognition and Participation

The discussion so far has been concerned with different forms and parameters of distribution—of impacts, vulnerabilities, wellbeing, responsibilities—and how these are spatially constituted and interrelated. Developments in justice theory, however, have shown that to only be concerned with justice as distribution, to be locked into a

Rawlsian framework of need, desert and entitlement, is insufficient—both theoretically and for capturing the nature of justice as practised and argued over in everyday public life. Key here has been the work of Young (1990) and Fraser (1997) who, while following different lines of argument, have both sought to extend conceptions of justice in ways that focus attention on the processes through which distributional injustices are created and sustained (in this way both seek to supplement rather than replace distributional perspectives). Schlosberg (2004) draws on both theorists to argue that environmental justice in theory and praxis is "trivalent", integrating questions of distribution with those of participation and recognition in order to derive a more complete and satisfactory account. Accordingly he argues that:

> These notions and experiences of injustice are not competing notions, nor are they contradictory or antithetical. Inequitable distribution, a lack of recognition and limited participation all work to produce injustice and claims for injustice. (Scholsberg 2004:529)

He also persuasively shows in recent work (Schlosberg 2007) how all three concepts of justice are integrated in the arguments, discourses and principles of environmental justice activists in the USA and in global justice movements, and that they in this way accept "both the ambiguity and the plurality that come with such a heterogeneous discourse" (2007:5). Indeed he argues that "within the environmental justice movement, one simply cannot talk of one aspect of justice without it leading to another" (2007:73). Taking recognition and participation into our understanding of the nature of environmental justice in this way raises new questions about its intertwining with geography. In what way is space embroiled and interwoven with environmental justice as recognition and participation, as we have seen it is with justice as distribution?

Spaces of Misrecognition

Taking recognition first, there are a number of ways in which recognition, in the context of environmental justice, might be spatially constituted. At the core of misrecognition are cultural and institutional processes of disrespect, denigration, insult and stigmatisation, which devalue some people in comparison to others (Fraser 1997). While such devaluing of, for example gender, ethnic or racial groups, need not have an explicitly spatial expression, it is well recognised that there are circumstances in which the misrecognition of people can be entwined with and realised through the misrecognition of places. In the literature on socio-cultural understandings of environmental risk, notions of stigmatisation (drawing on Goffman 1963) have been used to explain why particular cases, usually of proposed development-producing

technological risks, have generated particularly acute public resistance (Flynn, Slovic and Kunreuther 2001; Satterfield and Gregory 2002). Place stigmatisation, it is argued, can result from the siting of stigmatised technologies, such that positive senses of place are threatened and replaced with associations of danger, threat and degradation (Slovic, Flynn and Gregory 1994; Simmons and Walker 2005). It follows, as Pulido (1996) argues, that environmental justice mobilisations have often been seeking to reclaim denigrated places and place identities. Similarly, for Sze (2006:18) "environmental justice activism is about racial, geographic and local identity, as much at the same time as it is about a specific facility, issue or campaign".

Place stigmatisation and misrecognition are not however just the *product* of siting decisions, but also underlie the processes through which certain spaces get to be chosen for development in the first place. Once places, as well as people and communities, become "associated with trash" (Pellow 2002) they can then become the strategic or "natural destination" for further unwanted land uses. Accusations of environmental racism at the core of environmental justice in the US suggest deliberate strategic intent based on misrecognition of both people and places. Processes of land use planning that concentrate industrial activities, waste handling and energy generation together in "marked" places (literally so in terms of land use zonings), and that protect the environmental quality and land values of conservation and heritage areas, provide a less knowing and more institutionalised account of how recognition plays into the socio-spatial patterning of urban-industrial geography. Pulido (2000) provides an important move in this respect in analysing how "white privilege", a highly structural and spatial form of racism, has both shaped the urban landscape and created distinct but functionally related clean residential suburbs and polluted industrial zones (see Leichenko and Solecki 2008 for a related analysis of gated communities). Similar institutionalised understandings of misrecognition can be used to explain, in part at least, why the immediate "doorstep" environment of marginalised places—the streets and neighbourhoods of daily life for the poor or particular ethnic groups—becomes neglected and poorly served by the mundane environmental services of street cleaning and maintenance (Lucas et al 2004; Hastings et al 2005); as captured in Scotland by the term "environmental incivilities" (Curtice et al 2005). Marked people in marked places become expected to live with incivilities and blamed for not looking after their own environment, with such institutionalised assumptions shaping where effort by the state to address problems is and is not deployed.

Place stigmatisation in which people and places are associated is not the only way in which recognition is spatialised. People moving into

and through spaces and environments with which they are disassociated and culturally disconnected can also bring misrecognition into claims of environmental injustice. In the UK one of the first connections made between issues of race, ethnicity and the environment related to who was visible in and making use of rural spaces (Agyeman 1990). The lack of "black faces in the countryside" became a particular focus of the Black Environment Network in the 1980s, and has more recently been given attention by the Commission for Racial Equality as well as organisations responsible for countryside management. While a number of historical and contemporary processes can be seen to be at work in reproducing a predominantly white British rurality (Cloke and Little 1997), for minority communities the ways in which culturally embedded misrecognition became more acute as they moved from urban into rural spaces was central to how they felt excluded from rural environments. Drawing from this example, there are potentially many other ways in which understandings of the geography of identity can bring insights into how the spatiality of cultural and institutional misrecognition underpins the maldistribution of environmental goods and bads.

Spaces of Fair Process

Turning finally to justice as procedure, there is a sense in which a call or demand for more democracy, openness and inclusion in processes of decision-making is about enabling access to spaces, and flows between spaces, that have previously been restricted (Barnett and Low 2004). In this way a lack of procedural justice is intimately wrapped up with a closed geography of information, access and power—and procedural fairness with a fluidity of movement of people, ideas and perspectives across the boundaries of institutions and between differentiated elite and lay spaces, creating open rather than constrained networks of interaction and deliberation. The degree to which such fluidity and interaction is *genuinely* achieved and has influence is through the crucial test of procedural fairness—as realised rather than discursively represented. The real-world geography of flows, encounters and power relations is an important part of that test. Examples of how the spatial factors into the realities of "just" procedure and process include the following: the ways in which access to the "open provision" of web-based environmental information and the deliberative possibilities of virtual participation (Zavestoski, Shulman and Schlosberg 2006) are in practice spatially and socially differentiated; the ways that access to resources and the time–space constraints of everyday life limit abilities to be present in participatory spaces, from local meetings to international negotiations (Barnes et al 2003; Roberts and Parks 2007); and how strategic behaviour operates within and outside of the formal spaces of decision-making

processes (Bickerstaff and Walker 2005; Sherlock, Kirk and Reeves 2004).

The marking out of democratic space is also part of, but problematic within, prescriptions for how procedural environmental justice should be achieved (Lake 1996). Many calls for procedural justice assert that those who are most affected by decisions should have particular rights to be involved and have their voices heard on a fully informed basis (Hampton 1999). However, this begs the question of how "those who are most affected" should be defined. Spatial boundaries, delineated on political, environmental or cultural grounds, are often involved in such a definition but are rarely unproblematic. Hunold and Young (1998), writing within an environmental justice framing, provide the most thorough attempt to define what fairness should constitute in decision-making related to the siting of hazardous facilities, but fail to grapple sufficiently with the complexities of geography that can be involved. For example, a key part of their prescription is that "siting policy should be made on the basis of a fairly large unit of review—at the state or regional level—or the decision about where a site is located will already have been made" (1998:91), a provision that fails to recognise the problems involved in, for example, selecting sites that sit near to and generate impacts that transgress the political logic of state or regional boundaries. Somewhat ironically, such problems of spatial definition become all the more acute the more that power to determine or negotiate decision outcomes is passed to "the community" and/or mechanisms of resourcing involvement or compensating impacts are deployed (as is becoming increasingly advocated in siting policy; Lesbirel and Shaw 2005). For example, in the UK the principle of "fairness with respect to procedures, communities and future generations" (Committee on Radioactive Waste Management 2007:13) has been stated as central to the process to be used to decide where to site a deep geological repository for the disposal of nuclear waste. An innovative package of volunteering, resourcing of community involvement in negotiations, and compensation for the eventual selected host has been proposed, but questions of spatial definition are deeply problematic (as the Committee itself recognises). How should "volunteer communities" be defined and enabled to enter into the process? How can a focus on empowering host communities be reconciled with the risks that would be experienced by communities along transport corridors? Over what area should compensation be negotiated when risks and associated stigma impacts arguably extend far beyond the immediate locality? Such spatially orientated dilemmas are common to other situations in which justice is an explicit part of environmental decision processes—for example, the negotiation of rights to indigenous genetic materials under the Convention on Biological Diversity (Vermeylen 2007)—and

demonstrates the very real ways in which the construction of space is wrapped up in the determination of fair process and who is included and excluded from the environmental justice that is performed.

Conclusion

The remit of this chapter has been intentionally wide ranging in that I have endeavoured to identify the multiple ways in which geography, and specifically the spatial, is intertwined with a pluralised understanding of the scope and meaning of environmental justice. In the course of working through various distributional dimensions of impacts and responsibilities, through justice conceived as recognition and fair procedure and through a diversity of examples of socio-environmental concerns, this explorative process has encountered multiple spatialities of different things, of different forms, constructed at different scales. Environmental justice has been intertwined with the spatiality of people of different ethnicities, ages and genders; industrial installations, traffic and greenspaces; waste categories and molecules of pollution; perceptions, identities and meanings. Space has taken different forms—Cartesian space; political and democratic space; institutional space; spaces of identity, place and community; dynamic spaces of flows; and movement between spaces and across boundaries. Space has been organised and constructed at different scales: local proximate space, the body, the community, the region, and the nation-state. This substantial but inevitably partial listing is sufficient to demonstrate that the uni-dimensional and simple distributional geography of proximity that has characterised the enrolment of space within "first-generation" understandings of environmental justice forms only one part of a far more topologically involved landscape of socio-environmental relations. Such multidimensionality is not intrinsically a good thing (more is not necessarily better[2]), and clearly not all dimensions are necessarily equal in their significance or prevalence. But being open and receptive to diversity and plurality, rather than assuming that certain conventions of justice and spatiality will always be present or dominant, is, I would argue, necessary to do justice to (and in) a rapidly evolving field.

A number of conclusions and implications flow from this analysis. First, it lends support to Harvey's (1996) argument that justice and geography matter together; that they interrelate and are co-constructed as claims of inequality and injustice are put forward. It follows that how environmental justice is conceived will bring forward certain understandings of space and hide others; and that how space is conceived will open up certain avenues for claiming environmental injustice, and close down others. As Kurtz (2002) and Towers (2000) argue, specifically in relation to scalar framings, this pluralism and

fluidity mean that the politics of scale—or I would argue a broader politics of space—is significant in the way that environmental justice disputes are played out. Different forms and scales of space are in this sense a strategic resource and just as "different groups will resort to different conceptions of justice to bolster their position" (Harvey 1996:398), so will different groups work with different understandings of the spatiality of the issues at hand.

Second, if, as Schlosberg (2007) argues, different understandings of justice—as distribution, recognition and participation—are simultaneously applied and integrated within the discourses of environmental justice activists, so we might expect to observe multiple spatialities at work. This is not only a matter of the scalar shifting and interlinking that various analyses have identified in the tactics of activist groups (Davies 2006; Kurtz 2002), but a wider set of possibilities for simultaneously working with different spatial conceptions of impacts, vulnerabilities, responsibilities, recognition and participation, and for integrating these together. Leitner, Sheppard and Sziarto (2008) have recently made a similar argument about the multiple spatialities of contentious politics more generally, suggesting that there is a productive opportunity to tie the analysis of the spatialities of environmental justice activism to wider debates within the discipline. In particular, we might explore how different spatialities are being tied in congruent and supportive ways to produce more rather than less resilient multidimensional environmental justice discourses.

Third, a limitation of the analysis in this chapter is that is has been unable to represent the great diversity of political and cultural contexts into which an environmental justice frame has travelled across the world (Schroeder et al 2008; Walker and Bulkeley 2006). However, it is possible to speculate what implications the arguments developed here might have for our understanding of how environmental justice translates. If the spatiality of environmental justice was simply distributional and proximate, then this formulation and the practices and discourses that flow from it could travel relatively untouched from context to context. A circle mapped around an industrial plant and a population statistically analysed in Los Angeles, Lancaster, Johannesburg or Mexico City is ontologically stable, even if the details of data and socio-environmental categories may change. However, if the spaces that matter are not Cartesian in form but those of place identity, community, process and procedure, or if the meanings and values given to social and environmental spaces are socio-culturally rather than statistically defined, then we should expect both the meaning and spatiality of environmental justice to shift and reform as the framing travels and translates. For debates about the (im)possibilities of universalism in environmental justice theory and praxis (Harvey 1996;

Schlosberg 2007; Walker and Bulkeley 2006; Williams and Mawdsley 2006) this necessarily supports a pluralistic perspective, even if common core issues and processes can be observed across different parts of the world (Schroeder et al 2008).

Finally, the foregoing analysis inherently makes the case for a new, methodologically diverse and theoretically pluralised stream of geographical scholarship on environmental justice. This chapter has drawn from a diversity of human and environmental geography scholarship that, while not necessarily positioned within an environmental justice framing, has provided insights into the nature of socio-environmental relations, as well as into how justice and space are intertwined. In future research there is scope for a more thorough analysis of the spatiality of environmental justice within different socio-environmental and political contexts, for exploration of the implications of multiplicity and diversity that have been suggested in this conclusion, and for a closer engagement by geographers with recent developments in environmental justice theory.

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Endnotes

[1] He also introduces the capability framework in his most recent work (Scholsberg 2007) in part as it can be used to contain multiple notions of justice. This is not included in the analysis of the chapter but does provide intriguing possibilities for further development in the context of environmental justice (Holland 2008; Walker 2009).

[2] I am grateful to a referee for this challenging insight.

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