This book is about the intertwining of environment and social difference – how for some people and some social groups the environment is an intrinsic part of living a 'good life' of prosperity, health and well-being, while for others the environment is a source of threat and risk, and access to resources such as energy, water and greenspace is limited or curtailed. It is also about how some of us consume key environmental resources at the expense of others, often in distant places, and about how the power to effect change and influence environmental decision-making is unequally distributed. Most fundamentally, it is about the way that people should be treated, the way the world should be.

The term that best captures this set of concerns is *environmental justice*. These two words have become used in many different ways - as a campaigning slogan, as a description of a field of academic research, as a policy principle, as an agenda and as a name given to a political movement. Emerging from its origins in anti-toxics and civil rights activism in the US to produce what some have seen as one of the most significant developments in contemporary environmentalism, environmental justice has become increasingly used as part of the language of environmental campaigning, political debate, academic research and policy-making around the world. As we shall see, we can now find examples of environmental justice language being used in countries as diverse as South Africa, Taiwan, Israel, Germany, Australia, Brazil and Scotland, and with reference to issues from the local street level through to the global scale. It has, as Agyeman and Evans (2004) argue, provided a 'vocabulary of political opportunity' and an important way of bringing attention to previously neglected or overlooked patterns of inequality which can matter deeply to people's health, well-being and quality of life.

This, as part of the discourse of contemporary political life, makes environmental justice significant and worthy of attention. More fundamentally, though, focusing on environmental justice provides a route into examining important aspects of how people think, reason and act in relation to environmental concerns. Justice *does* and *should* matter, as much to our environmental concerns and experiences as to others. And as we shall see, working out exactly how justice or fairness matters, and the parameters within which claims and judgements of

environmental inequality and injustice can be made, provides just as much scope for deliberation and debate as more familiar and established justice concerns.

The scope of environmental justice

In this book I aim to explore the diversity of ways in which environment and social difference are intertwined and how the justice of their interrelationship matters. As environmental justice language has moved spatially around the world and across scales to include global concerns, so the scope of what has been positioned within an environmental justice 'frame' has expanded and diversified (Holifield *et al.* 2010; Sze and London 2008). In its early formulations in the US in the 1980s, environmental justice activism and research focused pretty narrowly on the relationship between race and poverty and the spatial distribution of waste and industrial sites producing pollution impacts, including accusations that a form of 'environmental racism' deliberately targeting poor black communities in locating polluting sites was at work (see discussion in Chapter 4). Whilst this is still an important and distinctive theme, over the ensuing 30 years far more has been encompassed.

A review in 2005 of the content of environmental justice activist group websites in the US identified 50 distinct and varied environmental themes (Benford 2005), including transport issues, food justice, deforestation, lead poisoning, bio-piracy and transportation. Looking to the research literature, a similarly expansive field of study is encountered (see Table 1.1). The forms of social difference that have been featured in recent environmental justice research

Table 1.1 The social and environmental dimensions of recent environmental justice research

Social dimensions	Environmental dimensions	
Race	Air pollution	Greenspace
Ethnicity	Accidental hazardous releases	Outdoor recreation
Class	Waste landfills	Mineral extraction
Income	Waste incinerators	Hog industry
Deprivation	Contaminated land	Emissions trading
Gender	Brownfield land	Oil drilling and
Single parent families	Urban dereliction	extraction
Households in social housing	Lead in paint and pipes	Access to healthy food
Older people	Flooding	Fuel poverty
Children	Noise	Wind farms
Indigenous peoples	Drinking water quality	Nuclear power stations
Disability	River water quality	Climate change
Deafness	Transport	Trade agreements
Special needs	Forest fires	Alcohol retail outlets
Future generations	Whaling Wildlife reserves	Biodiversity and genetic resources
	Agriculture	Genomics
		Land reform

(the left-hand column in Table 1.1) include, for example, questions of age, the environmental rights of indigenous people, gender differences, the environmental and participatory concerns of disabled people and responsibilities to future generations. The range of environmental concerns that have featured in the environmental justice research literature (the right-hand side of Table 1.1) is now vast – from landfills to oil extraction, lead in paint to whaling, wind farms to hog farms – and covers a wide diversity of environmental risks, benefits and resources.

In later chapters we will examine a selection of these environmental concerns in some detail — waste, air pollution, flooding, greenspace and climate change. In each of these we will consider some of the evidence of unequal patterns and experiences for different social groups, and the arguments and claims that have been made in research and in environmental campaigning. Some of this evidence and argumentation is striking and compelling, and some enormously important work has been undertaken over recent years to show how environmental inequalities are experienced, how they are caused and how people's living conditions, access to environmental resources and access to basic democratic rights need to be addressed. However, such material will not be presented uncritically, and throughout the book I am hoping that readers will be encouraged to think about what is being asserted and argued and to develop their own critical evaluations as to its meaning and importance.

In this vein, the book has a broader aim of developing analytical insight and understanding in an academic field that sometimes lacks a more critical edge. This is to be achieved by tracing the growth, spread and evolution of environmental justice activity over recent decades, examining some of the vast range of evidence, arguments, explanations and demands that have been put forward, and considering the implications that then follow. Some key questions underpin this endeavour:

- Is there one definition of what constitutes environmental justice (and injustice) or are there many potential different ones? As the language of environmental justice has evolved from its origins in the US and become used in many different places, contexts and circumstances, what does this imply for what environmental justice is taken to mean?
- How can we pick our way through the many types of environmental inequalities and forms of justice and injustice now being examined around the world and work out a way of categorising, comparing and evaluating what is at issue?
- What are the methods through which evidence of environmental inequalities is being produced and what are the complexities involved in applying these methods and making sense of the evidence?
- Are there ways in which we can analyse the evidence or 'knowledge claims' being made by an environmental group, a scientist or a local resident and understand why evidence is disputed and disagreements erupt?
- What alternative explanations are there of the processes that have produced and sustained patterns of inequality and injustice in different contexts?

These questions all encourage an analytical take on the meaning of environmental justice and require tools for the critique and evaluation of what is being argued for and about. In the rest of this chapter the first steps towards developing this approach and towards answering some of these questions will be laid out. Two key ideas will first be discussed – framing and claim-making – before focusing on how environmental justice can be defined and understood. Through this discussion I introduce some important ideas for the rest of the book.

Framing

The notion of an 'environmental justice frame' has already been referred to and will be a recurrent reference point throughout the book. Concepts of frames and framing have taken root in various areas of social science but have been particularly powerful in the analysis of social movements or 'collective action', including that of the environmental justice movement (Capek 1993; Faber 2008; Taylor 2000). Framing is a notion that recognises that the world is not just 'out there' waiting to be unproblematically discovered, but has to be given meaning, labelled and categorised, and interpreted through ideas, propositions and assertions about how things are and how they ought to be. By implication there is not just one interpretation of the world available, but alternative versions, multiple versions (the many alternative religions are an obvious general example). Applying this multiplicity to environmental justice concerns, we can see how a pattern of environmental inequality might be interpreted as 'just how things normally are', as the outcome of how the market economy works, or as the result of systematic discrimination and injustice. A 'problematic' environmental risk may be interpreted as something to be managed through good science, or as the consequence of the capitalist pursuit of profit by some at the expense of others, or, indeed, as not a problem at all.

Social movements, such as the environmental justice movement, actively try to persuade others of their preferred frames of meaning, interpreting what is wrong with the world and advocating change (Benford and Snow 2000). Some of these framings are quite radical in making a case for a different way of organising society and addressing environmental concerns. But they are not alone in this endeavour. Others engage in their own work of framing – governments and political parties do it all the time, as do the media and corporate actors. Frames are contested and argued about and counter-frames are deployed to challenge dominant or threatening alternatives. An example is provided by Shibley and Prosterman (1998) in their analysis of competing frames in media coverage of childhood lead poisoning. They trace the difficulties environmental justice activists have in establishing a framing of lead poisoning as a threat to health that is particularly acute for some children in US society, rather than as a 'silent epidemic' that is a risk to all children which stands as the dominant frame.

Academics engage in framing as well. There is an academic frame of work on environmental justice that I am writing within, which has certain shared ideas, terms and conventions, even if I might be trying to stretch and interpret these in

particular ways. What is interesting about the frames that come to be is where they have come from, what they include and leave out, and what difference they make. Also of interest is how they appear in different forms in different places and how they evolve and become more or less powerful and relevant in the processes that they themselves are part of. At various points in this book I will be asking these questions, not only in Chapter 2, which is most directly concerned with tracing the appearance and evolution of the environmental justice frame within political activity around the world, but also in other chapters as particular topics, approaches and contexts are considered.

Claim-making

A second term that will be widely used throughout the book is *claim-making*. This, like framing, is used to emphasise that there are many different ways in which we can try to make sense of, or make claims about, the world around us. As will be discussed in Chapter 3, claims about environmental justice can have different elements or components to them, and analytically we can identify these and categorise and evaluate them. For example, and to draw on the topic of Chapter 5, a claim about the justice of distribution of air quality in a city might involve:

- claims about concentrations of air pollutants and how these are concentrated in particular parts of the city;
- claims about the vulnerability of old, young or poor people to the health effects of polluted air;
- claims about responsibility for the production of the poor air quality;
- claims about why the distribution of poor air quality is unjust or unfair;
- claims about what would constitute a just or fair way of addressing this situation.

Such elements of claim-making are open to further analysis to bring out, for example, how they are drawing on particular types of quantitative or qualitative evidence, particular concepts of justice or particular notions of responsibility. There is too much here to cover fully at this point, but the different possibilities are important, as are the ways different elements are combined in claim-making and how these combinations might become more or less effective in achieving the aims of the actors involved.

One of the basic combinations that is often made within justice claim-making is to link evidence of a condition of inequality with a normative position on what is just or unjust (see the later discussion of the distinction between inequality and injustice). Box 1.1 shows four examples of such combinations where in each case descriptive evidence of a situation (in these cases the distribution of waste sites,

1 I have deliberately chosen to use 'claim-making' rather than 'claims-making'. The latter plural version is often used within sociology, but no significant distinction is implied.

Box 1.1 Examples of environmental justice claim-making

'There is a disproportionate concentration of landfill waste sites in communities with a high proportion of African-American people and this is wrong, unfair and racist.'

'Access to a park or to a green area shouldn't be only for people who are fit and healthy, its not only them that need nice places to go; but around here nothing is done to enable access for people who are disabled or who have problems with getting around.'

'We were obstructed from getting hold of information on levels of contamination and that's wrong, everyone should have access to information about threats to their health.'

'The richer countries of the world have produced most of the carbon emissions contributing to climate change, and it is not fair that it is the poorest countries and the poorest people in those countries that will suffer the worst consequences.'

access to parks, access to information, carbon emissions and climate change impacts) is linked directly to a normative claim about what is just or fair.

The point here is that the academic literature on environmental justice has tended to focus either on analysing justice concepts and theories – drawing on various philosophical and political traditions (Dobson 1988; Schlosberg 2007; Wenz 1988) – or on the generation of evidence of patterns of inequality. Rarely have the linkages been adequately explored or both elements been approached as forms of claim-making. One of the objectives of this book is therefore to explore the possibilities of doing this and of taking a more integrative approach.

What the examples in Box 1.1 also demonstrate is that acts of justice claim-making are essentially open to all. You and I (and my children in particular) routinely make claims about the justice or injustice of a situation. It is commonplace and seemingly inherent to being a social being. As Sayer (2005: 5) states, 'in everyday life the most important questions tend to be normative ones'. My children have always made claims (we would call it arguing) about how fairly they are treated, about whether or not their brother or twin sister got more birth-day cake than they did (Figure 1.1), about how many times they got to sit in the front seat of the car and so on (familiar to all parents and siblings I'm sure). They could also make such claims about environmental conditions, about their capacity to have an influence on decisions that affect their environment and the environment of others, and about the way that the consumption practices of our society are having serious impacts on other people elsewhere in the world. As they grow up, I hope that they do articulate and make such claims, as they see fit. In other words, there is an everyday voice and mode of claim-making that needs to be



Figure 1.1 A cake fairly divided? Source: The author.

incorporated into our understanding of justice, environment and social difference (not just the voices and modes of the politically engaged) and in this book at various points I will endeavour to bring this into view.

This point has a corollary: that claims made by those with particular professionalised roles and expertise must similarly also be seen as claims, rather than assertions of absolute truth based on their 'better', 'more expert' grasp of what is at stake. An analysis that I (an academic with qualifications and letters after my name to prove it) might produce of the relationship between patterns of air pollution and patterns of social deprivation (see Chapter 5) might be grounded in data and statistical methods, but clearly there are sufficient assumptions, uncertainties and unreliabilities in any such analysis to make its conclusions provisional and contingent rather than definitive. Claims rather than truths. You may decide you are perfectly happy with the analysis I have undertaken and convinced by the assertions I am making - convinced that it is a better claim about patterns of inequality than others might be, because it is backed up by good enough evidence and it makes a reasoned case; but I would rather not take that for granted. It then becomes interesting to think about on what grounds, in what circumstances and for what reasons some claims are advocated and given more authority and respect than others.

As we shall see in later chapters, disputes can open up about both what constitutes reliable evidence and the degree to which injustice of some form can be 'proven' to exist. These are not usually disputes that can simply be resolved by collecting better evidence or doing better analysis, as politics and ideology are

also typically (if not always) at work. Hence arguments in favour of greater reliance on strictly applied scientific methods to establish patterns of exposure to risks (Bowen and Wells 2002) can be made just as strongly as claims that science has been corrupted by state and corporate interests to hide and deny patterns of harm amongst vulnerable communities (Faber 2008).

Definitions of environmental justice and the case for multiplicity

Having introduced the framing and claim-making that are involved in environmental justice discourse, what then follows for how we understand the defining of what environmental justice is? Looking across academic, activist and policy literatures, environmental justice is most often defined in terms of an *objective*, something that is sought after and for which certain conditions are specified. The act of producing and publicising an objective-based definition is a key part of constructing a politically powerful environmental justice frame around which people are to be recruited and mobilised. An objective also does the important job of providing a metric or standard against which current conditions can be judged and critiqued, and from which claims can then be constructed.

From what has already been said we might well expect that people could have different ideas about how to define environmental justice as an objective. And yes, when we look across academic, activist and policy literatures, we do not readily find one agreed definition of environmental justice being used, but rather multiple alternatives. To illustrate this, Box 1.2 reproduces six definitions of environmental justice taken from a range of different sources, places and contexts.

Box 1.2 Some alternative definitions of environmental justice

Commonwealth of Massachusetts

'Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies and equitable distribution of environmental benefits.' (Commonwealth of Massachusetts 2002: 2)

US Environmental Protection Agency (EPA)

'Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies ... It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.' (US Environmental Protection Agency 2008)

Friends of the Earth Scotland

'Environmental justice is the idea that everyone has the right to a decent environment and a fair share of the Earth's resources.' (Friends of the Earth Scotland 1999)

Coalition for Environmental Justice (in Central and Eastern Europe)

'A condition of environmental justice exists when environmental risks, hazards, investments and benefits are equally distributed without direct or indirect discrimination at all jurisdictional levels and when access to environmental investments, benefits, and natural resources are equally distributed; and when access to information, participation in decision-making, and access to justice in environment-related matters are enjoyed by all.' (Steger 2007)

Bunyan Bryant

'Environmental justice refers to those cultural norms, values, rules, regulations, behaviours, policies and decisions to support sustainable communities, where people can interact with confidence that their environment is safe, nurturing and productive. Environmental justice is served when people can realize their highest potential, without experiencing the 'isms'. Environmental justice is supported by decent paying and safe jobs, quality schools and recreation; decent housing and adequate health care; democratic decision making and personal empowerment; and communities free of violence, drugs and poverty.' (Bryant 1995a: 6)

Carolyn Stephens, Simon Bullock and Alistair Scott

'Environmental justice means that everyone should have the right and be able to live in a healthy environment, with access to enough environmental resources for a healthy life; that responsibilities are on this current generation to ensure a healthy environment exists for future generations, and on countries, organisations and individuals in this generation to ensure that development does not create environmental problems or distribute environmental resources in ways which damage other people's health.' (Stephens *et al.* 2001: 3)

Considering the words contained in these six definitions with some care is an instructive exercise. All of the definitions are concerned with justice to 'people'. This is a key common and distinguishing feature that separates environmental justice from notions of ecological justice or justice to non-humans (Low and Gleeson 1998; Schlosberg 2007). However, the particular ways in which the populace is divided up into groups varies. For several definitions it's just 'everyone', but for the US EPA it's 'race, color, national origin, or income' that particularly matter. For Stephens *et al.* (2001) 'future generations' are important, but our children and grandchildren do not appear specifically in any other definition. Nowhere are other particular social categories, such as gender or age, highlighted.

In terms of the ways in which the environment matters, for Bunyan Bryant it is a range of dimensions including that it is 'safe, nurturing and productive', whilst for the Commonwealth of Massachusetts it is 'the distribution of environmental benefits' and for the Coalition for Environmental Justice the four dimensions of 'environmental risks, hazards, investments and benefits'. The only definitions to consider issues of consumption and responsibilities to others are Scottish Friends of the Earth in its 'fair share of the Earth's resources' and Stephens *et al.*'s injunction that we do not 'distribute environmental resources in ways which damage other people's health'.

In terms of basic concepts of justice – summarised in Box 1.3 and discussed in much more detail in Chapter 3 – all of the definitions include notions of distributive justice, who lives with, consumes or receives what. Most, but not all, also tackle questions of procedural justice: 'access to information, participation in decision-making, and access to justice' for the Coalition for Environmental Justice, and 'equal access to the decision-making process' for the US EPA. Bunyan Bryant's definition makes reference to the 'isms' and to 'cultural norms and values', which are expressions of justice as recognition.

Looking across all of these definitions, we find some commonalities but also much diversity in what exactly is at stake and what environmental justice (and

Box 1.3 Three concepts of justice

Distributive justice – justice is conceived in terms of the distribution or sharing out of goods (resources) and bads (harm and risk)

Procedural justice – justice is conceived in terms of the ways in which decisions are made, who is involved and has influence

Justice as recognition – justice is conceived in terms of who is given respect and who is and isn't valued

See Chapter 3 for fuller explanations and discussion.

injustice) is taken to mean. If we also pick on particular conditioning terms such as 'meaningful involvement', 'interact with confidence', 'a healthy life', 'without direct or indirect discrimination' and 'fair share', we could ponder and argue at length about what each of these means and how they might be operationalised. Although this is not quite the point – because these are general statements and principles and it is facile to criticise them for not being precise enough and for being 'open to interpretation'. However, this exercise does demonstrate the problems we might well have in trying to settle on one unified and agreed definition and vision of what environmental justice is, and how we would know that we had it. More fundamentally, it is argued in Chapter 2 that environmental justice is situated and contextual, grounded in the circumstances of time and place, hence defying universal definition – although common and recurrent elements do exist, as evident across the Table 1.2 definitions.

Such a perspective has become more common in the literature on environmental justice, although some, such as Ikeme (2003), have made appeals for greater conceptual clarity and precision and for the adoption of a 'unifying framework'. Wenz (1988: 2) made one of the first cases for a plural understanding of environmental justice, arguing that different perspectives on justice can often be found to underlie environmental disputes:

disputes about injustice are common. Many of these disputes are fostered by differing conceptions of justice. Because people have different ideas about justice, a social arrangement or environmental policy that one person considers just will be considered unjust by another.

Phillips and Sexton (1999: 2) also see that there are many 'legitimate' definitions and that significant consequences flow from the choices that are made:

there are many possible legitimate definitions depending on one's beliefs, opinions, and values. The central point is not that a particular definition is right or wrong, but rather that choosing a definition has distinct implications for the formulation, implementation, and evaluation of both policy and science.

However, it is David Schlosberg who has done most to convincingly and expertly lay out the grounds for what he calls a 'multivalent' understanding of environmental justice in both theory and praxis. He persuasively shows in his most recent work (Schlosberg 2007) how different concepts of justice are integrated in the arguments and discourses of environmental justice activists, both in the US 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' (ibid.: 5). Indeed, he argues that 'within the environmental justice movement, one simply cannot talk of one aspect of justice without it leading to another' (ibid.: 73). In Chapter 2 we will also see how the emergence of

environmental justice ideas and frames around the world leads to an argument for a relative and contextualised understanding of what constitutes environmental justice, rather than one searching for universal meaning and conformity.

Such perspectives can be unsettling for those looking for simplicity and clarity, but it is both an honest reflection of 'what is out there' and a necessary step in developing a more sophisticated understanding of the meaning that has been given to environmental justice in different contexts and that *could* be given to it in the future. It is quite possible, as many already do, to select an environmental justice definition that is most satisfactory and work with it in concrete terms, to use it as a guide and to make arguments, if necessary, as to why it is better than other ones. The fact that others might have alternative definitions for the same two words is not then necessarily a problem, but may in fact present opportunities for dialogue and discussion — an argument widely made about 'sustainable development', which has even more of a 'problem' of multiple definitions (Walker and Shove 2007). Justice is inevitably political and politics involves disagreement, competing perspectives and active work to persuade others of your point of view.

Defining environmental inequality: the is-ought distinction

A final introductory step in setting up the analytical approach in this book is to consider the meaning of inequality. Having argued that we should expect multiple meanings to prevail, in particular around contested concepts such as justice and fairness, I am now going to be maybe rather perverse and try to draw a precise line in the sand between the notions of environmental inequality and environmental (in)justice. This is not because I demand that everyone just shapes up and becomes more accurate in how they use the term and that only one meaning will do. Rather, it is because I have found it useful, in being analytical, to make as clear as possible a distinction between inequality and injustice, particularly when considering the practices of claim-making.

So for me – and I hope as consistently applied in this book – inequality is a *descriptive* term, describing a condition of difference or unevenness of something (such as income, health, pollution exposure/creation, opportunity, influence, access to resources, consumption of resources), between different groups of people (old/young, black/white, rich/poor, north/south, this generation/future generation, etc.). Accordingly, inequality can be measured and described using data of various potential forms – although such description will never be an entirely neutral or unconstructed exercise.

In some research and policy domains the use of the term inequality or equality also carries normative qualities – inequality as something always negative and to be removed, equality as something always to be sought after. However, I have found it useful to resist such a move. As Harvey (1996: 5) argues, it is necessary to consider 'the just production of just geographical differences' if we are to make sense critically of the many, if not infinite, varieties of unevenness that do undoubtedly exist. Or as Wenz (2000: 175) puts it, 'equality is presumptively

just but the presumption can be rebutted'. What is unequal will not be considered always and everywhere undesirable, bad, unfair or unjust. Some form of judgement or claim has to accompany this, for example, about the severity, consequences or morality of the inequality and the need for it to be reduced or removed. This separation of description and prescription, between 'is' and 'ought' (Proctor 2001), is an important distinction in much moral philosophy and helpful in being analytical, as this book is seeking to be.

Making this distinction is therefore important in promoting better reasoning about what constitutes environmental justice and injustice. In the geographical research community in particular (the discipline that I feel best able to engage with at this point) the bringing of ideas of justice more fairly and squarely into research and writing about the environment has been rather bereft of sustained reasoning about what the justice in environmental justice should constitute and why. Many geographers working within this framing have assumed that injustice is self-evident and unproblematic, that evidence of spatial-distributional inequality can be simply equated with injustice, that it is wrong in some way, without needing to explain for what reason(s). There are exceptions, some already having been referred to, but these are overwhelmed by the weight of largely 'uncritical' environmental justice scholarship that has either attempted to develop the 'facts' of unequal distribution of environmental 'goods' and 'bads' (values taken uncritically) or followed the resistance work of environmental justice activism without evaluating its normative foundation.

Indeed my own engagement with environmental justice research has not been without fault. Initially intent on reproducing for the UK the types of distributional studies that had been so influential in the emergence of environmental justice as a political force in the US (see Chapters 2 and 4), my concern was with geographical patterns of distribution of available environmental parameters (air quality, flood risk, greenspace and so on) and how these intersected with measures of social difference (see Fairburn et al. 2005; Walker et al. 2003, 2006). Some striking patterns were revealed (as discussed in Chapters 5, 6 and 7), but these were claimed patterns of difference and inequality, not directly of injustice. Whilst the various reports we produced acknowledged – in asides and recommendations – that questions of justice and fairness remained to be determined, this work was left for others to do. It soon became apparent, however, that without carefully reasoned accounts of the ways in which socio-environmental inequality mattered and 'injustice' was being produced, the value of revealing difference was severely diminished. How, for example, did poor river water quality actually matter to the predominantly poor urban communities who lived near to it, and how was their well-being diminished? Why should enabling proximity and access to greenspace for different social groups be a policy priority? Could a community surrounded by landfill waste sites in Scotland still be a case of 'environmental injustice' even though it was predominantly white and lower-middle class in social make-up? So in analytical terms being descriptive with inequality and normative with justice, and in this way maintaining the 'is-ought' distinction, is, sometimes at least, a productive thing to be.

Summary

In this opening chapter I have endeavoured to lay out an approach to making sense of environmental justice and explained how I intend to write about it in the rest of the book. We have seen how environmental justice at its broadest is about the intertwining of environment and social difference. We have seen how the field of environmental justice activism, research and policy has moved in all sorts of interesting ways geographically and into a wide diversity of forms of social difference and types of environmental concern – meaning that we are in complex and interesting rather than simple and obvious territory.

In order to handle this complexity and begin to understand what working with the language of environmental justice involves, I have introduced two connected concepts that are useful for developing a critical perspective. These are *framing*, the process of making sense of the world and putting forward and naming preferred ideas and meanings, an activity undertaken by environmental justice activists who try to enrol others into their campaigning or collective action frames (but also, in a less overtly political way, by researchers and other actors); and *claim-making*, the process of making various forms of claim about the conditions of a situation, such as a pattern of environmental inequality, and the extent to which this is just or unjust. Claim-making is typically multidimensional, involving various component elements that can be identified, categorised and interrelated.

We have seen how there is not just one environmental justice frame or one agreed definition of what a just environmental condition consists of, but rather multiple alternatives being applied in different contexts. I have argued that it is futile to expect that a single environmental justice can be found around which an absolute consensus can be constructed and that will happily serve in all circumstances, for all frames and instances of claim-making. Rather, I have aligned myself with those who argue for an openness to diversity in the different ways that environmental justice is understood and applied.

We have also seen that a range of different actors are involved in being concerned about justice and the environment – from the lay citizen to the activist and the 'expert' scientist or academic – and that we can position all forms of assertion made by these actors as claims, leading us to focus attention on what it is that makes some forms of evidence and justice claim more powerful, convincing and influential than others. I have also, in related terms, called for better critique and more active reasoning about what constitutes environmental injustice, something which I argue is helped by maintaining a distinction between inequality as descriptive and injustice as normative concepts.

Structure of the book

The next two chapters build on the ideas and themes of this first chapter by dealing, in Chapter 2, at greater length with the history, evolution and globalisation of the environmental justice frame and what this implies for how we understand the meaning of environmental justice, and by putting forward, in Chapter 3,

a framework for examining the constituent elements of environmental justice claim-making. This framework distinguishes between the justice, evidence and process elements of claim-making, and through examining each of these elements Chapter 3 provides a wide-ranging suite of resources for the critical analysis of particular instances of environmental justice research, advocacy, discourse and policy.

The rest of the book consists of five chapters focused on environmental justice in relation to specific environmental topics or domains — wastes of various forms (Chapter 4), air pollution (Chapter 5), flooding (Chapter 6), greenspace (Chapter 7) and climate change (Chapter 8) — which explore, illustrate and explicate particular sets of the cross-cutting themes introduced in Chapters 1–3. The choice of these topics is intended to encompass well-established matters of concern (waste and air pollution) as well as those that have been more recently positioned within an environmental justice frame (flooding, greenspace and climate change), addressing local through to global scale concerns. There are many other topics that these chapters could have focused on, but they provide more than enough environmental and social variety to contend with in considering the complexities of evidence and the determination of what environmental justice constitutes in context.

In the final chapter a series of conclusions are drawn that emerge from and consolidate the learning that has been achieved through the book, and which advocate ways of taking forward the analysis of environmental justice in the future.

Further reading

To explore further the range and variety of environmental justice activism and scholarship browse the contents of the journals *Environmental Justice* (www. liebertpub.com/env) and *Local Environment: International Journal of Justice and Sustainability* (www.tandf.co.uk/journals). There are various edited books that are also a good starting point, including Agyeman *et al.* (2003) and Pellow and Brulle (2005).

Several websites have been set up to provide resources on environmental justice, including:

- Environmental Justice Resource Centre at Clark Atlanta University, www. eirc.cau.edu/
- Center for Environmental Justice and Children's Health, www.nd. edu/~kshrader/cejch.html
- National Black Environmental Justice Network, http://www.nbejn.org/ who.html
- Environmental Justice Research and Resources (at Lancaster University), http://geography.lancs.ac.uk/EnvJustice/.