

**ENVIRONMENTAL CONFLICT RESOLUTION: A CRITICAL
ANALYSIS OF THE ROLE OF INTERESTS AND VALUE**

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ABSTRACT

This thesis intends to contribute to an enhanced understanding of environmental conflicts and their resolution. To accomplish this task the thesis will ascertain the role that value and interests play in environmental conflicts in order to establish an adequate basis upon which they can be resolved. In the process, the thesis will also examine three different approaches, namely, the Standard Approach; the Environmental Impact Assessment (EIA) framework; and the Structured Decision Making (SDM) approach. First, the standard approach is informed by the understanding that focusing on interests instead of human values makes the resolution of conflicts more tractable. In contrast, this thesis argues that an exclusive focus on interests, in the context of environmental conflict resolution, is inadequate in some important respects because there are other factors to be considered such as the environmental impacts at the root of the conflict. Second, the thesis examines the focus on impacts that characterises EIAs. It argues that this approach remedies the limitations of the standard approach insofar as impacts are understood in terms of object value. However, the EIA approach does not provide much guidance on how to deal with conflicting human values. Third, taking into account the fact that the standard approach does not address the question of object value, while the EIA addresses object value but does not deal directly with human values, the thesis examines the SDM approach to environmental risk decisions. The thesis argues that while the SDM approach claims to deal with conflicts involving human values head-on, it does not provide a viable alternative in terms of environmental conflict resolution. This is because it fails to recognise the key distinction between human values and object value

despite acknowledging the presence of multiple value dimensions as a major obstacle to value trade-offs and therefore to the resolution of value conflicts. Finally, the thesis recommends an adequate basis upon which environmental conflicts can be resolved.

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INTRODUCTION

Environmental problems and challenges have been on the increase as societies all over the world face stresses from rapid social change, population growth, economic pressures, and increased industrial activities in the face of dwindling environmental resources (Ramsbotham et al. 2005, p. 7). Consequently, environmental conflicts have been on the increase as the pressures to use and protect the environment increases (Crowfoot and Wondolleck 1990, p. 1). In the process environmental consciousness has been a significant factor in the occurrence of environmental conflicts (see section 1.4). Environmental consciousness refers to the personal or social acceptance of certain values which in turn translates into willingness to take on responsibility, interest, and a commitment to protect and care for the environment¹.

The genesis of environmental consciousness has been widely attributed to the interplay of various factors, particularly during the 1970s, which set the stage for civic action and efforts that have culminated in a global movement. What started in various places as responses to seemingly local environmental issues and problems has undergone transformation and expanded into a phenomenon of global proportions (McCormick 1991, p. 1). The mobilisation of these issues in the public domain resulted in the efforts of this movement being 'increasingly reflected in legislation, public policy, the creation and operation of public environmental agencies' (ibid., p. 1). Notably, progress in scientific research and an increasing body of scientific knowledge has for the most part provided impetus for environmental concerns. Rachel Carson's *Silent Spring* (1962) is often cited among pioneering works. The publication exposed the dangers of indiscriminate use of pesticides as a serious threat to biodiversity and habitats as it resulted in progressive or cumulative poisoning of both human and wildlife habitats.

In a policy context the increase in environmental conflicts poses a significant governance challenge in terms of balancing the competing demands of meeting social/economic needs and ensuring sound environmental management. In view of this challenge, the need to resolve environmental conflicts and to

¹ To this extent environmental *consciousness* has a deeper meaning than mere environmental *awareness*.

address the problems these conflicts present has been widely acknowledged by governments as a priority policy concern. In short, as societies continue to develop in the face of environmental constraints, the need to address environmental conflicts has become inevitable and increasingly important. The challenge is to integrate ecological, economic, and social goals in order to promote ecologically viable, economically, and socially desirable conditions.

In looking at environmental conflict resolution and decision making in general, it is also worthwhile to note the significance of the political and economic context in which they take place. Given the apparent ideological divide between developers and environmentalists, differences in power attributes (such as resources and political influence) can also pose challenges in the process of resolving conflicts (cf. Burton 1990, p. 189). In general, power and economic imbalances can negatively affect the degree or quality of participation by some stakeholders². For example, local communities may not only lack adequate information and resources, but they may also feel threatened by statements issued by public officials³. However, taking into account the broad range of stakeholders in environmental issues, (namely, Government, business, local and international NGOs and the general public), one would appreciate that the political and economic context for environmental conflict resolution is complex, diverse and dynamic. While one cannot ignore or even underestimate the challenges noted above, this discussion will not delve much into them. In setting the above issue aside, the approaches discussed in this thesis will be understood as communicative and consultative processes through which consensus can be built and disputes resolved (cf. Helleiner 2000, p.16) as opposed to being driven entirely by governmental or financial muscle (see section 4.1.2).

The contribution of this thesis is to broaden and deepen the understanding of environmental conflicts by articulating the distinctive roles that value and interests play in these conflicts in order to determine an adequate basis upon

² As Gerald Helleiner (2000, p. 6) observes, 'in political systems, whether, "democratic", oligarchic or dictatorial, whether national or international, money talks and hence the old saying that "he who pays the piper calls the tunes" may still be generally be true.

³ For example, one public official issued a statement at a public hearing emphasizing that 'the Government of Zambia is full support of the [proposed] mining project and anyone found hindering such projects *will be dealt with severely*' (African Mining Consulting Limited 2008, Environmental Impact Statement, Mkushi Copper Project).

which they can be resolved. The thesis stresses the need to distinguish between human values and object value in dealing with environmental conflicts involving multiple value dimensions. This perspective has not been fully explored, particularly within the field of environmental philosophy.

In addition, environmental conflict resolution has not received much attention from environmental philosophers (Schmidtz 2002, p. 420). The thesis also intends to bridge, or at least narrow the gap between environmental philosophy and environmental policy. To this effect, the thesis makes an important contribution to the provision of a conceptual analysis within which decisions arising from environmental conflict resolution can be properly understood and justified.

The thesis is divided into six chapters as outlined below:

The first chapter presents the conceptual framework and analysis of key concepts, viz. *value* and *interests*. The sense in which these concepts will be understood in this thesis is specified, taking into account the fact that these two terms are often ambiguously defined in many discussions in the literature, as well as in ordinary usage. The nature of environmental conflicts is also examined in order to assess the role that value and interests play in such conflicts.

The second chapter explores some issues about intrinsic value. This notion is relevant to the provision of a complete account of value. Intrinsic value is also relevant to an understanding of the nature of some environmental conflicts as noted in chapter 1. As a major source of disagreements, concerns about intrinsic value can significantly influence the character of some environmental conflicts. However, being a major source of disagreements also means that intrinsic value does not seem to have a special role to play in the resolution of environmental conflicts (see sections 2.2 to 2.4). Nevertheless, an appreciation of the different senses in which the concept can be understood and the context in which they are relevant is crucial in dealing with disagreements about intrinsic value, as well as in appreciating the distinctive roles that human values and object value can play in environmental conflicts. While the distinction between intrinsic and instrumental value is applicable to both human values and object value the significance of and concerns about intrinsic values vary from one context to the other.

Chapter 3 presents an appraisal of the standard view on conflict resolution in an attempt to appreciate the insights behind this approach to conflict resolution. Taking into account the explanation of environmental conflicts presented in chapter 1, this chapter explains why an exclusive focus on interests is inadequate in terms of dealing with different types of environmental conflict. With the help of a detailed example, the chapter also illustrates how attending to environmental impacts helps us to appreciate the root cause of environmental conflicts.

Chapter 4 illustrates insights that can be learnt from attending to object value in terms of environmental decision-making and environmental conflict resolution in particular. The purpose is to set the framework for understanding the value implications of decisions that may arise from the resolution of environmental conflicts. In discussing this matter this chapter focuses on the environmental impact assessment (EIA) framework. With respect to conflict resolution, stakeholder participation through public hearings and meetings form an essential part of the EIA process. The chapter also makes use of two examples to ensure that the arguments put forward are not detached from the practical demands of environmental conflict resolution. The chapter concludes by arguing that, while the EIA framework deals with object value, it does not offer much guidance in terms of dealing with conflicting human values in the process of resolving environmental conflicts.

In view of the fact that the standard approach and the EIA framework do not deal adequately with conflicting human values, chapter 5 looks at the structured decision making (SDM) approach as explained by Robin Gregory (2002). In particular, the chapter examines his attempt to tackle the challenge posed by multiple value dimensions in relation to environmental risk-decisions and value trade-offs. The chapter analyses the specific measures he proposes and concludes that this approach does not surmount the concerns raised by the standard approach. The main problem is that while claiming to deal with multiple value dimensions, Gregory fails to recognise the key distinction between human values and object value. The thesis then illustrates the shortcomings of the tendency to confound these two different kinds of value in an attempt to resolve environmental conflicts that involve multiple value dimensions.

Chapter 6 offers a comparative assessment of the significance of value and interests in the process of resolving environmental conflicts. In particular, it assesses the advantages of attending to the value implications of decisions as compared to an exclusive focus on interests. The purpose is to determine an adequate basis upon which environmental conflicts can be resolved. Drawing on insights from various sources in the literature, the chapter also explores alternative ways of understanding and dealing with conflicts involving multiple value dimensions. This is addressed by comparing holistic approaches, such as systems thinking, with the tendency to consider individual values against each other that characterises some other perspectives on value conflicts. The chapter finally examines how the interconnections among human values and object value can help in resolving environmental conflicts given that human values are not at the root of many of these conflicts.

Taking into account the analyses and arguments in all the chapters, the thesis concludes that taking into account interests, human values and object value should constitute an adequate basis upon which environmental conflicts can be resolved. As opposed to the focus on interests that characterises the standard approach, this thesis argues that both human values and object value are relevant to environmental conflicts.

In view of the challenges faced by the SDM approach in dealing with value conflicts involving multiple value dimensions, I argue that it is important whenever necessary to address human values and object value in a different manner. Taking into account the fact that the difficulties associated with human values with regard to conflict resolution do not apply to object value, attending to object value, or at least to the interconnections between the two, is helpful in the process of resolving environmental conflicts.

The thesis concludes with the recommendation that an adequate basis for environmental conflict resolution should take into account the following⁴: (1)

⁴ As Smith and Pangsapa (2009, p. 335) observe ‘the environmental priorities of each situation vary. Different ecological and cultural conditions prevail within a particular biome, so we should be suspicious of universal solutions and perfect answers; they are unlikely to be effective. We do not require a “blueprint” – an ideal “ecotopia” – worked out to the last detail, but we need to work towards a “green print” – that is, a *set of working principles* that acknowledge the complexity, uncertainty and interdependency between society and nature in order to develop flexible strategies...’

attending to subjective interests as opposed to focusing on human values may be helpful in the resolution of some environmental conflicts; (2) the pursuit of certain objective interests may be preferred to adhering to some human values; (3) certain human values should be adhered to at the expense of certain subjective interests; and (4) ultimately, object value has a central role to play in an informed attempt to resolve environmental conflicts.

CHAPTER ONE

CONCEPTUAL FRAMEWORK AND ANALYSIS OF TERMS

1.0 Introduction

This chapter presents a detailed analysis of the key concepts in this thesis, namely, value and interests. With the help of insights from various sources in the literature, the chapter explores the different senses in which value and interests can be understood. In particular, the attempt is to secure an understanding of 'value' and 'interests' that is clear and as comprehensive as possible, given that these terms are often ambiguously defined. Overall, this analysis is informed by the intention to provide a critical assessment of the roles that value and interests play in environmental conflicts and in the resolution of such conflicts. The chapter will also provide an explanation of the nature of environmental conflicts. The purpose is to set out a conceptual framework informing the rest of the discussions in this thesis. This will allow for the relevant comparisons and distinctions to be drawn among the different approaches to conflict resolution discussed in subsequent chapters.

The chapter begins with an exploration of the concept of value in section 1.1. This is followed by an examination of the notion of interests in section 1.2. Finally, the key distinctions among the different senses in which value and interests can be understood are highlighted, articulated and defended in section 1.3. This is followed by a detailed exploration of the nature of environmental conflicts in section 1.4.

1.1 Value

In this section I shall explore and specify the relevant senses in which value can be understood. In addition to reducing ambiguities, a thorough explanation of the concept is also required for an adequate understanding of the role that value can play in environmental conflicts and their resolution.

As Ralph Barton Perry rightly points out, there seems to be no ‘established and universal meaning’ (Perry 1954, pp. 2-3) of *value* because the concept can mean ‘different things in different contexts.’ He writes:

Theory of value is in search of a preferred meaning. The problem is to define, that is, *give* a meaning to the term, either by selecting from its existing meanings, or by creating a new meaning (ibid.).

This does not mean ‘that this giving of a meaning to the term ‘value’ is an arbitrary matter, dictated by the caprice, or mere personal convenience, of the author’, rather; there must be some criteria by which ‘the definition is justified or rejected’ (ibid.). Criteria for justifying or rejecting definitions of value are often based on some meta-theoretical assumptions or convictions (which in philosophical discussions can either be metaphysical or metaethical)⁵.

It is either inevitable or convenient in discussions such as this one to set aside the ‘semantic and metaphysical disputes’ about value in order to attend to the more practical concerns (Anderson 2003, preface, p. xiii). Setting aside the

⁵ One of the metaphysical questions is whether value is located in the object (holder) or in the subject (beholder) (cf. Rolston III 2010, p. 131, Nunez 1999, p. 106). However, once it is recognised that value arises from interactions between subject and objects, one can comprehend the value of say hard work, a particular diet, or an object without needing to ask where it is located, whether in the subject or in the object. The key issue in meta-theoretical concerns about value is about determining the relationship between *value* and *valuing*. The assumption in this discussion is that understanding the nature of value requires an understanding of the process of valuing. In fact, when used as a verb the term value also implies valuing. In brief, questions about valuing ‘have to do with what precisely is going on when *we ascribe* value to something’ (Zimmerman 2010, p. 10). In some discussions other terms such as *valuations* (Sunstein 1997) or *evaluations* (Zimmerman 2010) are used instead of valuing. While some such as Anderson (1993) distinguish between valuing and evaluation, for instance, this discussion will treat these variations in terminology as semantic differences. The key question with regard to valuing, valuations or evaluations is about whether value is merely *imposed* on something or whether it is a matter of *acknowledging* the value that something has. In dealing with this question the following observations are fundamental: (a) Explaining why something is of value might help to explain why people value it; (b) to explain why people value something may be to explain why it is of value; (c) certain explanations of why people value what they value may undermine the conviction that the things valued are of value (Harman 2000, p. 197). In short, the issue is whether or not there is ‘something about the things that we value, some attributes that they have, for example, that are the legitimate basis for our valuing them’ (MacKinnon 2012, p. 341, cf. McShane 2007).

meta-theoretical controversies, the concept of value appears to be both lucid and nebulous. It can be lucid if used in some specific or concrete sense as when we refer to the value of a particular object. It becomes nebulous once we recognize the different senses in which the term value can be used. Hence, it is important to be specific about the sense in which one is using it⁶.

This thesis will therefore distinguish between *human values* and *object value*. Generally, human values can be understood as desirable goals, ideals, or ideas that serve as guiding principles in the life of persons, groups or other social entities, such as organizations (Hitlin and Piliavin 2004; Hebel 1998). These are values held by human beings: at least, they represent ideas, ideals, or concerns they wish to uphold. In contrast to human values, object value can be defined as ‘the quality of a thing which makes it desirable, desired, or an object of interest’ (Angeles 1981, p. 310). The distinction between human values and object value is not meant to undermine any linkages between these two different kinds of value. Rather, it is helpful in dealing with ambiguities about value, as well as in dealing with some of the meta-theoretical controversies. If a claim is not precise in terms of which of the two different kinds of value it is dealing with then it can be misleading, especially if one takes into account that there are different kinds of human values (see section 1.1.1) as well as object of value.

Assuming, as I want to, that a single theory of value may be insufficient, what is required is a mapping of the concept which distinguishes different kinds of value. The notion of human values will be explained further in sub-section 1.1.1 while 1.1.2 will deal with object value. The relevance and significance of the distinction between the two different kinds of value will be explored further in sections 5.2 to 5.6 and 6.3.

⁶ Consider the following claim by J. Baird Callicott for instance: ‘Value is, as it were, projected onto natural objects or events by the subjective feelings of observers. If all consciousness were annihilated at a stroke, there would be no good and evil, no beauty and ugliness, no right and wrong; only impassive phenomena would remain’ (Callicott 1989, p. 147). There does not seem to be any problem with this claim if one relates it specifically to human values, especially in view of the value terms involved, namely, *good* and *evil*, *beauty* and *ugliness*, *right* and *wrong*. However, if that is not what Callicott had in mind, then there are some problems with the above claim. In view of the distinction between human values and object value one would expect some reference to the properties of objects, especially in the context of object value. Basing the value of objects entirely on subjective feelings does not provide a full explanation of the value of certain objects. For example, it is difficult to see how the value of one’s organs (e.g. heart, lungs, liver and so on) can depend entirely on subjective feelings as opposed to their functions. Value or valuing is not only about preference. It is also about *affirming* that the thing valued ‘merits or deserves to be valued by valuers’ (McShane 2007, p. 49).

In view of the recognition that there are different kinds of value, definitions need not be the main points of contestation. Rather, what is contestable is the range of things to which we can apply particular definitions of value. In fact, this is the main disagreement between economists and ethicists. This is understandable because what the term 'value' implies in economics is different from what it implies in ethics, or at least in some ethical theories. Many authors, such as Anderson (1993), for example, have acknowledged this problem to explain the gap between ethics and economics. For example, one concept that is closely associated with value in both ethics and economics is 'goods'. But the term is understood differently in ethics as compared to economics. In ethics, the term means 'worth' whereas in economics it is understood as denoting 'commodities'. What this also implies is that while the terms 'value' and 'good' are often used interchangeably, they are not equivalents. As Johan Brännmark notes

...even at the level of thin evaluative notions there are at least two potential objects of analysis, the good and the valuable, and it cannot be presumed that they amount to the same thing, although it would be very surprising if they were not even overlapping (Brännmark 2009, p. 333).

The expectation in this discussion is that in attempting to reconcile the different perspectives on value, an enhanced understanding of the concept will come into view. It would appear that what many authors fail to resist is the urge to work with a single theory of value in spite of the recognition that the concept is much more complex than any single theory might allow. To put this issue into perspective, an example will help. In his book, *The Science of Wealth*, Amasa Walker (1866) attempts to answer the following questions: 'What, then, is value? When does an article or commodity possess value?' An article or commodity has value, he claims, '... when it is an object of man's desire, and can be obtained only by man's efforts' (Walker 1866, chapter III).

Walker's conception of value above represents classical economic theory or thinking about value. This is pertinent because concerns about the economic value of natural resources are also central to an appreciation of environmental conflicts.

There is also an attraction in Walker's claims which I wish to note before attending to the limitations. The attraction stems from the caution not to conflate value with other terms that are often used to define it, such as desire for instance, as that often leads to confusion where value may be seen as being synonymous with desires.

Walker's conception of value is objectionable not because it is false or incorrect; rather, it is the application of this particular conception of value to things, such as atmospheric air or the heat of the sun, which is objectionable. These things seem to be outside the scope of Walker's theory of value given that his focus is on things that can be *exchanged*. His views are representative of classical economic thinking about value the influence of which many moral philosophers or ethicists such as Anderson are opposed to. In fact, the concern is not only that it would seem impractical to exchange certain things; it is also about whether or not some things should be exchanged. According to Anderson (1993, p. xi) the question is whether everything *should be up for sale*. Another obvious question is whether only exchangeable things have value.

The fundamental issue behind Anderson's challenge to the market approaches as represented in the above question is the need to appreciate that there are different kinds of values at stake, some of which should not be left to the rules or dynamics of the market. Her point is:

If different spheres of social life, such as the market, the family, and the state, are structured by norms that express fundamentally different ways of valuing people and things, then there can be some ways we ought to value people and things that can't be expressed through market norms (ibid., p. xiii).

Other spheres, in addition to the ones mentioned above, would include charitable or religious organizations (cf. Sunstein 1997, p. 234). Differentiating between the relevant spheres is helpful in terms of contextualising value concerns⁷. As compared to Walker for whom value concerns seem to centre on the market

⁷ This differentiation of value domains is crucial because as Sunstein claims: 'Distinctions among kinds of valuations are highly sensitive to the particular setting in which they operate. In one setting (say, the workplace), the prevailing kinds of valuation might be quite different from what they are elsewhere (say, the home or the ballot box)' (Sunstein 1997, p. 235).

sphere in terms of '*exchange power*', Anderson claims that her theory 'emphasizes the richness and diversity of our concerns and finds a place for a full range of responses to what we value' (Anderson 1993, p. xii). In her view, 'to value something is to have a complex of positive attitudes toward it, governed by distinct standards for perception, emotion, deliberation, desire, and conduct' (ibid., p. 2).

Walker is concerned about how an object or commodity comes to possess value and about the influence this value has on people in terms of its relation to other commodities or services. It is for this reason that he uses the term '*power*'⁸ to express value. In contrast, Anderson is more concerned about how we *should* respond to people or things we value. In her view, for example, to care about something is to be emotionally involved in what concerns the object of care, which in turn is an expression of how someone values something or someone else. Overall, Anderson's concern is about the need to recognise the 'richness and diversity' of responses to the things we value.

Furthermore, Anderson distinguishes between what she calls 'a person's values' and 'an object's values' a distinction similar to the one this thesis makes between *human values* and *object value* in subsequent sections. In her view, a person's values are 'whatever standards she accepts for evaluating persons, actions, and things' and 'an object's values consist of whatever properties it has, in virtue of which it meets various standards of value' (Anderson 1993, p. 3). Insofar as the value of objects is what is at issue, the main difference between Walker's and Anderson's views are the following: First, Walker's account seems to allow only two standards or criteria of value, namely, desire and effort, whereas Anderson's view is open to various standards of value. Second, unlike Anderson,

⁸ '...the term "value" always expresses precisely *power* in exchange, and no other power or fact. Desirableness is not value. Utility is not value. No objects are more useful and desirable than atmospheric air, the light of the day, the heat of the sun; yet these have no value. They will exchange for nothing, because any one may have all he wishes without effort ...The use of this term, in its strictest sense, is of the utmost importance. If confounded with anything, or taken into any partnership, the whole science is thrown into confusion' (Walker 1866, chapter III).

Walker does not make reference to the properties of an object in terms of explaining its value.

In dealing with different kinds of value this thesis will use a 'basic value classification' which distinguishes between human values and object value. This is the first level at which I want to qualify Perry's claim to the effect that value can mean different things in different contexts. Distinguishing between human values and object value is helpful in terms of a comprehensive mapping and appreciation of the different kinds of value thereby contributing to an enhanced understanding of the concept. A clear understanding of the concept is also crucial to an adequate explanation of the role that value can play in environmental conflicts and in the resolution of such conflicts. In what follows, I will further explore each of the two terms, viz., human values and object value.

1.1.1 Human values

While 'human values are often expressed in terms of morals and ethics' (Hebel 1998, p. 382) there are different kinds of human values – economic, religious, aesthetic, ecological, scientific, and so on. This is the second level at which this analysis qualifies Perry's claim that value can mean different things in different contexts. The first level, as noted in the previous section, involves the distinction between human values and object value. The second level involves the distinction between different kinds of human values.

In the study of human values, some authors, for example, Schwartz (1994, p. 35) have come up with elaborate lists of what they claim to be the relevant human values. However, such lists are not exhaustive in view of the fact that values appear to be too numerous or unlimited to be captured by any particular catalogue. For this reason any particular list of values should only be considered as providing some examples of the relevant human values in question, e.g., love, truth, respect, honesty, wealth, power, creativity, and so on. My interest in citing these examples is not to venture into a detailed discussion of each of these values. Rather, my intention is to provide some indication of what is here being referred to as human values.

In terms of human values, the term 'values' has been used variously to refer to interests, pleasures, likes, preferences, duties, moral obligations, desires, wants, goals, needs, aversions and attractions, and many other kinds of selective orientations' (Williams 1979, p. 16). In view of the numerous terminologies above which are used variously to refer to values, determining which of these would be appropriate in defining human values depends on the standpoint from which one is looking at the matter. The first is an individual's point of view, which can also be referred to as a person's values (cf. Anderson 1993, p. 3). Terms such as pleasures, likes, preferences, desires, wants, attractions, and aversions in defining values may be used in this particular sense (e.g., a desire for or aversion to luxury or fame). Overall, the view 'that each individual has a set of values appears undisputed' (Hebel 1998, p. 395).

Second, some scholars such as Morgan (1986) and Hall (1994) have noted that groups also have values which help to structure and provide meaning to the group's existence. I shall refer to this second aspect of human values as 'shared values'. Distinguishing between a person's values and shared values is helpful in terms of dealing with the terminological laxities involved in discussing human values as well as in assessing the value of certain things. This is pertinent because some things (e.g. respect and trust) have value irrespective of our personal attitudes and preferences. However, in looking for values that seem to be prevalent in a particular group or community, it may be worthwhile also to look out for values that may be unique to individuals.

The above notwithstanding, it is possible for individuals to adopt shared values such as respect or cooperation as part of their own 'personal values'. Nevertheless, an appreciation of the understanding that a person's values and shared values are not equivalents is helpful to a theory of human values. Appreciating the above distinction can be hindered by the urge to fit the different aspects of human values into a single explanatory framework, which may constrain our appreciation of the significance of human values with regard to conflict situations. The next subsection looks at another kind of value, namely, object value.

1.1.2 Object value

In looking at object value we have to appreciate that the term *object* may encompass a wide range of things including policies, decisions and actions, states of affairs, institutions, systems, and physical objects. However, an issue that needs attending to is the fact that some explanations of the value of objects make reference to the properties of objects while others do not. For instance, while both Walker and Anderson talk about the value of objects, Walker does not make reference to the properties of objects in terms of explaining how/why an object comes to possess value. In contrast, in distinguishing between a 'person's values' and 'an object's values', Anderson makes reference to the properties of an object in virtue of which it meets certain standards we set individually or collectively. I shall return to this point later.

The understanding of object value in this thesis is primarily focused on the qualities or properties of an object which makes it *desirable*, *desired*, or an object of *interest* (cf. Angeles 1981). I explore the notion of 'interests' in detail in section 1.2. In what follows I will consider the terms 'desirable' and 'desired' briefly.

The terms *desirable* and *desired* are related in some way given that one can desire what is desirable. However, we can also ask whether what is desired is desirable. Something is not *desirable* simply because it is *desired* by someone. The term *desirable* has an objective connotation if it is correct to suppose that to be desirable means that something is appropriate, required, necessary or needed. In contrast, *desired* has a subjective connotation in that it implies to be desired by someone in the sense of being preferred, wanted, anticipated, or sought after. Hence, to argue (a) that something can be desired because of its value is not the same as to argue (b) that something has value simply because it is desired by someone. The difference is that (a) allows for the possibility that something can have value even if it is not desired by anybody whereas (b) does not.

This thesis maintains that object value is largely based on the attributes of the object in question. If not, then it is difficult to see how one can persuade or convince others about the value of an object or be proven to be wrong about it. In short, an object can be said to have object value when it is desirable or an object

of interest because of its attributes and these attributes provide reasons for, in fact, desiring it. The central issue in appreciating object value is that objects have properties which make them desirable or objects of interest. The properties in question are not determined by how we respond to the object. Rather, I would argue that object value is at stake when one's response is determined or informed by the properties of an object or its actual or potential impact. To this extent there is a strong connection between some object values and objective interests.

For example, food or water is not good for our wellbeing and survival merely because we are interested in these objects. Instead we are interested in them and they are, in fact, in our interest because they are good for our wellbeing and survival. As opposed to Walker's perspective, for instance, an object cannot have object value simply because it is desired by someone. While there is a strong link between object value and subjective interests, there is a fundamental contrast between object value and subjective interests as I will explain in section 1.3. What this suggests is that some objects will still have object value even if they are not subjectively desired by, or of interest to someone.

In taking into account the distinction between human values and object value, it is possible that certain objects can be wrapped up in human values in that humans can give or attach value (i.e., symbolic or sentimental) to objects, for example, national flags, statues and so on. If the value in question has nothing or very little to do with the attributes of the object itself, but more to do with human events or circumstances surrounding the object, then such value does not amount to object value as understood in the context of this discussion. It is also plausible that some objects can be considered both in terms of human values and object value. For example, cars have utilitarian object value as a mode of transport. However, the same cars can also bear human values as symbols of status, success, power or luxury. In view of the above, Anderson's account of an object's values does not seem to be clear enough even though she makes reference to the properties of an object. She writes:

An object's values consist of whatever properties it has, in virtue of which it meets various standards of value. I have proposed that the judgement that an object meets an authentic standard of value entails that its meeting that standard makes it sensible for someone to value it. The standards of value for objects are the standards of rationality for our

responses to them. One of my values could be that bedrooms be cozy. If a given bedroom is cozy, then coziness is a value it has (Anderson 1993, pp. 3-4).

On this conception of an object's values Anderson (1993, p. 4) concludes 'a good is a bearer or bundle of qualities that meet certain standards or requirements we (correctively) set for it.' In contrast, I would argue that if the properties of objects have to meet the standards set by humans, individually or collectively, then Anderson's explanation of an object's values still falls within the category of human values. Hence, both Walker's and Anderson's perspectives on value seem to relate primarily to human values. Chapter 6 will explain further the significance of the distinction between human values and object value that I have adopted in this thesis with regard to environmental values.

In view of the analysis in section 1.1, and sub-sections 1.1.1 and 1.1.2, one would appreciate that in discussions such as this one, concerns about value do not call for certainty about the meta-theoretical issues noted in section 1. Rather, concerns about value require contextual sensitivity⁹ to what it means for something to have value and the range of things to which certain claims about value are applicable. For this reason the distinction between human values and object value is fundamental. The next section explores another key concept in this thesis, viz. interests.

1.2 Interests

The term 'interest' has generated considerable debate particularly in some philosophical discussions in environmental ethics. The reason is because the term has been used variously by different authors to apply to all living things: to animals in terms of what they desire (e.g. in Singer 1990) and to plants, analogously in terms of what they need (cf. Goodpaster 1978; Taylor 1986). In view of this varied usage, the question is not whether or not different living things have interests or not, but rather what sort of interests each kind of living thing can reasonably be said to have, and perhaps to what degree. However, the debate

⁹ In his article: "Rolston, Lonergan, and the Intrinsic Value of Nature," T.W. Nunez (1999) has argued this point in detail by complementing Holmes Rolston's ideas about values in nature with Lonergan's insight into the connection between *understanding* and *valuing*.

may not be so much about the meaning of the term '*interests*' as it is about the substantive claims that different authors want to defend. The issues raised above stem from the fact that the term interests can be understood in two different senses. Understanding these is central to this analysis. This will play an important role in explaining the nature of some environmental conflicts as well as in comparing some of the approaches to conflict resolution discussed in this thesis.

First, the term 'interests' is used to denote factors which are perceived to have the potential to contribute to one's well-being or the attainment of certain objectives (Johnson 1991, p. 141). This is the sense of interests at work in reference to what may be considered to be in someone's best interests. This sense of interests also appears to be closely linked with 'needs'. Needs are 'understood as those elements that are necessary for survival' (Des Jardins 1997, p. 212). These are needs which are 'in our interests' whether we are conscious of them or not. Basically, needs connote biological influences and relate to elements such as food, water, and clean air (cf. Hitlin and Piliavin 2004, p. 361). I shall refer to this first sense of interests as *objective interests*.

Second, interests can also mean what someone actually wants. Wants are the immediate desires, preferences, or goals toward which a person is inclined (Des Jardins 1997, p. 212). Overall, the second sense or understanding of interests is what is at work when reference is made to interested parties or interest groups. I shall refer to this second sense of interests as *subjective interests*¹⁰. These interests are based on our experiences or conscious decisions, and this happens when one is 'interested in' something.

In short, to be interested in something and for something to be in someone's interests are not the same thing. Hence, it is helpful to be specific about the sense in which the term 'interests' is being used in particular claims so as to avoid equivocating (cf. Wenz 1988, p. 289). The above distinction between objective and subjective interests is widely recognised in the social theory literature. Objective interests are understood in terms of *needs* or *functional imperatives* that must be fulfilled whereas subjective interests are understood in

¹⁰ If interests are understood in this specific sense then I cannot maintain as Ralph Barton Perry or Warren Neill does 'that interest is the original source and constant feature of *all* value' (Neill 1998, p. 60). In my view this sort of claim can only be entertained with a vague notion of interests.

terms of beliefs that actors actually have about how to meet their needs or functional imperatives (Alexander 1999, p. 231). In this thesis, however, subjective interests will be understood in terms of what people actually want as opposed to their beliefs about how to meet their needs.

What the foregoing analysis suggests is that we can expect a discrepancy between what may be in one's interests (objectively) and what a person actually wants or is interested in (subjectively). Hence, it is reasonable to suspect that sometimes what people actually want and what is in their interests fail to correspond (Attfield 1994, p. 142). In fact, people may have no interest in something which may seem to be in their interests (Taylor 1986, p. 63). On the basis of this analysis, actors can in certain circumstances act against their own best interests (cf. Van Dyke 1962, p. 575). Arguably, what is at work in supposing that actors can act against their own best interests is the tendency to weigh what they want against what is presumed to be in their interests. It would be difficult to explain how actors can act against their own best interests without the distinction between the two different senses of interests (e.g., a diabetic wanting sugar).

When dealing with interests in conflict situations, the distinction between what is presumed to be in someone's interests and what someone actually wants is important. Taking into account the plausibility of both senses of the term 'interests', the second sense in terms of what actors actually want is pertinent in dealing with conflicts between people. This is important if we don't want to compromise the autonomy and agency of any of the parties to a conflict. Thus, attending to what people actually want as opposed to what we think is in their interests is not only a practical, but also a democratic requirement. In fact, under the standard approach to conflict resolution which will be discussed in chapter 2, interests will be understood in the specific sense of what people actually want. As compared to this more specific sense of wanting something, the term interest can also be vague as it can represent a variety of responses ranging from mere curiosity to being actively concerned about something. Hence, as opposed to being a limitation, the focus in this analysis has the advantage of avoiding confusions which may result from equivocating between different senses of the same term as is the case in some discussions about interests.

This thesis will set aside concerns about plants given that plants cannot be said to have interests in the subjective sense¹¹. In contrast, animals can reasonably be said to have interests in both senses of the term.

The interests of animals are often taken into consideration when dealing with conflicts involving people and animals. However, there is a limit to the extent to which people can promote the interests of animals, especially animals in the wild, because there is a danger that this may amount to *interference*. However, we can still distinguish between interventions and interference. As opposed to interference, interventions seem to require that helping some animals for example not be at the expense of other animals (e.g. preventing a predator from catching its prey) or contrary to the established patterns of interaction and systems in the wild. For instance, it is a well-documented fact that hundreds of wild beasts perish through drowning when crossing the Mara River on their migration routes between Tanzania and Kenya. Someone who cares about the interests of animals might find it reasonable to ask if it may not be helpful to construct a bridge or two for the animals to cross the notorious crossing points on the Mara River safely. While the death or loss of these animals in their hundreds is minimal compared to their total population, the concern behind the idea of helping them to cross safely is that they are potential or actual victims of drowning. Perhaps a stronger argument against building bridges for animals across the Mara River is that it would amount to interference, especially taking into account the fact that the crocodiles that inhabit the river will be deprived of their annual feast. In fact, visitors to game parks are generally advised not to interfere and to let nature take its course.

¹¹ In theory the idea that plants have objective interests analogous to that of other living things may not be difficult to appreciate. The question is whether or not such interests can be taken literally, which also raises the question of what the practical significance of plants having interests might be in terms of decision making (cf. Taylor 1986). The distinction between objective and subjective interests helps to narrow the focus in terms of candidates for each of these categories. However, it would seem that drawing boundaries in terms of what things to include or exclude in each of these categories, especially the category of objective interests is still open to debate. For instance, some have argued that if we can extend objective interests to plants then we should also be willing to do the same for machines (cf. Jamieson 2008, p. 147). Whatever the merits of this claim might be, the distinction between living and non-living things (animate and inanimate objects) has a bearing on the significance of appealing to objective interests. Similarly, the distinction between conscious beings (or just the potential for it) and those that do not possess consciousness has a bearing in terms of what sort of things can be said to have or not to have subjective interests. Nevertheless, the position in this thesis is that appealing to value as opposed to interests will still provide an alternative for making one's case for the preservation of things such as plants as will be explained in chapter 4 and 6.

Interference has a negative connotation if it is distinguished from intervention. There are many interventions that would seem less controversial than what may be termed as interference. For instance, scientists and the relevant government agencies or conservation groups often get concerned when wild animals are seen to be dying mysteriously. Often, efforts are made to find out the cause of death in order to at least save some of the animals that are still alive.

As indicated at the beginning of this section the key question may not be about whether or not different things have interests or not, but rather about what sort of interests certain things can reasonably be said to have, and perhaps to what degree. It is, however, reasonable to assume that only conscious beings are capable of having subjective interests.

The next section explores some relevant contrasts among the different senses of the key concepts I have discussed in section 1.1 and 1.2, namely, human values; object value; objective and subjective interests.

1.3 Relevant contrasts among some key concepts

In exploring the key concepts in this thesis, namely value and interests, the analysis in the preceding sections has highlighted the distinction between human values and object value in section 1.1, and the distinction between objective and subjective interests in section 1.2. These two distinctions will facilitate the relevant contrasts to be discussed in this section, viz., the contrasts between *object value* and *subjective interests*, and between *human values* and *objective interests*.

In view of the contrast between objective value and subjective interests there is a basis for challenging the tendency to reduce the value of objects, especially objects in the natural environment, to the subjective interests of humans. Hence, the point to contrasting object value with subjective interests is to assess the role they can play in environmental conflicts and in the resolution of such conflicts. Contrasting between object value and subjective interests is important to environmental decision-making and conflict resolution as will be explained in chapter 4, with regard to the environmental impact assessment (EIA) framework.

To argue that there is a sense in which the value of certain objects is independent of our subjective interests does not imply that the two cannot coincide. Rather, it allows that someone may want something because of its value. An appreciation of the contrast between object value and subjective interests then makes it plausible to explore the question of whether something has value simply because someone is interested in it, or whether someone is interested in something because it has value. If something has value simply because someone is interested in it, then it is difficult to divorce value from interests. However, it is also reasonable to suppose that someone may want something because of its value. We do certain things not simply because we are interested in doing them but because of the value associated with doing such things. In this vein, the contrast between object value and subjective interests is intended to underscore the point that there are things that have value irrespective of what we may actually want. For example, although some people may not be interested in exercising, this does not detract in any way from the value of exercising. Alternatively, exercising is not just valuable simply because there are some people who are interested in exercising. Rather, people may be interested in exercising because of its value and the fact that we may not be interested in something does not mean that it does not have any value.

However, people may want something not because of its value but simply because they are interested in it. To push this claim further, one can even suppose that it is possible to be interested in something that has no object value. Nevertheless, instead of thinking that people can be knowingly interested in something that has no value, one would want to think that it is more likely that people are often mistaken about what has or does not have value.

From a personal point of view, some things may seem to be more 'valuable' than others simply because one is interested in them. Nonetheless, the only thing this might prove is that one is more attached to the thing one is interested in and not necessarily that the thing one is interested in has value or that the thing one is not interested in has no value. With regard to object value, for instance, the properties or attributes of the object are what matter largely for explaining the value of something. 'It is also why the reasons we give for valuing typically make reference to the object' (Jamieson 2008, p. 68) as opposed to

appealing merely to our desires or preferences. For instance, the nutritional value of vegetables does not depend on whether one is a vegetarian or one likes vegetables or not. Hence, the reason for contrasting object value with subjective interests is to underscore the fact that an object can have value irrespective of whether someone is interested in it or not.

The contrast between *human values* and *objective interests* can be better understood in terms of a distinction between ‘values’ and ‘needs’, given that *needs* constitute one kind of objective interests. ‘[Human] values, which are acquired, differ from needs in that the latter are universal and primordial, and perhaps genetic’ (Burton 1990, p. 37). Values tend to be culturally or group specific¹² while needs, especially at the most basic levels, are common to all humanity or to all beings of the same kind. Furthermore, needs and values are likely to influence behaviour differently, if needs are understood in terms of biological influences and values in terms of ideas or ideals¹³

The point in distinguishing between human values and objective interests, such as needs, is that values can differ from one person or group to another whereas their objective interests are likely to be the same. This does not, however, imply that objective interests or needs in particular, can never be in conflict. Nevertheless, an appreciation of the distinction between needs and values can have a significant bearing in terms of how conflicts are resolved. For example, a workable solution to a conflict can be found on the basis of needs or interests which people may have in common as opposed to attempting to reconcile their conflicting values. The standard approach to conflict resolution which will be discussed in the next chapter, where the contrast between human values and subjective interests is most relevant, explores this insight in detail.

¹² This observation obviously reminds us of the debates between value universalism and relativism. One would, however, want to believe that there are values which are (or at least should be) common to all human beings, hence the term ‘human values’. What might differ from one individual or group to another are the value systems and hierarchy or how the values are organized and galvanized.

¹³ For example, as Hitlin and Piliavin write: ‘Values serve as socially acceptable, culturally defined ways of articulating needs – a need for sex might be culturally reconstituted as a value for love ... The expression and satisfaction of more biological needs can be articulated through cultural prescribed values, but these values are not the needs’ (Hitlin and Piliavin 2004, p. 361-2; cf. Rokeach 1973).

The contrasts alluded to in this section are often presupposed in many discussions¹⁴. In this thesis, *value* is understood in terms of human values and object value and needs are understood along with objective interests as compared to subjective interests. The distinctions among these key terms have been articulated and defended. The next section provides a detailed exploration and explanation of the nature of environmental conflicts in order to assess the roles that the different senses of value and interests play in such conflicts.

1.4 Environmental conflicts

The notion of conflict may have many meanings in everyday life (Wallensteen 2002). Even so, conflict is traditionally associated with a breakdown in relationships between individuals, groups, communities or nation states, where the behaviour of the parties involved (e.g., violence or demonstrations) is often what draws attention to conflicts. However, as Peter Wallensteen observes:

Obviously, conflict is more than the behaviour of the parties. The 'issue' refers to the incompatible positions taken by the parties motivating their actions. This then is a deeper understanding of what conflict is. It contains a severe disagreement between at least two sides, where their demands cannot be met by the same resources at the same time. Incompatibility appears to be a key to the existence of conflict (Wallensteen 2002, p. 15).

Wallensteen's explanation of conflict above revolves around two related aspects, namely, 'incompatible positions' and 'severe disagreements'. I shall explore the notion of *positions* in chapter 3 where it is relevant to the standard approach to conflict resolution. The main point to note is that *incompatibility* is the key factor to the existence of conflict when different demands cannot be met by the same resource at the same time. This then would be the source of disagreement¹⁵. Overall, the study of conflict has revealed that conflict is an inevitable part of human life and interactions among systems (Myers and Filner 1994, p. 3).

¹⁴ This is the case for example when Werner Ulrich poses the following question: 'How can we justify the *value* implications of decisions in the face of conflicting *values*, *needs* and *interests*?' (Ulrich 2009, p. 133).

¹⁵ Some explanations of conflict highlight the aspect of social conditions (e.g., exploitation of one group by another) which create an environment for conflict. As Burton (1990, p. 147) suggests, 'the major source of social conflict at all levels is within institutions and structures, and not within the discretion of individuals, or the identity groups to which the individuals look for support.'

To appreciate the nature of environmental conflicts, it is worthwhile to distinguish them from other kinds of conflict. Conflicts can be distinguished on the basis of source or root causes. The sources of conflict can be political, economic, environmental, historical, or cultural (United States Institute of Peace, USIP 2012, p. 4). We can distinguish *environmental conflicts* from all the others, which I shall generally refer to as *social conflicts*. Making the distinction between social and environmental conflicts does not entail a denial of the interconnections between social and environmental issues. Often there are significant economic or social aspects in dealing with environmental issues (cf. Martin-Schranmm and Stivers 2003, p. 90). This is the reason for example why an EIA may include a social impact assessment (SIA).

However, environmental conflicts are influenced primarily by the condition or structure of environmental resources. The term environmental conflict is used 'to refer to conflict in which at least one party has concerns about the environmental impacts of the other party's projects' (Schmidt 2002, p. 229). Environmental impacts can be defined as the consequences of human activities, products, or services 'on environmental resources or receptors of particular value or sensitivity' (SRK Consulting 2006) in relation to human and animal habitats, as well as in relation to natural systems such as wildlife, forests, or wetlands.

In view of the above, we need to distinguish my focus on the policy context, in this thesis, from another field of interest in environmental conflicts, namely, security studies. It is obvious that large scale violent conflicts, i.e., wars, can cause significant environmental destruction and might even leave the environment unsafe long after the conflict has been terminated. However, the field of security studies looks at how environmental degradation may lead to armed conflicts which can be referred to as 'environmental conflicts' as well.

The main difference is that my focus is on the non-violent side of environmental conflict while security studies research is more concerned with the *violent* side. However, the understanding of environmental conflicts is the same, namely, as having 'an environmental cause' of conflict rooted in actual or potential human-induced environmental impacts (Libiszewski 1992, p. 4). It is also worth noting that while one can show that environmental conflicts do manifest

themselves as conflicts over resources, not every conflict over resources is a typical example of what we would spontaneously connect with the term *environmental* as understood above¹⁶. For example, conflicts over possession of or access to resources such as oil or minerals cannot be regarded as environmental conflicts per se. Rather they are, by origin, economic or social conflicts. However, the consequences from the exploitation of these resources, e.g., pollution or environmental destruction are what may lead to environmental conflicts. However, and as noted earlier, one cannot ignore the economic or social aspects of environmental conflicts. This would also explain why such things as draining of marsh areas for human settlement or the construction of wind farms to harness electricity can and have been a source of conflict in some areas.

I agree with Libiszewski's analysis of what can be properly termed as *environmental conflicts*. Nevertheless, my focus in this thesis is narrower than it is in security studies. This difference is not based on the understanding of the *environmental* but on the different aspects of *conflict* I have chosen to focus on. This is evident if we consider the following spectrum for the different stages of conflict.

Table 1: The proposed scale for the stages of conflict

Stages /Intensity of Conflict	Aspects
Cleavage	(Potential conflict)
Conflict ¹⁷	(Manifest: Incompatible goals are perceived and formulated)
Crisis	(Sanctions, e.g., political/economic or grave verbal attacks)
Grave crisis	(Including military threats/skirmishes)

¹⁶ As Libiszewski (1992, p.3) notes therefore '...the involvement of natural resources is evidently not the '*differentia specifica*' we mean when we speak about an *environmental* cause of conflict to distinguish it from other causes. For the definition of *environmental* in our context the concepts of *ecosystem* and *environmental change* are fundamental, rather than the concept of resource.'

¹⁷ My emphasis

Source: adapted from Libiszewski 1992

In view of the above representation of conflict, those in security studies will be more focused on the crisis stage. 'But it could also be necessary to give attention to just manifest and in certain cases even potential conflicts in the context of serious environmental degradation' (Libiszewski 1992, p. 9.)

Libiszewski acknowledges that 'the quarrels between radical environmentalists and industry could be called as well "environmental conflicts" as wars over fresh water' (ibid., p. 7). My focus in this discussion is primarily on *quarrels* or disagreements as noted earlier with reference to Wallenstein. In considering the different stages of conflict in table 1, my focus only goes as far as the *crisis stage*. On this basis what many governments and developers may be concerned about, as the US government memo on environmental conflict resolution (ECR) explains, is as follows:

- Protracted and costly environmental litigation;
- Unnecessarily lengthy project and resource planning processes;
- Costly delays in implementing needed environmental protection measures;
- Forgone public and private investments when decisions are not timely or are appealed;
- Lower quality outcomes and lost opportunities when environmental plans and decisions are not informed by all available information and perspectives; and
- Deep-seated antagonism and hostility repeatedly reinforced between stakeholders by unattended conflicts (US government 2005).

Hence, instead of looking at 'warring factions' (actual or potential), the focus in this discussion is on *stakeholders* and on their disagreements. In short, my interest in environmental conflict resolution is within the context of decision and policy making. Those in security studies might maintain, as Libiszewski (1992, p. 7) does, that 'the point we should keep in mind is war and the danger of war, including both international and civil wars', and therefore they will need to explain how environmental degradation may lead to war¹⁸. In contrast, my focus in this

¹⁸ As Libiszewski (1992, pp. 9-10) acknowledges, this is not only a fundamental question, but a difficult one as well. It is difficult because 'social facts, such as conflicts, cannot be explained by natural facts, such as environment, but only by other social facts.' For this reason a complex model of analysis is needed involving three distinct levels, namely, environmental effects, social effects and conflict: 'The category of *social effects* is interposed between the two variables *environment* and *conflict*, serving as an "analytical filter". It is on this level of analysis that the two groups of disciplines represented in the topic, namely natural sciences and social sciences, join and are mediated (ibid.).'

discussion does not face the question of explaining *how* environmental problems might lead to war.

In view of the above understanding of environmental conflicts, this thesis will consider *environmental conflict resolution* as a process involving people with differing views, interests and values, who are brought together in a systematic and structured way in order to find workable solutions to shared problems about environmental issues (U.S. Institute for Environmental Conflict Resolution 2012). In this regard, the main issue in dealing with an environmental conflict is about how to address the problem at hand, as opposed to merely meeting the demands of the human parties to a conflict. My assumption in this case is that unlike other conflicts where there are only two parties, an environmental conflict has three parties: In addition to the two human parties that characterise other conflicts, an environmental conflict will involve the environment, or some aspects of it, as yet another 'party' to the conflict. What this means is that decision-makers have a third factor to appeal to besides the *interests* and *human values* of the parties to a conflict. The third factor at issue might be either or both of the following, namely, the *object value* of the environmental aspects at stake, or the *interests* of other living things, such as animals.

In fact, where animals are involved, it is important to be specific in terms of whether the conflict is about *people versus people* or *animals versus people* (human/animal conflict)¹⁹ or, as we shall see with the example in chapter 3, *animals versus plants*. Being specific in this way can help in terms of dealing with the concerns at issue. If an environmental conflict is portrayed as being between two human parties, then to also appeal directly to the interests of animals or plants might imply 'double counting' of such interests. This is because this would entail considering the interests of animals, as well as the interests of people interested in the welfare of such animals (or the flourishing of plants). Nevertheless, and in view of the definition of environmental conflicts adopted earlier in reference to Schmidtz, the primary focus in this thesis is on *people versus people* conflict, but with significant attention to the environmental factors at stake as will be explained in the next section.

¹⁹ This happens when elephants for instance destroy people's crops or when lions attack cattle.

1.5 Some explanations of environmental conflicts

A number of claims have been put forward in terms of conceptualising environmental conflicts. This exploration takes note of some of these claims in order to stress the need for proper conflict analysis and to facilitate an adequate understanding of environmental conflicts. Hence, the task in this section is to establish the character of environmental conflicts so as to ascertain what would be a comprehensive way of dealing with these conflicts. The discussion begins with an explanation of environmental conflicts provided by Crowfoot and Wondolleck (1990, p. 1):

Environmental conflicts are rooted in different values of natural resources and environmental quality. Some individuals perceive an intrinsic value in things that are wild and natural while others do not. Some see societal obligation to protect species and preserve habitat while others do not. Some place priority on maintaining biological diversity and environmental integrity for future generations while others place priority on harnessing nature's resources to serve the needs of today's society.

Furthermore:

...the uncertainty surrounding various environmental actions, and the different assessments of the risks associated with these actions, cause conflicts ... groups assess such risks differently, reach different conclusions about appropriate decisions, and therefore find themselves in conflict (ibid., p. 7).

The above explanation of environmental conflicts is a good starting point. In what follows, this discussion unpacks Crowfoot's and Wondolleck's claims above, so as to specify the different issues at stake and to draw out the relevant aspects. The issues at stake in Crowfoot's and Wondolleck's terms involve the following different claims:

- (a) Environmental conflicts are rooted in *different values* of natural resources and environmental quality;
- (b) Some individuals perceive an *intrinsic value* in things that are wild and natural while others do not; and some see societal obligation to protect species and preserve habitat while others do not;

(c) Some place *priority* on maintaining biological diversity and environmental integrity for future generations while others place priority on harnessing nature's resources to serve the needs of today's society; and,

(d) *Uncertainty* surrounding some environmental actions in terms of their impacts or effects.

All of the above concerns are relevant and each, with the exception of (d), represents different aspects of environmental conflicts. In some instances, and for theoretical purposes, each of these issues can be understood as representing different types of environmental conflicts. In what follows I examine each of the above claims in detail, except (c) which will be discussed in the next section. In particular, (a) and (b) require some clarifications in view of the analysis of terms presented in the previous sections, especially in relation to the basic classification of value in terms of human values and object value.

The claim in (a), namely, that 'environmental conflicts are rooted in different values of natural resources' is open to interpretation given that Crowfoot and Wondolleck do not specify what they mean by *different values* of natural resources. The starting point in considering the interpretation of the above claim is to look at the distinction between human values and object value. As such, there are at least three possibilities that may lead to conflict.

First, different human values in relation to the same natural resources may be in conflict. Generally, these kinds of conflict would involve different kinds of human values, such as economic, aesthetic, moral, religious, scientific, and so on. For example people may strongly disagree on whether or not mining should take place in a certain area because some are concerned about the economic benefits of mining whereas others are more concerned about the aesthetic value of the area at issue.

Furthermore, reference to different kinds of values could also imply the distinction between intrinsic and extrinsic/instrumental values as the next chapter will explain.

Second, some human values and the object value of some natural resources or elements in the natural environment may be in conflict. For example,

profit/wealth as human values, in relation to timber production, often conflict with the object value of forests in ecological terms with regard to water catchment areas, the regulation of oxygen and carbon dioxide in the atmosphere, or habitats for other species.

Third, the object value of different natural resources can also be in conflict with each other. For example, this may happen when species are introduced into a different region where they threaten the survival and existence of other species, and sometimes with far reaching implications for entire ecosystems. It is also in the third sense that 'environmental quality' would be a primary concern as it relates to the object value of different things in terms of standards or levels of certain elements in the environment, such as the quality of water or air.

In (b), Crowfoot and Wondolleck raise the concern that some people perceive intrinsic value in things in the natural environment whereas others do not. They mention the term '*intrinsic value*' in passing without any detailed discussion of what the notion implies. The concept of intrinsic value is by far the most controversial of all concepts of value, at least in philosophical discussions. It is therefore an issue that will have to be addressed in a separate chapter. For the meantime the following can be noted: From the point of view of attempting to resolve environmental conflicts, this discussion will take (b), the concern that 'some individuals perceive intrinsic value in things that are wild and natural while others do not', as a given.

The issue in (d), about uncertainty over the effects of certain environmental activities, is more of a general concern and does not seem to represent a specific type of conflict. Suffice it to note that it is one of the factors that can aggravate any type of environmental conflict. Given that an environmental conflict emerges when one party has concerns about the environmental impacts of the other party's projects (proposed or implemented), then a conflict can be complex to resolve if there is uncertainty about the impacts in question. To appreciate this particular issue it would suffice to compare some of the issues that have been prominent on the global environmental agenda, namely, ozone layer depletion and climate change.

The risks associated with the depletion of the ozone layer came to light in the early 1980s. It was then established that a hole in, or thinning of, the ozone layer exposed people and other life forms to serious risks from harmful radiation (ultraviolet rays). In this case it would appear that there was consensus both on the causes and effects of ozone layer depletion. As a result, it was easy to initiate international measures to curb the problem through the Montreal Protocol of 1987 and other reinforcement measures that followed. In contrast, the scenario for other environmental challenges, such as climate change, has been different. In the case of climate change, there have been disagreements both on the causes and the risks associated with the problem. Consequently, reaching agreements on this matter has proved more problematic as compared to the international response to the risks associated with ozone layer depletion.

While the motivations for the expressed concerns may be various, having sufficient knowledge about the impacts at issue is also essential to the analysis of environmental conflicts. This is important because sufficient knowledge about the impacts is crucial to the assessment of risks. Chapter 4 and 6 will address the significance of impacts with regard to environmental decision-making and conflict resolution.

In dealing with (d), about uncertainty in relation to the risks associated with some environmental undertakings, it is important to differentiate two issues. The first is that the uncertainty can be understood in terms of disagreements about factual matters as to whether or not certain activities or products actually do lead to or can cause certain impacts. In the context of environmental conflict resolution, factual matters pose challenges when they attract different answers from experts (Wenz 1988, p. 32). The second is to separate factual disagreements about the impacts in question from the value disagreements about whether certain impacts and the associated risks are acceptable or not, even though the former does in some way inform the latter.

Environmental conflicts are sometimes aggravated by lack of conclusive evidence about the impacts of certain activities on the environment or on human health. What this means is that it is difficult to assess risks and later on determine whether those risks are acceptable or not in the absence of reliable, conclusive

information and evidence. This should not in any way imply that when factual matters are settled conclusively, then value questions are also settled. Even when the facts are clear, decisions have to be made as to whether the impacts and risks involved are acceptable or not.

The discussion so far provides some indication of how complex environmental conflicts can be. Nonetheless, when dealing with concrete cases, what is required is a thorough analysis of the situation in order to get to the root of the conflict. A good understanding of conflicts is necessary in order to develop strategies for dealing with them (United States Institute for Peace 2012, p. 4). Crucial to this processes is the determination of which issues are the most relevant to focus on. To this effect conflict analysis helps to redefine a conflict. This redefinition opens up alternative or appropriates ways of dealing with conflicts (cf. Burton 1990, p. 28). Taking into account the explanation of environmental conflicts provided in this section, the next section will consider specific types of conflict in order to ascertain the roles that the key concepts discussed in section 1.3 can play in environmental conflicts.

1.6 Typology of environmental conflicts

In terms of subjective interests, conflicts can occur in two different ways. First, they can be an issue of '*competing interests*', or what Schmidtz (2002, p. 418) refers to as 'conflict in use', which is primarily about access to the same resources by different users²⁰. Second, environmental conflicts can manifest in terms of '*conflicting interests*' or what Des Jardins (1997, p. 96) refers to as a 'conflict of interests' in which case one party prefers one thing whereas another party prefers something else. Each of the parties' attention may be focused on the same

²⁰ The following case cited by John Benson is a good example of a conflict of competing interests: 'In north-west England, a conflict [arose] over a proposal to impose a 10 mph speed limit on Windermere, a lake which lies within a National Park, a designated area of peace and tranquillity, but which is much used by power-boat enthusiasts and water skiers, whose activities contribute substantially to the economy of the area, and of course to their enjoyment, but detract from the peace and tranquillity of the lake' (Benson 2000, p. 41). It is clear from the above case that the interests of speed-boat enthusiasts were in conflict with those who were interested in retreating to the park and the lake for some peace and quiet.

resource, but for different reasons. One party may prefer *to use* a particular resource whereas another party may prefer *to preserve* the same resource. The result is a situation where one party is in favour of a project that involves the use of a particular resource whereas another is against such a project. In this way, 'environmental conflicts are also incited by different stakes in the outcome of environmental and natural resource management decisions' (Crowfoot and Wondolleck 1990, p. 7).

The example in (c), as noted in the previous section, where some people place priority on maintaining biological diversity and environmental integrity for future generations while others place priority on harnessing nature's resources to serve the needs of today's society, also represent a different kind of conflict, namely, '*conflicting priorities*'. As Schmitz claims, 'we misunderstand this kind of conflict if we see it simply as another case of conflicting values.' This is because 'people's immediate goals can be incompatible even when their values are relevantly similar' (Schmidtz 2002, p. 418). In short, conflicting priorities do not necessarily entail '*conflicting human values*'. Conflict can emerge between people with relevantly similar or shared values when each of them sees different things as more pressing, e.g., harnessing a river to generate electricity as compared to maintaining biodiversity or river ecosystems. While conflicting priorities may involve conflicts of value in the sense of object value, they do not necessarily entail conflicting values in the sense of human values.

Conflicting values represent a different type of conflict and relate more to the concerns noted in (a) and (b), and would most likely entail different orientations toward the environment. For instance, as Crowfoot and Wondolleck (1990, p. 1) note, some individuals perceive an intrinsic value in certain things, especially those that are wild and natural, while others do not.

In view of the distinction between human values and object value, conflicts that are primarily over human values, should also be distinguished from '*conflicts of value*' that involve the object value of different things (e.g. when a small town community is faced with a choice to consider a construction of a new shopping mall at the expense of a public park). However, one can assume that Crowfoot's and Wondolleck's claim in (a), to the effect that 'environmental conflicts are rooted

in different values of natural resources and environmental quality' provides for both of the two different types of value conflicts, namely, 'conflicting values' and 'conflicts of value'. In understanding the significance of impacts, however, the focus on conflicts of value should be understood in terms of object value.

While the different types of conflict outlined in this section can be manifested in isolation or simply as aspects of the same conflict, they are all relevant to an adequate understanding of environmental conflicts. An adequate explanation of conflict is crucial not only to the understanding of conflicts, but also to the resolution of such conflicts²¹. In taking account of the many subjective perceptions, ideological and value stances, an additional problem might be that as human beings we may not be that good at knowing our 'real' motives. In short, it may not always be immediately clear, both to the individual and to others, as to the real reasons why someone might be in favour of, or why one might be opposed to something. What this implies (although it is not my main concern here) is that we may not only be capable of deceiving others, but ourselves as well. This is why third-party intervention and adequate conflict analysis is essential (United States Institute for Peace 2012, p. 4).

Determining the nature of an environmental conflict is an important first step in determining how it can be resolved. To appreciate the nature of environmental conflicts, as I shall argue throughout this thesis, the distinctions among human values, object value and interests is very helpful. In the same vein, it is important to ensure that the emphasis placed on any of these three dimensions is not at the expense of others in order to avoid a tendency to reduce different aspects or types of conflict to a single explanatory framework, unless it is warranted by the nature of the conflict at issue.

²¹ As Burton (1990, p. 27) writes: 'In the study of conflict, its resolution and prevention, in which there are so many subjective perceptions, and ideological and value stances, the main problem area is finding an adequate explanation of conflict from which to deduce remedies.'

Conclusion

The discussion in this chapter has clarified and specified the sense in which the key concepts will be understood in the rest of the discussions in this thesis. The analysis has shown that some key distinctions are useful in terms of dealing with the ambiguities involved in the key concepts, namely, value and interests. I have adopted terms such as object value, human values, and objective and subjective interests in order to make the key concepts and the relevant distinctions clearer. Object value is understood as the quality of something which makes it desirable or an object of interest, whereas human values are understood in terms of desirable goals, ideals or principles that human beings, as individuals or groups are committed to, or at least wish to uphold. Objective interests have been understood as factors that are conducive to an entity's wellbeing or to the attainment of certain goals or objectives, while subjective interests have been understood in terms of what a conscious being actually desires or wants.

Furthermore, the distinctions set out in this chapter are helpful in terms of facilitating an adequate explanation of the nature of environmental conflicts. This has enhanced the understanding of environmental conflicts by facilitating a typological analysis and explanation of these conflicts. This then makes it possible for one to undertake an assessment of the distinctive roles that value and interests play in environmental conflicts and of how they can be resolved.

The contrast between subjective interests and human values is central to the standard view on conflict resolution which will be discussed in chapter 3, whereas the contrast between object value and subjective interests is relevant to the EIA framework presented in chapter 4. The distinction between object value and human values will be utilised in chapter 5, to highlight the challenge posed by conflicts that involve different kinds of value, and to explain the limitations of approaches that conflate these two different kinds of value in an attempt to resolve environmental conflicts. The analysis of concepts as presented in this chapter therefore provides a basis for distinguishing and comparing the different approaches to conflict resolution that will be discussed in this thesis.

The next chapter will explore some concerns about intrinsic value, an issue which is not only important to a complete understanding of value but also to an appreciation of the nature of some environmental conflicts.

CHAPTER TWO

ISSUES ABOUT INTRINSIC VALUE

2.0 Introduction

This chapter examines the notion of ‘intrinsic value’. This concept is relevant to some of the discussions in this thesis for two reasons. First, it is required for a complete mapping of the concept of value and our valuing practices. Second, some conception of intrinsic value is required in order to explain the nature of some conflicts as indicated in Crowfoot’s and Wondolleck’s explanation of environmental conflicts in section 1.5, noting that some individuals perceive intrinsic value in things that are wild and natural while others do not. In this chapter I explore these two issues on the assumption that the first will shed more light on the second. In brief, having a sense of what the concept of intrinsic value means is important in order to appreciate the role such value might play in environmental conflicts.

This discussion takes the above observation by Crowfoot and Wondolleck (that some individuals perceive intrinsic value in things that are wild and natural while others do not) as a given. However, in view of the reasons noted above it is still worthwhile to explore and consider some of the relevant issues about intrinsic value. The concept of intrinsic value is central to environmental ethics where it has been applied by philosophers in an attempt to extend our moral obligations to nonhuman beings and the natural environment²². I shall return to this issue in section 2.1 when I examine the different senses of intrinsic value (see especially the first and second sense).

It is important not to confuse the practical issues with the conceptual questions about intrinsic value. Furthermore, we should not confuse the conceptual questions about intrinsic value with the deep metaphysical and metaethical questions or assumptions about it, because doing so has been an

²² Some philosophers (e.g., Norton 2003) have argued that environmental ethics should move beyond intrinsic value in order to attend to practical issues while others, such as Jamieson (2008), maintain that the notion represents deep questions about value which we cannot ignore.

obstacle to an appreciation of intrinsic value in some philosophical discussions. Explaining intrinsic value should not be derailed by some of these meta-theoretical issues because they are not peculiar to it²³.

As indicated in section 1.1, the focus in this thesis is on the conceptual and practical issues about value and not on the metaphysical concerns. With this qualification in mind, I will now proceed to examine the concept of intrinsic value taking into account the fact that resolving conflict is a practical concern which however can be helped by a good conceptual framework (cf. Burton 1990, p. 152).

There are three issues involved in the controversies about intrinsic value: (i) what the notion of intrinsic value means; (ii) the range of things to which the concept of intrinsic value can be applied²⁴; and (iii) the practical significance of intrinsic value, for example, in decision making and in our obligations to the bearers of intrinsic value. With regards to (ii), the point of contention is mainly whether or not intrinsic value is applicable to nonhuman beings or objects. The issues in (i) and (ii) are related in that how intrinsic value is conceived or understood (i) will have a bearing on (ii) in terms of the range of things to which intrinsic value so conceived may be applicable. How (i) and (ii) may relate to (iii) is open to debate (cf. Crisp 2006, p. 62). In some discussions, however, the above issues are conflated. This can be a source of confusion and misunderstandings.

I concur with Michael Zimmerman that (i) is more fundamental than (ii) for we cannot say what may or may not have intrinsic value unless we understand what intrinsic value means. Hence, as Curt J. Ducasse notes with concern, it is surprising that in some criticisms of intrinsic value, no account of intrinsic value is supplied. This is unfortunate because ‘an explicit account of what is being meant by “intrinsic value” is indispensable if what is denied, affirmed, or queried is not to

²³ With regard to instrumental values, for instance, MacKinnon (2012, p. 341) writes: ‘Those things that produce benefit are good or of positive value, and those that cause harm are bad or of negative value. But where does this goodness and badness come from? Is it there in the poison or in the growth? This a considerable difficult metaphysical and moral question ... Does a thing have value in the same sense it has hair or weight?’

²⁴ Zimmerman (2010, p. 2) expresses (i) and (ii) as follows: (i) ‘What is intrinsic value?’ and (ii) ‘What has intrinsic value?’

remain wholly mysterious' (Ducasse 1968, p. 410). Equally, the fact that many critics write as though intrinsic value can only have one meaning can also be misleading. As we shall see in section 2.1, intrinsic value can be understood in different senses.

Intrinsic value is often defined as value that something has 'in itself', or 'for its own sake' (Zimmerman 2010, p. 1). This definition involves two distinct terms viz., *value-in-itself* and *value for its own sake*. I shall return to this particular issue when I look at the different senses in which intrinsic value can be understood. In what follows I consider key distinctions that are often used to explain intrinsic value.

There are two distinctions that are often invoked in explaining intrinsic value. One of these is the distinction between intrinsic and extrinsic value. Another is the distinction between intrinsic and instrumental value. Extrinsic value is defined as the value something has for the purpose of something else or for some entity apart from itself (Martell 2009, p. 28). As Wilfred Beckerman and Joanna Pasek have noted, the term 'intrinsic value' may also be used 'to indicate merely one part of the twofold classification of values as being either intrinsic or instrumental', which means 'that objects of value are, respectively, either valued for their own sake or valued for the sake of the contribution that they make to some other objective' (Beckerman and Pasek 2010, p. 83). It is common in the literature to distinguish intrinsic value from instrumental value perhaps because instrumental value is understood as a typical example of extrinsic value.

Given the diversity and plurality of values, the distinction between instrumental and intrinsic value may be useful, but it does not seem to be as definitive, exhaustive, or as precise as one would want to have it. In short, there are values that do not fit snugly in terms of being either instrumental or intrinsic, i.e., being non-instrumental does not necessarily make a value intrinsic. Equally, non-intrinsic does not necessarily mean instrumental (cf. Jamieson 2008, p. 71). It is because of this difficulty that the distinction between intrinsic and extrinsic value is fundamental (cf. Korsgaard 1983, p. 170).

To determine what may or may not have intrinsic value, we first need to establish what intrinsic value means. In so doing we have to take into account the fact that intrinsic value has several meanings. The next section explores the different senses in which the notion of intrinsic value can be understood. Given the rich record of the discussions about intrinsic value (Zimmerman 2010, p. 2) one does not need to reinvent the wheel as it were. Hence, much of the emphasis and effort in this discussion is motivated by the need for clarity.

2.1 The different senses of intrinsic value

Philosophers such as Dale Jamieson and Katie McShane identify four different senses of intrinsic value whereas others, such as John O'Neill identify three, yet others such as Shelly Kagan and Ben Bradley refer only to two different senses of intrinsic value. In discussing the different senses of intrinsic value philosophers often use different terminology. While it will be inevitable to incorporate the views of other philosophers in order to clarify certain claims and terminologies, this analysis is largely based on the terms employed by Jamieson (2008) outlined as follows: '(1) intrinsic value as ultimate value; (2) intrinsic value as moral considerability; (3) intrinsic value as inherent value; (4) intrinsic value as independence from valuers' (Jamieson 2008, p. 154).

In the first sense (1) 'what is of intrinsic value is of ultimate value' whereas 'what is of instrumental value is only valuable because it is conducive to the realization of what is of intrinsic value' (Jamieson 2008, p. 69). What this implies then is that what is of intrinsic value is (ultimately) more important than what is of instrumental value. In the context of some moral theories as Jamieson points out, one cannot ignore the fact that this sense of intrinsic value has had pride of place. For example, intrinsic value may be understood to refer to the 'highest good' or 'what is of absolute value'.

Intrinsic value is the 'gold standard' of morality. Just as gold is what is of ultimate monetary value, so what is of intrinsic value is what is of ultimate moral value. In the case of both money and morality, other things obtain their value by their relations to what is of ultimate value (Jamieson 2008, p. 69).

However, outside of the context of some moral theories the above assumption needs qualification, especially if it is understood to imply that what is intrinsically valuable 'must always be more important' than what has instrumental value (Jamieson 2008, p. 153); or 'that intrinsic values are the kind of values that should outweigh, trump, or even silence other values in cases of conflict' (McShane 2007, p. 47). This conclusion, as some philosophers point out, is not always true because in some instances something of instrumental value can be more important than what is of intrinsic value. For example, assuming that *pride* (in the positive sense) is intrinsically valuable, one may have to swallow one's pride and accept help in order to get out of some predicament. It is plausible to think that intrinsic value might pose different concerns from what is of instrumental value. But it does not necessarily mean that intrinsic value has a *special* role to play in the resolution of environmental conflicts.

In the second sense (2) 'intrinsic value is seen as the ticket that admits something to the moral community' in that 'having intrinsic value is both necessary and sufficient for being an object of primary moral concern' or as having 'moral standing' or being 'morally considerable' (Jamieson 2008, p. 70). Consequently, as some philosophers would claim, 'such value is a particular kind of *moral* value' (Zimmerman 2010, p. 14). While there is no inconsistency in supposing that something that is morally considerable has intrinsic value, it does not follow that anything that has intrinsic value is or should be morally considerable (cf. O'Neill 2003, p. 138). In fact, intrinsic value might have an important role to play in moral decision making because anything that has moral standing is intrinsically valuable. To claim that intrinsic value entails moral standing appears to put the cart before the horse, as it were. We may need to inquire as to whether it is more appropriate, in some instances, to say that someone has a *rational* obligation to something that possesses intrinsic value as opposed to saying that they have a *moral* obligation.

Considering that rationality is a complex notion (cf. MacIntyre 1988), it is important to be clear about the context in which one is using this important term. The most common understanding of rationality is 'instrumental rationality' which is the pursuit of one's interests and the need for consistency in one's choices and actions. As a result, some authors insist that rationality must be seen from a

purely individualistic and self-interested economic point of view (cf. Rawls 1971, p. 14, Wallace 2008, p. 7). This understanding of rationality is challenged on the grounds that it involves a “thin” theory of rationality. ‘Its value is not denied, but the need for a broad theory of rationality is suggested’ (Nicholson 1992: 51). In this regard, the argument is that a broad understanding of rationality must go beyond mere consistency or efficiency to consider the framework or ‘broad set of beliefs in which preference judgements are embedded’ (ibid.). For example as Boardman (2001: 103) points out:

To the extent that environmental reasoning rests on assumptions about cooperation, community, trust and interpersonal communication, and the restraint of self-interest in the production and consumption of goods, the pursuit of self-interest appear to be limited or just wrong.

The above concern points to the need for a “thick” description of rationality which, however, is beyond the purview of this discussion²⁵. Nevertheless, it should be adequate for my purpose here to state that to see an action as rational is to see it as something we have reason to do (or to refrain from doing with regard to some environmental concerns).²⁶ I may for example not value a tree for its own sake. Rather I can value it as having value in itself. The rational constraint then is that one cannot cut down a tree without a reason that might make it necessary for one to cut it down. This need not necessarily entail that I have certain moral obligations to the tree. Making a distinction between moral and rational considerations does not entail a denial of the interconnections between moral and rational concerns. Rather, what this observation implies is that the general claim standard to some environmental ethical theories, that whatever has intrinsic value is thereby morally considerable, can be mistaken (cf. O’Neill 2003, p. 126).

²⁵ According to Arne Naess for instance, ‘if an environmentally oriented policy decision is not linked to intrinsic values, its rationality is yet undermined’, or more specifically, ‘even what counts as a rational decision is challenged, because “rational” is always defined in relation to specific aims and goals’ (Naess 2010, p. 242).

²⁶ This understanding of rationality is open to two interpretations: ‘On the stronger usage, an action is rational if it is rationally required, and so omitting it would be irrational. The stronger usage allows that there can be cases where more than one action is rational – in which case it would be irrational to perform none of the actions. On the weaker usage, an action is rational if it has not been ruled out by reason – and not performing the actions is equally rational’ (Mason 2006, p. 10).

Distinguishing between morality and rationality is important because while the terms 'rational' and 'moral' may appear to be intimately connected (particularly in the context of philosophical ethics), the term rational can be used in discussions or in reference to decisions or actions that make no direct reference to moral questions. As Nicholson (1992, p. 51) points out, '[such] usage of "rational" has the merit of separating judgements of rationality from judgements of morality and therefore adds, not detract from our moral precision and effectiveness.' This allows for the possibility that something can be rational but immoral²⁷.

Jamieson refers to the third sense of intrinsic value as 'inherent value' supposedly because it 'depends entirely on what inheres in the thing itself' (Jamieson 2008, p. 70). MacKinnon (2012, p. 342) makes a similar observation that 'things have intrinsic value or worth (sometimes referred to as inherent value) when they have value or worth in themselves for some reason'. However, and as I want to maintain in this discussion, it is also reasonable to see why some authors insist on drawing a distinction between *inherent value* and *intrinsic value* (cf. Connelly and Smith 1999, p. 19).

If one takes into account the view that instrumental value is not the only kind of extrinsic value, then inherent value is considered to be a kind of extrinsic value but in a non-instrumental way, or at least not in a purely instrumental fashion. Jamieson's account above is a good representation of inherent value because it requires both the subject and object. For example, the sight of many things e.g., a flock of geese flying overhead is of inherent value in that we can appreciate it aesthetically and value it accordingly (Connelly and Smith 1999, p. 19) in the same way that we may appreciate a beautiful sunset. We cannot talk about the aesthetic value of such phenomena without the subject who is capable of perceiving them in this particular respect. Consequently, distinguishing inherent value from intrinsic value merely requires one to abandon the claim that inherent value depends *entirely* on what inheres in the object. Unlike Jamieson's or

²⁷ There is however a strong connection between rationality and morality in philosophical discussions. As Callicott (2010, p. 203) observes, 'the weight of western philosophy inclines to the view that we are moral beings because we are rational beings. And while morality *in principle* might be a function of human reason (as say, mathematical calculation clearly is), to suppose that it is so *in fact* would be to put the cart before the horse. Hence we must have become ethical before we became rational. Even so, ethics proper, in Darwin's [or Hume's] account, remains firmly rooted in moral feelings or social sentiments.'

Mackinnon's perspective, this analysis is therefore in support of making the distinction between intrinsic and inherent value.

Nevertheless, the underlying idea for the third sense of intrinsic value (which Jamieson and Mackinnon refer to as inherent value) is that it is value that 'an object has solely in virtue of its intrinsic properties' (O'Neill 2003, p. 131). Some philosophers refer to intrinsic value in this sense as the value which an object has 'in itself' or as 'value-in-itself' (cf. Kagan 1998, p. 278). This sense of intrinsic value can also be explained as value that something has in virtue of its non-relational properties. 'If the object's value is had independently of all other objects, that value cannot depend at all upon any relational properties of the object; rather its intrinsic value must depend upon the intrinsic properties alone' (ibid., p. 278; McShane 2007, p. 48). The terms *intrinsic* and *objective* properties are used interchangeably in some discussions and will be understood as such in this discussion.

The fourth sense of intrinsic value involves the claim that intrinsic value is independent from valuers. According to Jamieson (2008, p. 71) the idea behind 'independence from valuers' is that there are certain things that are of value, even if no one were ever to value them.' As O'Neill (2003, p. 132) similarly notes, in this sense intrinsic value is 'value that an object possesses independently of the valuations of valuers.' Depending on how the term 'independently' or 'independence from valuers' is interpreted this sense of intrinsic value is subject to slightly different interpretations. In one interpretation (metaphysical) it leads to the view that intrinsic value can *exist* independently of valuers (cf. G. E. Moore 1903). In another (metaethical) it merely involves a claim intended to deny the subjectivist view that all value depends on the attitudes or preferences of valuers (O'Neill 2003, p. 132). Hence, O'Neill interprets this sense of intrinsic value as a synonym of 'objective value'.

In view of the four different senses of intrinsic value examined in the foregoing we can understand why conflating them can be a source of confusion (cf. O'Neill 2003; McShane 2007) or why some of the disagreements about intrinsic value could be based on misunderstandings. To deal with this particular concern this discussion will set aside the claim that intrinsic value is synonymous

with ultimate value as stated in (1), which in fact is closely connected to the moral sense of intrinsic value in (2) and the associated claim that intrinsic value is always more important than instrumental value for instance. Equally, the claim that intrinsic value can exist in a world where there are no valuers or that it exists in objects, which is one of the ways in which one can interpret the sense of intrinsic value in (4), shall be set aside as well. There are, however, other interpretations of the same sense (4) which I will rely on to establish the meaning(s) of intrinsic value I want to adopt in this thesis.

The key issue to understanding the sense of intrinsic value in (4) is that it is value that an object has *independently* of valuers. To this extent there is more than one viable explanation. First, an object can have intrinsic value independently because such value is based entirely on its objective properties. This also entails the second explanation which is that such value is independent of the attitudes and preferences of valuers. Intrinsic value in this sense then is synonymous with 'objective value'. Third, intrinsic value can be understood as value that an object has independently of its use or instrumental value to valuers.

Later in the discussion we shall see that the first and second explanations are not exclusive to intrinsic value because they can apply to instrumental value as well. For example, the instrumental value of some things, e.g., water, minerals and vitamins, is based on their objective properties and not on the attitudes and preferences of valuers.

The third explanation adds something crucial to an understanding of intrinsic value which then makes it possible to distinguish intrinsic values from other types of value such as instrumental value. Therefore, intrinsic value in this sense 'might be used to indicate that the value something possesses is not only objective but is independent of its instrumental value to something else' (Connelly and Smith 1999, p. 19).

In view of the foregoing analysis I shall focus on intrinsic value simply defined as (a) value that something has 'in itself' and (b) 'for its own sake' thereby aligning the foregoing analysis to the definition of intrinsic value adopted in the introduction to this chapter. The sense of intrinsic value in (a) is based on the intrinsic or non-relational properties of something. This is the concept at work in

the contrast between intrinsic and extrinsic value. The concept of intrinsic value in (b) is what is at work in contrasting intrinsic with instrumental value. In reference to the same contrast between intrinsic and instrumental value, McShane (2007, p. 48) notes 'that to value something intrinsically is to value it for its own sake, and thus for a thing to be intrinsically valuable is for it to be properly or appropriately valued for its own sake.' Another set of terminology that is used in distinguishing between instrumental and intrinsic value is the contrast between '*means*' and '*ends*'. O'Neill (2003, p. 132) refers to '*ends*' in the above contrast as 'a synonym for non-instrumental value.' In this sense, anything that is valued as an *end* is understood to be intrinsically valuable whereas something that is valued as a means has instrumental value. Whether something is valued as an end for its own sake or as an end in the sense of ultimate value is an open question. Hence, to value something for 'its own sake' does not automatically or necessarily imply that it is of ultimate value.

In considering the two crucial senses of intrinsic value above (i.e., valuable 'in itself' and valued for 'its own sake or for itself'), it may also help as noted earlier to set aside the metaphysical concerns about intrinsic value on the understanding that such concerns are not peculiar to intrinsic value. Rather, they apply to other types of value as well, such as instrumental value.

2.2 Some issues about the two distinct conceptions of intrinsic value

The two concepts of intrinsic value in (a) and (b) are compatible in the sense that something can be valued for its own sake because of its intrinsic or non-relational properties. It is reasonable to suppose that something can be valued for its own sake because of its intrinsic properties or in general for being the sort of thing it is. As Harman (2000, p. 198) points out 'not all explanations compete'; rather, some help to *fill out* others.

Taking into account the possibility that the two different conceptions of intrinsic value can be understood in combination with each other, as Jamieson, O'Neill and Harman acknowledge, the question is how we can distinguish

between things that can have intrinsic value in both senses of the term and those that may not. The differences between living and non-living things as well as between conscious and non-conscious beings would play a significant role in addressing the above question.

I would argue that a certain interpretation of something being valued for its own sake will dictate that only conscious beings can be valued for their own sakes (cf. Martell 2009, p.30). It is difficult to see why objects that can never possess consciousness should be valued for *their own sakes*, even though they can be valued in and of themselves. Hence, not all value that is based on the intrinsic or objective properties of something, for example the value of a tree, would entail that the thing should be valued intrinsically for its own sake. Being valued for its own sake seems to imply that it matters to the being what happens to it. It is also in this respect that valuing something for its own sake would be more directly relevant to moral considerations as opposed to intrinsic value in the sense of value-in-itself, which, however, is also relevant to certain rational considerations as noted in the previous section.

The claim that objects, which lack consciousness, cannot be valued for their own sake, or at least that it may be difficult to understand why, does not imply that such objects can only have instrumental value. On the contrary, it is possible to value certain such objects in a non-instrumental fashion on the basis of their objective properties, or at least in part. However, this does not imply that all value that is based on the objective properties of the object amounts to intrinsic value. As Martell (2009, pp. 28-9). For example, food and certain tools have value that is based on their objective properties. The value of these things is derived from their objective properties but is value for something else. Hence, the fact that value is based on the objective properties of something does not necessary mean that it possesses intrinsic value. Furthermore, given that an object has value that is based on its objective properties; the next question is whether or not it would be rational or appropriate to value the object for its own sake.

The distinction between 'value-in-itself' and something being valued 'for its own sake' is central to the understanding of intrinsic value in this thesis because it helps to lessen the controversies and misunderstandings about the notion. It also

makes it possible for practical purposes to distinguish between things to which we may have moral obligations and those to which we may have rational obligations. To what sort of entities these two senses are applicable depends on the significance of the distinctions between living and non-living things, as well as on the distinction between conscious beings and living things which lack consciousness or the potential for it. As mentioned earlier, it is difficult to see how something which lacks consciousness can be valued for its own sake. In contrast, it should not be difficult to suppose that a living thing which lacks consciousness can be of intrinsic value in the sense of having 'value-in-itself'. In some discussions however, there is more emphasis on intrinsic value that is based on consciousness (sentience/experience) which leads to the view that things which lack consciousness cannot be said to have intrinsic value.

For example, Martell claims:

It is hard to see a value in just being, living or growing. Value is the experience of these. Plants and rocks do not have the capacity to experience being or growing or gain wellbeing from them. But experience or wellbeing, which are of intrinsic value, can be felt by sentient beings – humans and animals – and it is in them that intrinsic value lies (ibid., p. 30).

It is however surprising that those who follow this line of thinking are willing to distinguish between beings that can have experiences and those that cannot, but are willing to ignore the distinction between plants and rocks for instance, or generally between living and non-living things. In view of the two different senses of intrinsic value adopted in this discussion there is a flaw in this line of thinking which should not be difficult to expose. For instance, this is apparent in Martell's additional claim 'that there cannot be intrinsic value in an ecosystem' because, 'a system's value and claim to respect rest in the value it has for its individual members' (ibid., p. 35)²⁸.

Martell may be correct in claiming that ecosystems cannot have intrinsic value because the value they have is for individuals who make up the system. But it is difficult to see why sentience or the capacity to experience pain or suffering

²⁸ We also need to appreciate that the idea of a system is also applicable at the individual level. At this level it is not difficult to maintain that the value generated by individuals, as systems, is primarily for individuals themselves which then can be said to be intrinsic value for their own sakes or as value-in-itself.

should be the only criteria upon which individuals can be said to have intrinsic value in the context of an ecosystem. In fact, it is not clear on what basis sentience is a criterion for membership in an ecosystem. There is of course room for being concerned about pain and suffering in a socio-ecological context, especially from the human point of view, but such concern need not be the only consideration or the primary criteria for value. However, what Martell's position seems to imply is that only individuals can be valued for their own sake. His concerns about why ecosystems should not be given intrinsic value are as follows:

Giving value to systems has dangerous implications. It means we can value systems over individuals and individuals can be sacrificed for the sake of an impersonal structure. Making the ecosystem of intrinsic value creates a conflict between its interests and the interests of the individuals who make it up. Yet it is the latter who matter and the former which should serve them. If the system gains value in itself over and above individuals this can be very dangerous for them (Martell 2009, p. 35).

The above concerns may be relevant. However, they do not tell the whole story. One may agree with Martell that the value in the ecosystem is not for the ecosystem but for individuals who make up the system and who stand to benefit from the ecosystem's services. Hence, we cannot value the system for *its own sake*. The value of the ecosystem may be determined by the objective properties of the system as Martell admits, but it is value for individuals and not for the system²⁹.

However, a shift from considering the value of individual elements to considerations of collective entities such as species and ecosystems is a key feature of environmental thinking. From this perspective the focus is on defending *habitats*, 'which is a collective name including both instrumentally necessary inorganic features of the species' environment and other intrinsically and

²⁹ Nevertheless, a system can have 'systemic value', i.e., 'the value present in systems such as ecosystems and the entire evolutionary process that facilitates the existence of living creatures in all their diversity' (Attfield 2000, p. 201). As Holmes Rolston III points out, 'all value does not end in either human or non-human intrinsic value, to which everything else is contributory. Values are intrinsic, instrumental, and systemic, and all three are interwoven, no one with priority over the others in significance, although systemic value is foundational ... [To say that systemic value is foundational means that] systemic value is the productive process, its products are intrinsic values woven into instrumental relationships' (Rolston III 2010, p. 134).

instrumentally valuable organisms' (Ferré 2010, p. 159). Species or systems may not have intrinsic value in the sense that individual organisms can be said to have it. Nonetheless, concerns about species or systems are inextricably linked to concerns about individual organisms and their environments.

Sensitivity to the two different conceptions of intrinsic value is helpful in terms of making sense of the disagreements about whether nonhuman beings or objects can have intrinsic value or not, or in approaching such concerns 'with the care and suspicion they deserve' (Jamieson 2008, p. 75). In short, in dealing with questions about intrinsic value one should pay attention to both the nature of the object at issue and the relevant conception of intrinsic value.

In considering Martell's views as to why some things cannot be said to have intrinsic value, it is evident that those who hold this view seem to assume that there is only one kind of intrinsic value. In view of the two different senses of intrinsic value explored in this discussion this assumption is questionable. A particular sense of intrinsic value may be more relevant to certain considerations and another sense relevant to other considerations.

In what follows I consider further substantive claims for or against attributing intrinsic value to nonhuman beings or objects in order to shed more light on the nature of these disagreements. The discussion will focus on the views of Eugene Hargrove (2003) and Bryan Norton (2003). A comparison of the two is interesting because even though they claim to hold the same point of view, there are still marked disagreements in their views concerning the intrinsic value of nonhuman beings or objects. These two perspectives are helpful in terms of appreciating the nature of the disagreements insofar as the intrinsic value of nonhuman beings is what is at issue.

First, I will examine Hargrove's views in section 2.3 as an example of the line of thinking that is consistent with the attribution of intrinsic value to nonhuman beings. This will be followed by an examination of Norton's view in section 2.4 as being representative of the line of thinking that rejects the attribution of intrinsic value to nonhuman beings or objects. Then I shall respond to some of Norton's concerns and arguments against ascribing intrinsic value to nonhuman beings.

2.3 Eugene Hargrove on intrinsic value

According to Hargrove (2003, p. 177) 'at the most general level, four kinds of values are possible': (1) Instrumental value for the benefit of nonhuman beings (*nonanthropocentric*); (2) instrumental value for the benefit of human beings (*anthropocentric*); (3) intrinsic value that applies to nonhuman beings (*nonanthropocentric*); and (4) intrinsic value that applies to human beings (*anthropocentric*) As Hargrove observes:

In environmental matters nonanthropocentric instrumental values – concerning the instrumental relationships of benefit and harm between nonhuman plants and animals – are quite common and completely uncontroversial ... One thing in nature either instrumentally benefits other things or it does not, regardless of what humans think about it and whether or not humans think about it and whether or not humans even know that these instrumental relationships exist ... Anthropocentric instrumental value judgements, if they are simply the same relationships applied to humans, are likewise common and uncontroversial. Fluoride is either instrumentally valuable to humans or not, whether we humans know it, believe it, or value it (*ibid.*, p. 177).

In Hargrove's view, appreciating the above may be difficult if the distinction between instrumental and intrinsic value is associated, or taken to be synonymous, with the distinction between anthropocentric and nonanthropocentric claims about value. Hence, Hargrove cites some of the terminological issues involved in discussing intrinsic value as contributing to the confusions or disagreements about it. Nonanthropocentric claims are 'simply assumed to be the opposite of instrumental value, making *anthropocentric* for all practical purposes a synonym for the word instrumental' (*ibid.*, p. 175). However, attending to instrumental values need not necessarily entail that such considerations are restricted to 'anthropocentric' concerns, as it is commonly assumed, because certain things can be instrumentally valuable to things other than human beings.

I shall consider the term 'nonanthropocentric' simply as the opposite of 'anthropocentrism'. Anthropocentrism involves a claim that all value (intrinsic and instrumental) is grounded in value for humans (Holbrook 2009, p. 53).³⁰

³⁰ In contrast, value may be '*anthropogenic*' but that does not necessarily mean that it should be *anthropocentric*. As Attfield (2003, p. 189) points out, 'the anthropogenic theory of value simply involves the claim that all value and disvalue are dependent on human valuations.'

Something has value if and only if human beings stand to benefit from it. Anthropocentrism then confines the scope of concern, e.g., moral concern, 'to human interests, and regards nothing but human wellbeing' (Attfield 2003, p. 188) or human consciousness (Norton 2003, p. 170) as being intrinsically valuable. In short, anthropocentric concerns are human-centred. In contrast, a nonanthropocentric view would involve a claim that various elements are instrumentally valuable to other entities in the environment apart from or in tandem with the interests of human beings. For example, we can understand why a river or an old growth forest can be said to be instrumentally valuable to entities or organisms that depend on these things for their continued existence. In fact, many conservation groups or individuals will find this to be a reasonable basis for objecting to any undue intrusions into certain areas of the environment by human beings.

From Hargrove's perspective the question may not be whether or not nonhuman beings have intrinsic value. Rather, it is more about the sense in which they can reasonably be said to have such value. I concur. There is, however, a challenge in terms of accommodating the different senses of intrinsic value in some philosophical discussions. As Hargrove concludes, 'it is almost as if there is a competition between various conceptions of intrinsic value such that recognition of one kind of intrinsic value, anthropocentric intrinsic value, somehow damages the other, nonanthropocentric intrinsic value' (ibid., p. 178).

Hargrove's explanation of anthropocentric and nonanthropocentric intrinsic value³¹ is compatible with the two different senses of intrinsic value I have adopted in this discussion. From a nonanthropocentric perspective some nonhuman beings (e.g., animals) can have intrinsic value in both senses of the term, i.e., value in itself and for their own sakes while others (e.g., plants) can only have intrinsic value in the sense of value 'itself'.

³¹ '...if all that is claimed is that nonhuman entities have sakes or goods of their own (independent of human interests) and that they are using nature instrumentally for the benefit of their own sakes, which are then defined as (intrinsically valuable) ends (to them)' Hargrove (2003, pp. 177-8).

The next section considers Bryan Norton's concerns about attributing intrinsic value to anything other than human beings. The views expressed by Norton are representative of the line of thinking that is opposed to attributing intrinsic value to nonhuman beings or objects.

2.4 Bryan Norton's argument against the intrinsic value of nonhumans

To some, the notion of intrinsic value causes problems regardless of the sort of entities to which it is applied, human beings included. As Coker and Richards (1992, p. 17) claim, 'the value we attach to ecological phenomena is of the same kind as the value that we attach to human beings, and the problem of explaining its nature is no greater in the one case than in the other'³² (cf. Hargrove 2003, p. 182). This, however, does not seem to be Bryan Norton's primary concern. His main concern is about the attribution of intrinsic value to nonhuman beings or objects in the natural environment or to 'nature' in general. Instead of talking about the intrinsic value of nonhumans, in Norton's view, there are reasons for being concerned about human behaviours that are detrimental to the natural environment. As he suggests, we can choose for rational or religious reasons 'to live according to an ideal of maximum harmony with nature' without attributing intrinsic value to natural objects or nonhuman beings (Norton 2003, p. 165). Such an ideal can then provide a basis for condemning human actions that are detrimental to the environment and to other species.

In his view, 'in a post-Darwinian world, one could give rational and scientific support for a world view that includes ideals of living in harmony with nature, but which involve no attributions of intrinsic value to nature' or nonhuman beings (ibid.). As he claims, we need not recognise the intrinsic value of nonhuman objects; instead we can recognise the intrinsic value of our fellow humans and their preferences that nonhuman objects not be harmed. To illustrate this point, Norton (2003, p. 166) gives the following example:

³² In considering a hierarchy of values, especially in the context of human values, one can still argue that the intrinsic value of a human being is more important than that of an animal or that the intrinsic value of an animal is more important than that of a plant.

I can accept that there is a fitting way to act in regard to my neighbour's horse, without thereby accepting any commitment to accord intrinsic value to it. Nor am I thereby committed to anything either unintelligible or pointless. I need not recognize the intrinsic value of the horse; I can alternatively, recognize the intrinsic value of my neighbour and her preference that the horse not be harmed.

In considering Norton's views one can assume that he is working with a rather specific sense of intrinsic value, which in his view can only be attributed to human beings. This can also be seen from the fact that he has no problem attributing intrinsic value to human beings. The question, however, is whether or not intrinsic value that is attributed to human beings is, or should be, the same kind that is attributed to nonhuman beings or objects. If there is only one kind of intrinsic value, then the answer to this question would have to be in the affirmative for those who believe that nonhuman beings are also intrinsically valuable.

To make sense of Norton's claims against the attribution of intrinsic value to nonhuman beings or objects, we need to ascertain the sense in which he understands the notion of intrinsic value. In fact, one of the reasons why he is unable to attribute intrinsic value to nonhuman beings, as he claims in the example of the horse cited earlier, can be seen in the following: 'Ideals regarding the treatment of my neighbour's horse (viewed as a piece of private property) imply only that the horse has instrumental, not intrinsic value' (ibid.). Of course, looking at a horse from this perspective does not seem to require that one attributes intrinsic value to it. But what Norton does not seem to take into account is the possibility that to some owners, a horse or a dog might be a companion as opposed to being a piece of property, in which sense *owning* the horse does not always imply that it can only be instrumentally valuable. It can either be valued inherently for its beauty and companionship or it can also be valued intrinsically for its own sake. Furthermore, contrary to Norton's claims, there are reasons to be concerned about the horse on the basis of what is instrumentally valuable to it (in terms of its objective interests), as opposed to or independently of concerns about the owner and her preferences that the horse not be harmed. This is because what is instrumentally valuable to the horse is not determined by the owner's preferences. Rather, what is good for the horse or a dog is what should inform the owner's preferences.

Finally, a consideration of Norton's conception of environmental conflicts can also help to explain why he has a problem with attributing intrinsic value to nonhuman beings or objects. In Norton's view:

The most common conflict, the one many environmentalists fear we face, exists when overly consumptive felt preferences cause serious overexploitation of nature thereby threaten the resource base necessary for continued human life. This conflict can be resolved by taking human ideals into consideration (Norton 2003, pp. 171-72).

What is obvious from the above is that Norton's concern is primarily about human life, if not the only concern. Everything else would seem to matter only insofar as it contributes to the continued existence of human life. However, Norton's view above is not far from acknowledging that there can be conflict between our consumptive preferences and the integrity of nature or other living things in the natural environment. But even if he did acknowledge a conflict, the conflict would be between the intrinsic value of humans and the instrumental value of the natural environment. This may be informed by the view that 'although we literally cannot kill the planet, we can make it better or worse for us' (MacKinnon 2012, p. 341). Nonetheless, Norton's point is that we cannot attribute the same kind of intrinsic value we attribute to human beings to nonhuman beings as well. This seems to be the underlying concern in Norton's argument against attributing intrinsic value to nonhuman beings.

Given that the concept of intrinsic value can be understood in two different senses, as explained in section 2.2, it is rather difficult to demonstrate completely that nonhuman beings cannot plausibly have intrinsic value in any of them. In particular, Norton's concerns do not seem to sufficiently indicate that attributing intrinsic value to nonhuman beings is unreasonable or irrational. If that is the case, then the question is not whether or not nonhuman beings can be said to have intrinsic value at all. Rather it is more about the *sense* in which such beings can reasonably be said to have intrinsic value. Therefore, the position in this thesis is that being open to the two different senses in which the notion of intrinsic value can be understood is important in dealing with disagreements about it. In particular, intrinsic value in the sense of something having 'value-in-itself', and something being 'valued for its own sake' should not be difficult to understand.

Instrumental value or use value is not the only kind of value *conceivable*, nor should it be the only kind that matters. Admittedly, instrumental value would seem much easier to appreciate or to relate to than intrinsic value because the benefits from the instrumental value of something are often tangible.³³ However, ‘some notion of intrinsic value is likely to loom as a significant landmark on any adequate map of our evaluative practices’ (Jamieson 2008, p. 75). As pointed out earlier in section 2.2 given that there are different kinds of instrumental value it is strange for anyone to maintain that there can only be one kind of intrinsic value, especially in view of the distinction that is often made between intrinsic and instrumental value.

In addition, sensitivity to the distinction between human values and object value is also helpful in terms of appreciating the different senses in which the notion of intrinsic value can be understood. Given that the distinction between instrumental and intrinsic value is applicable to both human values and object value (cf. Rokeach 1967, 1973), considering whether one is looking at human values or object value has a significant bearing on which of the two senses of intrinsic value would be more appropriate. In fact, looking at intrinsic values in the context of human values is likely to raise different concerns compared to looking at intrinsic value in the context of object value. This issue will be explored further in chapter 5.

In view of the foregoing analysis, it should suffice to note the following: First, there are two distinct concepts of intrinsic value, i.e., the value that something has in itself and value or valuing something for its own sake. This is important because we need to understand what intrinsic values mean in order to be in a position to say what may or may not have intrinsic value.

Secondly, even if people agree on the meaning of intrinsic value, and the sort of things that may possess it, they may still disagree on its significance in decision making or in their actions. To this extent the conceptual and practical issues about intrinsic value would be independent of each other. However, disagreements about intrinsic value can contribute significantly to the nature of

³³ In contrast, as Des Jardins (1997, p. 130) suspects, ‘we seem to lack the language for expressing intrinsic value’ (cf. Feldman 1998, p. 339).

some environmental conflicts. Hence, taking note of these disagreements is pertinent to an understanding of some aspects of environmental conflicts. Overall, some notion of intrinsic value is required not only for understanding the nature of some environmental conflicts as explained in chapter 1, but also for a complete mapping of the concept of value itself and our valuing practices. Furthermore, sensitivity to the different senses in which intrinsic value can be understood is helpful in making sense of some of the concerns at stake.

It is also pertinent to take into account the plausibility that the distinction between instrumental and intrinsic value is applicable to both object value and human values.

Conclusion

This chapter has been dedicated almost entirely to a discussion of intrinsic value because, in the context of environmental philosophy, one would appreciate that this not a notion one would usually mention in passing. Over and above the controversies that have characterised the intrinsic value debate, one is also expected to take a stand on the significance of the entire debate itself. I have, however, resisted this temptation because of the overall aim and context of this thesis, namely, conflict resolution. In particular, the analysis presented in this chapter should be understood from a mediator's or facilitator's outlook (see section 3.1) where the aim is not necessarily to establish which side is correct or wrong.

From the point of view of a mediator or facilitator, attempting to determine whether or not any party to a conflict should attribute intrinsic value to things that are wild and natural may introduce an additional burden or strain (perhaps unnecessary or undesirable) on the process of resolving conflicts. What this entails is that in good conflict analysis, one has to be open to all the relevant concerns raised, including those that may reflect issues about intrinsic values. It is not a mediator's prerogative to decide whether or not an expressed concern is

trivial or is indeed the most important³⁴. Doing so may just defeat the purpose of deliberation and in the process hamper their attempts to resolve conflicts. Instead, the purpose of deliberation is to strive for areas of agreement or synergy among the conflictual domains.

On the assumption that concerns emanating from human values would pose different challenges in the resolution of environmental conflicts as compared to concerns based on object value, the next chapter examines the challenges posed by human values in the resolution of conflicts. I examine this issue by exploring some insights from the standard approach to conflict resolution.

³⁴ As Robin Gregory (2002, p. 473) notes, although the distinction between 'means and ends values is conceptually straightforward—ends are valued in and of themselves, whereas means are valued insofar as they contribute to the availability or amount of some other objective—*developing clarity in practice only comes after engaging stakeholders in demanding discussions*' (emphasis added).

CHAPTER THREE

THE STANDARD APPROACH TO CONFLICT RESOLUTION

3.0 Introduction

This chapter presents an appraisal of the standard view of conflict resolution. In brief, this view involves the claim that focusing on interests instead of human values makes the resolution of conflicts much more feasible. The problem, however, as I will argue, is that an exclusive focus on interests in the process of resolving environmental conflicts is inadequate in some important respects because there are other things to be considered such as the impacts at the root of the conflict. With the help of an example, I will illustrate how attending to impacts helps us to appreciate the nature of environmental conflicts and the limitations of the standard approach. Concerns about human values that will emerge in this chapter, and their significance to environmental conflicts and their resolution, will be addressed gradually in subsequent chapters.

In view of the analysis of concepts presented in the previous chapter, it is worth noting that the understanding of both interests and values that characterises the standard approach to conflict resolution is specifically in relation to human beings. In short, the focus is on human interests and values. It is also in this specific sense that the contrast between *interests* and *human values* is central to the standard approach to conflict resolution. In view of the analysis of terms presented in the previous chapter, the term 'interests', under the standard approach, is understood primarily with regard to subjective interests, that is, interests in the sense of what the parties to a conflict actually *want*.

The discussion in this chapter begins with a brief exploration of the concept of 'conflict resolution' in order to place it within the broader context of the field of conflict studies and practice. This is followed by an examination of the thinking behind the standard view on conflict resolution. Then an assessment of this approach to conflict resolution is undertaken against a detailed analysis of the nature of environmental conflicts. The purpose is to provide a basis on which to

explain why an exclusive focus on interests, as advocated by the standard view on conflict resolution, would be inadequate in the resolution of some environmental conflicts. To substantiate this claim, the chapter will also make use of an example. This is intended to highlight key features of environmental conflicts which may be overlooked if the standard approach to conflict resolution is adopted in dealing with certain environmental conflicts.

3.1 Conflict resolution

The field of conflict studies and the actual practice of conflict resolution are vast. In such an expansive field, it is common to find that the same terms are used in different ways or different terms are used to refer to the same things (cf. Ramsbotham *et al.* 2005, p. 27). Thus, choosing to use one term and not the other may require some sort of rationale. Nevertheless, concepts in this field are better understood when contextualised, or defined in relation to other related concepts. Conflict resolution can then be understood in relation to conflict management. 'Conflict resolution involves the termination of conflicts by finding solutions to them' whereas 'conflict management includes the prevention, limitation, resolution or transformation of conflicts' (United States Institute for Peace, USIP 2012, p. 3). Consequently, and by definition, conflict resolution is one of the key components of conflict management³⁵.

However, whether one is looking at *conflict resolution* or *conflict management* the techniques involved in dealing with conflicts are the same, viz. *negotiations, mediation, facilitation, and problem-solving*. Negotiation is a process whereby parties to a conflict seek to settle or resolve the conflict, whereas mediation involves third party intervention, but also includes negotiations (Ramsbotham *et al* 2005, p. 29). Facilitation also involves third party interventions:

An independent third party facilitates constructive communication through moderating, implementing rules and non-directive communication styles. The notion of facilitation captures the positive side of conflict and tries to determine the possibility of synergy between conflictual domains (Mayer 2008, pp. 42, 43).

³⁵ Some authors such as Ramsbotham *et al* (2005, p. 27) use the term conflict resolution in a broader sense to include conflict management.

In this sense, facilitation is also linked to problem-solving. In problem-solving, parties to a conflict are invited to reconceptualise the conflict in an attempt to find constructive solutions or outcomes that are beneficial to all (Ramsbotham et al. 2005, p. 30). The question of which of the above techniques may be more appropriate or predominant depends on the approach to conflict resolution that is adopted. For example, under the standard approach where the emphasis is on reaching consensus or resolutions that are mutually acceptable to all concerned parties (Crowfoot and Wondolleck 1990, preface, p. xiii), negotiation and mediation are more central to the process of resolving conflicts. In contrast, under the Environmental Impact Assessment (EIA) approach, discussed in the next chapter, facilitation and problem-solving are more relevant. This difference is partly rooted in how 'public involvement' is perceived. As Crowfoot and Wondolleck (1990, p. 22) claim:

In the traditional process [of decision making in government], public involvement is limited. It is, for the most part, public input to decisions, inputs that are multiple and often conflicting. Constructive criticism and offering of alternatives by citizens are certainly permissible; whether or not action is taken on these suggestions, however, is the decision of the relevant authorities in charge.

The above notwithstanding, dealing with environmental conflicts under the EIA is primarily about finding workable solutions to the problems at hand as opposed to merely meeting the demands of the parties to a conflict. In fact, negotiations under the EIA approach could be difficult because of the open nature of the process. An EIA process often can bring in people with diverse views, interests and values, some of whom, unfortunately, may not be on talking terms, as the case may be with some conservation groups and oil corporations. Hence, unlike mediation, facilitation may not involve any negotiations. It may only require that every party is given an equal opportunity to communicate their views and concerns through small stakeholder meetings or through public hearings as explained in sub-section 4.1.1.

Against this background, and on the basis of the analysis of concepts presented in chapter 1, this chapter will examine the standard approach to conflict resolution. The point is to ascertain whether or not the standard approach offers or can facilitate an adequate understanding, or explanation of environmental

conflicts. If the standard approach does not facilitate an adequate understanding of environmental conflicts as indicated in section 1.4 and 1.5, then there is reason to suspect that it is not adequate in dealing with some environmental conflicts.

I will begin by exploring the thinking behind the standard approach to conflict resolution. The idea is that doing so will allow us to evaluate the merits of this approach to conflict resolution in general, as well as in understanding its limitations in the context of environmental conflicts.

3.2 The thinking behind the standard approach

In order to appreciate the standard approach to conflict resolution, it is worthwhile to note that there are two options that may be available in attempting to resolve a conflict. One option is to focus on 'ultimate goals'. The other option is to focus on 'immediate goals'. In view of the contrast between human values and interests that characterises the standard approach, ultimate goals relate to human values whereas immediate goals are captured in terms of subjective interests.

In view of the above, one of the options is to interrogate ultimate goals (goal values) which may seem self-justifying, non-negotiable, or almost beyond discussion in the hope that they become open to inquiry, questioning and exploration. The idea behind this is that 'a reduction of conflict can sometimes be sought by forcing the contending parties farther out on their means-ends chains' (Van Dyke 1962, p. 572). The reason why ultimate goals (ends) may be difficult or impossible to reconcile is presumably because they are focused on or informed by incompatible human values. In chapter 5, the thesis will consider the particular kind of values that may pose this kind of difficulty.

For example, the goal of preserving life, or not to take away any life, could be the ultimate goal or value at issue. A person who holds this ideal may not be willing to negotiate or even discuss it as an option that can be sacrificed in the first place. However, if people are persuaded to discuss such issues, the expectation is that there may be a 'change of positions' in terms of their overall stance, which in turn might make it possible for them to consider values or views which are opposed to their own.

The alternative option is that ‘when ultimate goals are in irrevocable conflict, the appropriate strategy for reducing conflict is presumably to draw attention away from them and to look for more immediate interests that, hopefully, may be shared’ (ibid.). The assumption or expectation, as Schmdtz (2002, p. 240) claims, is that negotiations should revolve around the actual problem as defined by the actual benefits to be realized from the settlement or resolution of a conflict. The motivation is that when there is the above shift from ultimate goals (values) to immediate interests ‘two reciprocal advantages may be gained: the role of emotion in considering the interest is likely to be reduced, and the role of objective inquiry is likely to be increased’ (Van Dyke 1962: 571). This is because it is much easier to establish what is instrumentally valuable than the case might be with establishing what is ultimately valuable to all concerned parties. Of the two options above, the standard approach to conflict resolution favours the second option of focusing exclusively on interests, as the next discussion explains.

The standard view on conflict resolution strategies in the literature is that focusing on interests instead of values makes the resolution of conflicts tractable (Burton 1990, p. 40). As noted earlier, this strategy relies on a distinction between interests and human values that is clearly articulated and defended. As Burton (1990, p. 40) claims, the distinction between interests, which are negotiable, and values, which are not, is a recent one: ‘it is an insight gained primarily from facilitated conflict resolution processes.’ In some discussions, the same view is expressed slightly differently. For example, as Schmdtz (2002, p. 240) claims, ‘the most basic principle of conflict resolution is that mediators should try to get people to focus on their *interests*, not on their *positions*.’ In comparing the two expressions of the standard view by Burton and Schmdtz above, it would appear that *positions* relate to values.

The term ‘positions’, however, appears to be somewhat vague. Consider, for instance, the following account of the standard view which incorporates both Burton’s and Schmdtz’s perspectives above:

One of the classical ideas in conflict resolution is to distinguish between the positions held by the parties and their underlying interests and needs. Interests are often easier to reconcile than positions, since there are usually several positions that might satisfy them. Matters may be more difficult if the conflict is over values (which are often non-negotiable)

or relationships, which may need to be changed to resolve the conflict, although the same principle of looking for a deeper level of compatible underlying motives applies (Ramsbotham *et al.* 2005, p. 18).

From the above explanation one can infer that the term *positions* can be linked to both interests and values. The difference, as Ramsbotham and others explain, seems to be that interests can be satisfied by several positions which presumably may not be the case with values. What this means is that positions are likely to be less *rigid* if they are informed by interests as compared to when they are informed by human values. This then provides a basis for differentiating between positions that are based on interests and those that are based on values. However, and for the sake of clarity in terminology, the focus in this thesis is on *interests* versus *values* as opposed to *interests* versus *positions*.

The main issue in terms of appreciating the standard view on conflict resolution is to look at the perceived advantages of focusing on interests, and the difficulties associated with human values in the process of resolving conflicts. Of particular significance is the claim that human values are 'often non-negotiable' as compared to interests which are often negotiable (*ibid.*). In particular, compromise can be made on interests if the concerned parties stand to gain something in return as opposed to 'values which are not for trading' (Burton 1990, p. 39) or which may not be motivated by personal gain. Chapter 5 explains in detail why some human values may not be up for trading.

Furthermore, 'interests are transitory, altering with circumstances and are not as much part of the individual as values might be' (*ibid.*, pp. 39-40). In fact, as some scholars suggest, we can see a person or personhood as a constellation of values (Rokeach 1973). In this sense, compromising on values can be difficult because 'values have inherent personal relevance' and 'occupy an important place within individuals' social psychology' (Hitlin and Piliavin 2004, pp. 379, 384). As a result, values appear to be an inherent part of individuals in terms of who they are or what they stand for in a way that interests might not be. In short, to compromise on values may be seen as being tantamount to compromising on who someone is or what someone stands for.

Overall, some values represent ‘enduring goals or beliefs’ (Rokeach 1973, p. 5) and may relate to commitments that individuals would want to maintain even in the face of adversity or persuasion. Furthermore, people may want to protect certain values even if their own conduct appears to contradict such values³⁶. For instance, people who oppose activities that contribute to global warming would still drive to a corner store (Gregory 2002, p. 466), or they may oppose an expansion of a coal powered plant even though they use and benefit from the electricity generated from the same power plant. In contrast, interests are likely to be much more directly implicated in behaviour because they relate to what a person wants or to the things they want to pursue.

Against this background it should not be difficult to appreciate why focusing on interests can make the resolution of conflicts much more tractable than the case might be if the focus is on conflicting human values. As understandable as the argument behind the standard view on conflict resolution might be, it should not be taken as a substitute for a thorough analysis of environmental conflicts. While an exclusive focus on interests can make the resolution of some conflicts tractable it is inadequate in some important respects. This is the position in this thesis and it is informed by the exploration of the nature and typology of environmental conflicts presented in the first chapter.

In brief, approaches to conflict resolution that are based on the standard view can be characterised as follows: ‘They acknowledge the value differences underlying many conflicts, yet try to resolve the resulting disputes by cooperatively seeking a common ground between different interests at stake and then building upon this common ground’ (Crowfoot and Wondolleck 1990, p. xiii).

To explore the limitations of the standard approach the next section will examine an example that has been widely discussed by various sources in the environmental ethics literature. The case in point involved the removal of feral goats in order to save endangered species of plants on San Clemente. The discussion that follows on this case is based exclusively on the account provided by Dale Jamieson (2008).

³⁶ This happens perhaps because even though values are central to issues of personhood, they are less directly implicated in behavior (cf. Hitlin and Piliavin 2004, p. 361).

3.3 The San Clemente Island case

San Clemente Island is located off the coast of southern California. Setting part of the history aside, the Island is occupied by the United States Navy, which took custody of it in 1934. After taking over San Clemente Island for military purposes, the U.S. Navy got caught up in some environmental problems which are relevant to the claims in this discussion. Jamieson explains the San Clemente case as follows:

In 1977 seven species (those which are native and exist naturally nowhere) were listed as endangered under the Endangered Species Act. Four plant species, which were first listed under the Act, provide shelter to two species of bird and one species of lizard. The listing obliged the Navy to develop a recovery plan, and their attention turned immediately to the feral goats that had inhabited the island since the seventeenth century. The goats had severely degraded the ecosystems and it was clear that they were a major threat to the existence of these species. By 1979 the Navy had recovered 16, 500 goats from the island, but about 3, 000 remained in steep, rugged, canyons. The Navy then proposed a shooting program to be conducted from helicopters, but was blocked in court by the Fund for Animals. A series of negotiations led to the fund using helicopters and nets to capture some of the goats, taking them off the island, and finding homes for them across the country. However, the conflict continued, and in 1990 the last goat on the island was shot. While accurate numbers are hard to come by, one estimate is that about 27, 000 goats were shot and about 4,000 were airlifted to safety (Jamieson 2008, p. 172).

To appreciate the difference between the standard approach and the perspective to environmental conflicts adopted in this thesis, a comparative assessment of different ways of looking at environmental conflicts in relation to the above example is worthwhile. In particular, this assessment compares the focus on *interests* with the focus on *impacts*.

It is important to recall the sense in which the term 'interests' has been understood in order to interpret the San Clemente Island case appropriately. As explained in chapter 1, the focus on interests in this discussion is in terms of what people actually *want* as opposed to what may be assumed to be *in their best interests*. If the focus is on interests in the sense of what people actually want, then the issue at hand involves a 'conflict of interests' between the Navy and the Fund for Animals. In following the standard approach, one should be satisfied with

what Jamieson has described as the initial reaction to how the impasse between the Navy and the Fund for Animals was handled: 'An initial reaction that many have is that the airlift organized by the Fund for Animals was a good compromise; Goats were recovered, as the Navy *wanted*, but they escaped harm, as the Fund *wanted*'³⁷ (Jamieson 2008, p. 173). But there is more to this case than what the exclusive focus on interests may provide.

Looking at impacts paints a different picture, and at least highlights the root cause of the conflict at issue. The environmental conflict at the core of the San Clemente case is between the value of feral goats and the value of endangered species of plants. The conflict emerged when it was noted that the goats, in terms of impacts, had severely degraded the ecosystem, and it became clear that their existence on the island was a major threat to the survival of the plants in question. In short, the presence of the goats on the Island and the survival of the endangered plants seemed incompatible. Second, there is the issue of the impact of the actions by the Navy on the feral goats. This too is a genuine concern, and this is what the Fund for Animals was primarily concerned about. But focusing on the interests of the parties to the conflict makes it seem convenient to look at it as merely a conflict between the Navy and the Fund for Animals. However, the character of environmental conflicts often changes when we shift our focus from interests to impacts. This is because the focus on interests may overshadow the root causes of the conflict as defined by the impacts at stake. Focusing on what the parties to the conflict want may result in a failure to understand the cause of the conflict and the nature of the conflict at issue.

Attending to impacts makes it possible to understand the object value at stake as opposed to merely looking at what the parties to a conflict want. For example, the object value at stake in the San Clemente case was biodiversity which was threatened by the fact that goats were destroying the plants in question. In particular, the value of the plants was at stake, especially in view of the fact that they were classified as endangered, besides their role in the ecological context of the area. Clearly there was a conflict between the goats and the endangered species of plants. But if biodiversity is the object value at stake,

³⁷ My emphasis.

then the idea of choosing between the goats and plants is a tough one, taking into account that they are both part of biodiversity. As Jamieson (2008 p. 172) writes:

This case seems to present us clearly with questions about the value of sentient but common animals versus the value of highly endangered but insentient plants. Someone who endorses biocentrism or believes that biodiversity should never be reduced, even slightly, might think that morality demands killing the goats. Someone who takes sentience or animal rights more seriously would find this conclusion almost impossible to swallow. Both sides face a series of further questions, including these: How many sentient animals is a single plant worth? How much environmental degradation must we sustain before a single goat can be killed?

Of course the initial idea was to move the goats off the island. At least, that would seem to have been more practical than moving the plants. It is only when logistical difficulties emerged that the Navy decided they could get rid of the remaining goats by simply shooting them.

I concur with Jamieson's interpretation of the San Clemente case. However, in following up on this account, it will suffice to point out the need to distinguish between human values and object value in looking at the perspective Jamieson presents us with. There are two aspects one should note in Jamieson's account above, namely:

- (a) The case presents us with questions about the value of common animals versus the value of endangered plants; and
- (b) Someone who endorses biocentrism or believes that biodiversity should be protected 'might think that morality demands killing the goats' whereas 'someone who takes sentience or animal rights more seriously' may find this conclusion to be unacceptable.

Sentience refers to concerns about the capacity to suffer whereas biocentrism is concerned with respect for all forms of life. The understanding in this discussion is that the second aspect (b) is largely determined by human values given that the concern is about *what someone endorses*. In contrast, the first aspect (a) is primarily a biological issue that should be understood in an ecological context³⁸. In short, while some of the concerns generated on the basis of human values may

³⁸ See Rolston III (1988, p. 197).

correspond to the object value at stake (as the case may be with the San Clemente example), sometimes what we endorse or believe may not be an accurate reflection of what is at stake.

From the perspective adopted in this thesis I can see and argue that (a) relates to the object value of the animals and plants while (b) touches on the involvement of human values. Focusing directly on object value, especially in terms of environmental impacts, does not base our understanding of conflicts on what the parties to a conflict happen to endorse or stand for (their human values). However, Jamieson's point in (b) can also show that we do often bring our human values to bear on environmental conflicts even though, at the root, the conflict is primarily about the object value of the environmental elements at stake. It is also worth noting that, in some instances, concerns generated on the basis of human values can latch on to or safeguard the object value of the environmental elements at issue. For example, a community may preserve a certain area of the natural environment on religious grounds or on the basis that it is a dwelling place for the ancestral spirits. Such areas may, upon inspection, turn out to be of significant ecological value even though this ecological significance was not the primary reason for their preservation.

Furthermore, the San Clemente case is useful in understanding the precedence of impacts and object value over interests in the context of environmental conflicts. Before the Fund for Animals came on the scene, the Navy was already trying to address a *conflict of value* (object value) between the goats and the endangered species of plants. It is only when the Navy decided to start shooting the animals that a *conflict of interests* arose between the Navy and the Fund for Animals. Hence, there is often more to environmental conflicts than just the interests of the parties to a conflict.

Conclusion

This chapter set out to assess the standard approach to conflict resolution in the context of environmental conflicts. The standard approach suggests that we focus on interests, as opposed to focusing on conflicting human values, in order to ease the resolution of conflicts. It cannot be denied that interests have a role to play in environmental conflicts and in the resolution of such conflicts. Nonetheless, the argument in this thesis is that the role that interests play in environmental conflict resolution is limited because there are other factors to be considered, namely, the impacts at the root of the conflict.

Distinguishing between the standard approach and the approach adopted in this thesis highlights how the shift from focusing on interests, which characterise the standard approach, to consideration of impacts changes the character of our understanding of environmental conflicts. As explained earlier in section 1.4, environmental impacts involve the consequences of certain activities or products on environmental aspects of particular value or sensitivity. To this effect, and as will be explained in the next chapter, value is to be understood primarily in terms of object value as opposed to human values. Hence, an exclusive focus on interests is not the only alternative in an attempt to avoid the difficulties associated with human values in the process of resolving conflicts. In dealing with environmental conflicts we cannot just focus on what the parties to the conflict want. The need for assessing the environmental factors at stake presents a fundamental issue to be considered.

Chapter 5 will further explore the difficulties involved in dealing with conflicts involving human values. The next chapter examines the environmental impact assessment (EIA) framework, an approach to environmental decision making, and conflict resolution which takes into account object value primarily because of its focus on environmental impacts.

CHAPTER FOUR

ENVIRONMENTAL DECISION-MAKING AND CONFLICT RESOLUTION

4.0 Introduction

In the preceding chapter I argued that an exclusive focus on interests, as advocated for under the standard approach, is inadequate in some important respects insofar as the resolution of different types of environmental conflicts is what is at stake. I have also argued that object value, in relation to impacts, should be central in the resolution of environmental conflicts. The standard approach to conflict resolution is concerned with human values and interests. While human values and interests are relevant to the analysis of conflicts, they are not at the root of major environmental conflicts. Instead what are at the root of these environmental conflicts are the impacts of certain human undertakings. It is therefore in the consideration of impacts that the concept of object value is useful in terms of understanding the value implications of decisions that emerge from the resolution of environmental conflicts.

Taking into account the fact that the standard approach to conflict resolution does not deal directly with object value, but makes reference only to human values, this chapter examines the significance of object value in terms of environmental decision-making and conflict resolution in particular. In looking at environmental decision-making and conflict resolution, the focus in this chapter is on Environmental Impact Assessments (EIA) which will be discussed with the help of two examples. The chapter will also explore how the EIA framework differs from the standard approach discussed in the previous chapter in relation to the role that value and interests play in the resolution of environmental conflicts.

An EIA is an environmental decision-making tool. Environmental conflict resolution is something that accompanies the process by implication. Hence, the agenda of EIAs is much broader than the specific task of resolving conflict. In particular, the purpose of an EIA is to ensure that environmental concerns are integrated into economic or developmental projects (Environmental Council of

Zambia, ECZ 2010, p. 4). Consequently, the primary concern in attempting to resolve conflicts under the EIA process is not merely to meet the demands of the parties to a conflict. Rather, it is more about finding a solution to the problems at the root of the conflict. While the process tries to accommodate different views, as well as to seek common ground, the resulting decisions need not and do not often depend entirely on consensus among the stakeholders. I will clarify this claim in subsequent sections.

The discussion will begin with an examination of the nature of the EIA framework. This will be followed by an exploration of how conflicts are dealt with under the EIA process, an issue which will be addressed with the help of an example.

4.1 The nature of the EIA process

There are two aspects that are essential to an appreciation of the nature of the EIA process and framework, namely, 'technical analyses' and 'stakeholder participation'. Technical analysis is provided by professionals on the basis of studies they have conducted, or generally on the basis of the information available on a particular issue or problem. Stakeholder participation allows for the participation of the public and community members in the affected areas. In short, an EIA has two key aspects, namely, 'technical analysis' and 'stakeholder participation' both of which feed into the *deliberations* that characterise the final stages of the process thereby contributing to decision making.

EIA is a relatively recent phenomenon introduced in the environmental public policy arena in the 1970s. It has been increasingly turned to as a method for incorporating environmental and social concerns into project designs and implementation. According to James Connelly and Graham Smith, an EIA can generally and concisely be understood as follows:

The aim of the EIA process is to present, in as bias-free a manner as possible, a systematic analysis of the significant impacts of a proposed development as an aid to decision makers. Consultation with statutory agencies (such as government departments or pollution control agencies) and non-statutory groups (such as voluntary conservation

organisations) is seen as central to the process of information gathering, as is a period of consultation with agencies and the public after the environmental impact statement is published. Such consultations should mean that the best sources of information are accessed and can often lead to project redesign and mitigation of impacts. These comments, along with the environmental impact statement, feed into the decision-making process for authorisation, where they are balanced against other material considerations (Connelly and Smith 1999, p. 145).

In what follows I tease out some of the issues noted in the above overview of the EIA process.

4.1.1 Technical analysis and stakeholder participation

As a technical process, an EIA is a systematic investigation of conditions within the environment followed by an assessment of the impacts a proposed project will have on the environment in its totality in terms of physical, biological, chemical, social, and economic considerations (Environmental Council of Zambia, ECZ 2006, pp. 3, 7). The EIA process involves a number of activities, some of which are undertaken by consultants hired by the developer, in liaison with the implementing government department or agency, for example the Zambia Environmental Management Agency (ZEMA, formerly ECZ) in the Zambian context. These activities are intended to facilitate the identification and evaluation of potential impacts, mitigation measures, and the options available to assist in deciding whether or not to approve a proposed project. Hence, it is vital that an EIA is conducted at an early stage so that the information is conveyed at a time when it can materially affect the outcome in terms of decision-making (Warthen 1988, p. 6), to ensure that the decision is informed by, or takes cognisance of all the relevant concerns and perspectives. It is also a requirement from the start that those conducting the EIA study take into account all the pertinent legal issues that may be relevant to a proposed project to ensure that the decision taken is within the confines of law.

Insofar as stakeholder or public participation is concerned, the EIA process is not only consultative but also informative. It is consultative in that it involves soliciting concerns about a proposed development from all the stakeholders. It is a requirement that a record of these consultative meetings is provided, detailing the

concerns voiced by the participants and how the developer intends to address those concerns. The process is informative because it involves dissemination of information about the environmental impact statement report of the potential impacts of a proposed project.

One of the reasons for including public participation in the EIA process is explained by the recognition that 'growing public concern for the environment spells out the need for involving the public in decision-making' (ECZ 2006, p. 4) and public responsibility is summarised as follows:

The responsibilities of the public and IAPs (Interested and Affected Parties) are to provide information about the local environment, community goals and aspirations in relation to the proposed development, contributing to the social, cultural and economic evaluation of the project and assisting in decision-making as well as the project management process (ECZ 2006, p. 4).

In providing for public or stakeholder participation, the EIA framework makes a distinction between interested and affected parties (IAPs). An interested party can be any individual or institution that has a stake in the issues involved in virtue of their mandate or professional obligations. In addition, merely taking an interest in the matter at hand can qualify any member of the public as an interested party. In contrast, affected parties are those who are directly affected by a proposed project, for example, people or communities living in the area where a proposed project is to be implemented. Of course, there is no reason why one cannot be an affected and interested party at the same time.

Public hearings, besides being the source of additional information, are crucial in that they afford decision-makers an opportunity to assess whether people, or the affected communities in particular, are in favour of the proposed project or not. The significance of public hearings is explained as follows:

It is important to state that the findings of public hearings have considerable influence on the review process. In some cases certain aspects of the project proposal have had to be altered, additional mitigation proposals and commitments were made and final decisions on projects delayed until substantive issues were addressed (ECZ 2006, p. 13).

In line with the above elaboration, public hearings and the review process can provide safeguards in relation to some concerns about the EIA process, for

example, the determination of what might constitute '*significant impacts*'. Given that it is the developer who has to produce the environmental impact statement (EIS) there is likelihood to over-emphasise the potential benefits of the project and to down-play the significance of the negative environmental effects (Connelly and Smith 1999, p. 146). For this reason, the contribution of public hearings to the review process is essential in terms of enhancing the efficacy, reliability and fairness of EIAs. In particular, public hearings are also useful in attracting the attention of all interested parties, ensuring that people in influential positions do not highjack the process. The relevance of public hearings to this discussion is spelt out in terms of the benefits of public hearings in the EIA process, among which the following are the most relevant:

- Providing an avenue for public information and interaction between the proponent and all interested groups;
- allowing people to articulate their views about a given project and make inputs which eventually enhance the quality of the project's environmental assessment;
- leading to social acceptability of projects and promotion of harmonious relationships between the proponent and affected communities;
- unearthing issues that may be hidden from the reviewing authority; and
- resolving conflicts during public meetings since every party is given the opportunity to express concerns before an independent panel (ECZ 2006, p. 13).

While all the above issues are indirectly relevant, this discussion is focused more on issues raised by the last point. In terms of conflict resolution, public hearings form an essential part of the EIA process. Many conflicts are resolved in this manner or at the decision-making stages. Even if a conflict is not resolved during a public hearing, the hearing may still afford decision-makers an opportunity to appreciate what is really at stake so that such issues can be properly considered during the decision making stage. In some instances, the decisions that emerge from the EIA process may not be based on consensus or mutual agreement among stakeholders. For this reason, if a conflict is protracted, the case may even end up in courts of law for litigation. However, the fact that some cases might end up in courts of law should not be interpreted as a weakness on the part of the EIA process. Rather it is an accountability requirement for the purpose of good environmental governance.

In view of the fact that there is input from various stakeholders into the EIA process, the next section explores how the issues raised in the process are handled.

4.1.2 EIA as a deliberation process

In considering the significance of public hearings and input from various stakeholders in the review process, the EIA can be understood as a process of deliberation. As a result the process is able to take into account various interests. The decision-makers are not just faced with an environmental impact statement to consider. Rather, the main task is about the 'need to balance a range of qualitatively different economic, social, and environmental factors', as a result of which an EIA places considerable 'emphasis on the role of sound political judgement' (Connelly and Smith 1999, p. 144). For this reason deliberation under the EIA process is in some sense a political process and not just a technical process. In understanding the EIA as a process of deliberation, one should take into account the distinction between 'deliberation' and a mere 'balancing of interests':

The idea behind deliberation is that the process of negotiation and discussion can be educational. Because people must argue their views on the merits and from a public or intersubjective point of view in order to persuade each other, they may refine or even change their positions to make them plausible representations of the public interest or the general good. Disagreements are likely to turn, therefore, on scientific, technical, and legal considerations, about which both sides may then seek more evidence or better information. In the context of deliberation, in other words, positions are not construed as exogenous variables but are endogenous to the decision-making process. Participants, therefore, may redefine a problem or consider alternatives that permit an *unexpected resolution*³⁹ (Sagoff 1988, p. 41).

In deliberation, as the above claim suggests, the concerns expressed by stakeholders are not treated as 'givens' or 'arbitrary' preferences coming from outside (*exogenous*) the process. Rather they are considered to be part of, and as being (*endogenous*) generated by the process, in order to enhance the outcome

³⁹ In my view, the possibility of getting people to accept a resolution they did not expect represents an ideal by which the success of deliberation efforts can be measured.

of the process. As a result, 'one of the advantages of this approach is that it can involve debate, exchange of information and argument, by which initial preferences of the various parties may become modified and their arguments scrutinised' (Benson 2000, p. 47). Hence, deliberations have a significant bearing on the decision making process under the EIA framework. The decision making *stage* of the EIA *process* in the Zambian context, for instance, is summarised as follows:

- Upon receipt of the environmental impact statement (EIS) from the developer, the Zambia Environment Management Agency ZEMA reviews the project;
- ZEMA either approves or rejects the project;
- If ZEMA approves the EIS, the developer may implement the project;
- If ZEMA rejects the project the developer can appeal to the Minister for the relevant government ministry in charge of environmental affairs within ten working days of receipt of the decision letter from ZEMA. The Minister, on behalf of government, must respond to the appeal within fourteen working days; and
- If not satisfied with the Minister's decision, the developer may appeal to the High Court (ECZ 2006, p. 12).

The next section presents an example in order to address some substantive issues about the character of conflict resolution, or decision making in general, under the EIA framework. I shall refer to the example at issue as the Legacy case. This case went through the EIA process and attracted attention from different sectors of society both locally in Zambia and internationally.

4.2 The Legacy case

The Legacy case involves a proposal that was initiated in 2006 with a view to develop hotel infrastructure and related amenities within the Mosi-oa-Tunya National Park. The park is situated in Livingstone, a town in the Southern Province of Zambia, named after the 19th century British missionary and explorer David Livingstone – and is considered as the tourism capital of the country. In terms of physical location, the park is situated on the Zambian side of the Zambezi River, and covers an estimated area of about 6000 hectares. The park has unique importance because being within the vicinity of the Victoria Falls makes it part of a World Heritage Site, following a declaration in 1989 by the United Nations

Educational, Scientific and Cultural Organization (UNESCO). Consequently, this is an area where the country has national and international obligations to carefully control new tourism developments, especially in terms of infrastructure for the tourism industry.

This notwithstanding, there have been a number of developments in the park, apparently as a result of the emphasis government has placed on tourism as an important sector for economic growth and national development. These developments by other developers were already established before the Legacy proposal came on the scene. Among others, the developments include two hotels owned by Sun International, namely the Royal Livingstone and Zambezi Sun. As a press statement from Legacy Holdings indicates, all these facilities are within the national park in an area which has been designated as a tourist zone by the Zambia Wildlife Management Agency (ZAWA). If this is the situation, then the question is why did the Legacy proposal provoke what has been described by some conservationists as the 'the biggest environmental campaign ever run in Zambia'? To answer this question, some details on the case will help to shed light on the matter.

Initially, Legacy Holdings Zambia Limited had tendered for, and acquired a two hectares area advertised by ZAWA on a five year lease. The case then took a twist when it later emerged that in fact Legacy had applied for more land and had been awarded an additional 218 hectares. This meant that the Legacy project was now looking at a total area of 220 hectares of the national park along the Zambezi River upstream of the Victoria Falls.

According to a press statement issued at the time by Legacy and as explained in the EIA report, the 'Mosi-oa-Tunya Hotel and Country Club Estate Project' was to be anchored, among other things, on the following components: (a) two hotels, namely the 'Mosi-oa-Tunya Hotel and International Conference Centre' with approximately 280 rooms and Queen Victoria Hotel' with 200 rooms; (b) an 18 hole golf course, 450 luxury villas and support facilities collectively referred to as the 'Queen Victoria Country Club and Golf Estate.' In providing a rationale for the proposed developments, Legacy felt that the aim of their initiative was to 'position Zambia, Livingstone and Victoria Falls as a leading tourist

destination and critical mass for eco-tourism', particularly in comparison to the neighbouring countries like Zimbabwe.

It was also Legacy's intention to commission the project in 2008 before the 2010 FIFA world Cup hosted by South Africa. Among other benefits, the project was expected to create 2000 jobs during construction and 1000 permanent jobs thereafter. In the same press statement, it was indicated that Legacy looked forward to working closely with the government, the people of Zambia and all stakeholders in order to realize what seemed to them as an exciting project (*The Post*, Friday April 21, 2006). Truly the project was exciting but in very different ways for different people. While some were anxious about it, others were incensed by it.

4.2.1 Public response to the Legacy case

Civil society and conservation groups in particular were against the project proposal by Legacy, apart from concerns about the manner in which Legacy had acquired additional land. These concerns raised suspicions about procedural issues and the integrity of the deal. However, concern about how Legacy acquired the additional land is not what is of primary interest to this discussion.

As noted in chapter 1, dealing with conflict situations can be tense given that there are often so many subjective perceptions and value stances. In fact, some cases are also characterised by protests by the communities, conservation groups or other civic organisations. But in many cases, just as the situation was with the Legacy case, there are supporters on both sides for and against the project.

(<http://victoriafallsheritage.blogspot.com/2006/11/wildlife-and-environmental.html>)

After considering the environmental impact statement submitted by Legacy on the project, and comments from stakeholders and the general public during the review process, ZEMA concluded that the proposed project would have far reaching negative environmental impacts if it were implemented in full. In particular, they noted that it would have caused permanent damage to a wildlife habitat and animal corridor, especially for hundreds of elephants that cross the

Zambezi River from Zimbabwe into Zambia every year. This ruling confirmed the concerns that were expressed by conservation groups such as the Wildlife and Environmental Conservation Society of Zambia (WECSZ). Among other issues WECSZ cites the ZAWA's Mosi-oa-Tunya General Management Plan (GMP) of May 1999 which under sub-section 3.5.1 on natural resources clearly states that the priorities for the management of the national park will include 'protecting and conserving the Zambezi River and its riverine vegetation.' Consequently, 'any development – local, national, international – which threatens the integrity of the riverine ecosystem should be opposed in the strongest terms.' In this vein, WECSZ notes that the General Management Plan was clearly opposed to the developments proposed by Legacy. Following up on the impression given by the claims noted from a participant earlier in this section, the next section explores different ways of looking at the Legacy case.

4.2.2 Some relevant perspectives on the Legacy case

There are different ways of looking at the Legacy case insofar as the understanding and resolution of environmental conflicts is what is at stake. The different perspectives can be explained in terms of the different typology of environmental conflicts outlined in chapter 1. 'Conflict in use' involves competing interests where people want access to the same resource. They may want to use the same resource in the same or different ways. In contrast, 'conflicting interests' entail a situation where some people are in favour, while others are against a project that involves using a particular resource. Those who are against the project may in fact want the resource at stake to be preserved.

'Conflicting priorities' arise when people's immediate goals are incompatible even though their personal or social values are relevantly similar. In contrast, 'conflicting *values*' entail different and incompatible orientations with regard to the environment and other relevant aspects. Finally, 'conflicts of value' involve the object value of different things, which are incompatible in that getting one or more of one is somehow detrimental to the existence or quality of the other. For example, more timber production in certain areas means less or degraded forests.

While these conflicts can be understood in isolation as different types of environmental conflicts, they can also manifest as different aspects of one episode of environmental conflict, especially when multiple stakeholders are involved. Under the EIA framework, however, it would be possible to look at environmental conflicts either in terms of interests and priorities or in terms of object value on the basis of impacts.

By considering interests, the Legacy case can be viewed, as another commentator portrayed it, in the following story:

After raising their concerns at a contentious public hearing ... they [conservation groups] used internet blogs to keep supporters updated and to spread the word internationally. It worked. Safari tour operators in Britain threatened to boycott Legacy. The US Environmental Protection Agency wrote to the Zambian government to voice its concerns. The United Nations Educational, Scientific and Cultural Organization (UNESCO) let it be known that the project would put in jeopardy the World Heritage site status that the falls and park currently enjoy; and,

In December, the Environmental Council of Zambia (ECZ) handed down a compromise decision. Noting that the Legacy proposal would have 'far reaching environmental consequences', the ECZ said the golf course would have to go. Legacy could keep its two hotels, but would be prohibited from putting up animal fencing or building their hotels higher than the treetops. 'It was a huge victory ... It's the biggest environmental campaign ever run in Zambia.'

(<http://victoriafallsheritage.blogspot.com/2006/11/wildlife-and-environmental.html>)

The manner in which the Legacy case is portrayed in the above citation represents a view where a conflict situation is seen as a conflict of interests. The conflict is primarily understood to be between Legacy and the conservation groups. Legacy preferred one thing and those opposed to the project preferred something else. In fact, this view could be reinforced by the fact that Legacy is reported to have threatened to take away the proposed USD 260 million investments if it was not allowed to implement the project in full and in the designated area. The decision by the environmental management agency may be seen as a compromise between the two competing positions. This is in view of the fact that Legacy was only allowed to construct two hotels while the golf course and villas were not permitted. However, as things turned out, the compromise was

not acceptable to Legacy. Of course, this is expected in a process like the EIA where decisions are not primarily based on consensus or mutual agreement among stakeholders.

There is yet another way of looking at the Legacy case. This can be explained by again drawing on some of the pertinent issues raised in a press statement by the Chairman of Legacy Group. The press statement raises the relevant issues at stake, in addition to expressing some of Legacy's specific concerns on the matter. It reads in part as follows:

As happens in similar situations elsewhere, there are many locals and competitors, both in Livingstone and Zimbabwe, who have their own agenda and/or conflicting interests, who use the environment as a tool to protect their own self-interest. These include competing hotel groups on both sides of the river, local expatriates developing their own golf estate, or who have a grudge against the government ... *The real issue is – will the environment on the Zambian side of the falls be worse off or better with this development?*⁴⁰ The authorities need to decide this outside of all other peripheral issues.

(<http://victoriafallsheritage.blogspot.com/2006/11/wildlife-and-environmental.html>)

The above account by Legacy begins with an interests' perspective on the conflict. It is only when the key question is posed (as emphasised in the above citation) that a different way of looking at the conflict, or at the Legacy proposal in this particular case, opens up. The question touches on the need to look more directly at the *impacts* of the project. The consideration of relevant impacts is what defines a conflict of value (e.g., environmental versus economic value). As Legacy claims in the above citation, the real issue was whether or not the environment was going to be *worse* or *better off* if the project was approved. Of course, as noted earlier in section 4.1, there is a concern about whether a developer can state potential impacts in a manner that is not biased. However, it is for concerns such as this one that public hearings and the review process have been provided.

Furthermore, attending to impacts makes it possible to clearly review a proposed project in terms of both environmental and social considerations. In this regard, the supposed economic benefits of the project, in terms of tourism development and job creation were weighed against the actual and possible

⁴⁰ My emphasis.

environmental impacts of the project. It is on this basis that the environmental agency decided not to approve the Legacy project in full. The next section explores why attending to impacts is crucial to environmental decision-making and conflict resolution in particular.

4.3 The significance of impacts in environmental conflict resolution

The need to appreciate the significance of impacts in environmental conflict resolution is primarily based on the realization that the concerns expressed in a situation of conflict may be motivated by issues other than the impacts of the project in question. For example, besides the concern noted in the previous section, there is also a common suspicion that the concerns raised by parties to an environmental conflict may well be self-serving. This is because what may appear to be genuine environmental concerns may turn out to be just disguised ways of supporting an individual's or groups' own self-interests. Of course, each party is free within reason to promote their interests. But from the point of view of the decision-makers this cannot be at the expense of the root cause of the conflict and what is actually at stake. Hence, the best way to proceed, for instance as one EIA report illustrates, is as follows:

Where we identified clear environmental concerns for any project activity and saw potential effects, the team designated the environmental concern as a valued environmental component upon which the EIA study was focused. The valued environmental components were determined, in part by perceived public concerns related to physical, biological, socio-economic or aesthetic values and by scientific and professional knowledge (Environmental and Social Affairs Unit, Zambia Electricity Supply Cooperation, ZESCO 2010, p. 29).

In the above citation, the term used to refer to impacts is 'potential effects'. The advantage of looking at impacts stems from the understanding that they can be assessed more transparently than the case might be with interests or human values. This is because impacts can be objectively ascertained or assessed and measured, assuming it is practically possible to obtain the relevant data or information. In chapters 1 and 3, I explained why impacts are at the root of

environmental conflicts based on the understanding that environmental conflicts emerge when one of the parties has concerns about the environmental impacts of the other party's activities or project. This chapter argues that attending to impacts facilitates considerations about object value in the resolution of environmental conflicts. This is important because what are fundamentally at the root of many environmental conflicts are the incompatibilities among the object values of certain environmental resources.

To assess the significance of impacts in terms of decision making, this discussion will consider some scenarios that may shed some light on the significance of different factors, such as interests or object value, in the decision making process.

The EIA framework does not seem to spell out specifically how conflicts are resolved. The only thing that is clear, as noted earlier in section 4.1, is that 'every party is given the opportunity to express concerns before an independent panel.' This does not tell us exactly how conflicts are resolved under the EIA process. Just giving all the parties an opportunity to express their concerns does not by itself resolve a conflict. This is important to note especially if one takes into account how the participant described the situation during the public hearing for the Legacy case where he expressed anxiety about whether the meeting was going to be fruitful or not. The particular concern was that 'cadres had been brought on both sides and every time the speaker spoke for or against the project, there were huge cheers.'

Setting aside the practical and emotional challenges of dealing with a crowd, the real issue is to appreciate the manner in which the EIA process deals with environmental conflicts. The EIA involves a decision making approach to environmental conflict resolution. For this reason, deliberation among stakeholders and decision-makers is central to the process. In fact, given the open nature of the process, facilitation seems to be the most convenient technique as compared to, say mediation or negotiations. Facilitation involves giving all parties an opportunity to express their concerns before an independent panel. An independent panel, as the third party, also assists in terms of 'constructive communication through moderating, implementing rules and non-

directive communication styles' (Mayer 2008, pp. 42, 43). In view of the fact that, often, there are multiple stakeholders (interested and affected parties) in the EIA process, mediation or negotiations, whereby parties to a conflict directly seek to settle a conflict by talking to each other do not seem to be the primary methods of the EIA approach to conflict resolution (see section 3.1). While public input to decisions is provided for, the actual decision making rests with the relevant authorities (Crowfoot and Wondolleck 1990, p. 22).

The crucial issue for the EIA process is to determine whether a proposed project should be approved or not. In a public policy context, this issue has underlying value considerations rather than being merely about the interests of any particular party to a conflict. If the project is not approved, then the question of balancing interests does not even arise. If the project is approved, then balancing the interests of concerned parties becomes a significant part of the process. What this often entails is that a project is approved subject to certain conditions which the developer has to fulfil so as to take care of the concerns raised by other interested parties. Nevertheless, and as the concept itself (environmental impact assessment) suggests, the consideration of impacts is what is at the core of the EIA framework.

To appreciate the EIA approach to environmental conflict resolution and the significance attached to the assessment of impacts the following scenarios should help. First, let us assume a scenario where there are no objections from the public against a proposed project. In particular, communities in the area affected by the proposed project are unanimously in favour of the proposed project. Does this mean that the decision-makers have no choice except to approve the proposed project? From the decision making point of view of the EIA framework, the answer is '*not necessarily*'. This is because the decision-makers still have to consider the technical information and professional comments or views about the project. On the basis of this information, a decision can be made not to approve the project in question for the appropriate reasons if that is where the evidence is pointing.

There is no conflict of interests in the above scenario to talk about insofar as the public or the particular community involved is concerned. An awareness of

the above scenario is useful in terms of appreciating decisions that can emerge from the EIA process.

For a second scenario, we may ask, how do the decision-makers handle cases where one group is in favour of a proposed project, and another group is against the same project? As noted from the first scenario, from a decision making point of view, what matters primarily is not the fact that one party is in favour of the project and the other is not. Instead, the reasons provided for taking such positions are the critical factors to be looked at. The need to provide justifications for the position taken in terms of relevant reasons or evidence is therefore crucial. Attending to object value, as the EIA process does, offers real insights into what is actually at stake and adds something substantial to the process of resolving environmental conflicts as opposed to an exclusive focus on interests that characterises the standard approach. An exclusive focus on interests does not seem compelling, at least in the context of environmental conflict resolution, especially if one takes into account the different types or aspects of environmental conflicts such as conflicts of value or conflicting human values.

In order to further illustrate the significance of object value as well as to highlight the limitations and dangers of an exclusive focus on interest, the next section will examine another example that went through the EIA process. The case involves a proposal to commission an open pit mine in the Lower Zambezi National Park. The park is about 4000 square-kilometres and is situated about 100 kilometres to the east of Lusaka, the capital city of Zambia.

4.4 Mining in the Lower Zambezi National Park

*“You want to mine where?”*⁴¹ One commentator exclaimed.

In 2011, the Zambian government made a controversial decision to grant a 25-year mining license to Zambezi Resources Limited, a subsidiary of an Australian mining company. In September 2012, after Zambezi Resources submitted its environmental impact statement (EIS), ZEMA rejected the proposed large scale open-pit mining activities on the following grounds:

The proposed site is not suitable for the nature of the project because it is located in the middle of a national park and thus intends to compromise the ecological *value* of the park as well as the ecosystem.

As the commentator wondered:

How could the government even consider mining in a national park, which then was under consideration for World Heritage status? ... You do not need an environmental impact assessment to inform you that it is wrong to mine in the middle of a national park.

(<http://newswatch.nationalgeographic.com/2014/01/23/zambia-approves-a-massive-private-copper-mine-in-the-heart-of-lower-zambezi-national-park/>)

However, and to the dismay of some environmental groups and individual citizens, ZEMA's decision was overturned in January 2014, by the Minister of Lands, Natural Resources and Environmental Protection, following an appeal from Zambezi Resources. This development prompted the environmental groups to seek a court injunction (as provided for under the EIA framework and regulations) and it was granted. Before I comment further it is only fair to hear both sides of the story by looking at the views in favour of the proposed mining project as well.

The main thrust of the arguments by those in favour of the proposed mining project was that 'mining activities have far greater impact on the economy than tourism.' From this perspective the Lower Zambezi case seems to present us with

⁴¹ (<http://newswatch.nationalgeographic.com/2014/01/23/zambia-approves-a-massive-private-copper-mine-in-the-heart-of-lower-zambezi-national-park/>)

an issue of mining versus tourism in the context of economic benefits. Apart from the core issue noted above, there were other issues that may be worth noting and clarifying. For example, one commentator poses the following questions:

... Why are animals and plants or the natural beauty of the park more important than the lives of people? How do you reduce poverty without increasing economic activity through projects like this? ... I will never understand how people can essentially argue for *more poverty* in the name of the environment.

(<http://www.zambian-economist.com/2014/02/reframing-lower-zambezi-mining-copper.html>)

The first question: 'Why are animals and plants or the natural beauty of the park more important than the lives of people?' raises an issue which will also come up in the next chapter. I do not think that those who were opposed to the mining project are in any direct way saying that animals, plants or the natural beauty of the park are more important than people. However, the issue is about how to understand decisions where people have to choose between different options and what such decisions may imply.

Just like the views against the mining project alluded to earlier in this section, there are statements in the above argument in favour of the project that reflect the personal feelings of the author. While such views are relevant as a reflection of how deeply different people may feel about the project, this discussion will set aside this aspect of the issue.

Another thing to bear in mind is that getting accurate information in situations of conflict is challenging because 'there may be a significant amount of distorted, irrelevant or false information' (United States Institute of Peace 2012, p. 4). For example, in some reports it is stated that the mining project will affect 25 per cent of the national park while some claimed that the mine will only take up 6 per cent. Consequently, this discussion has also set aside concerns about figures in relation to gains or loss in revenue presented by both camps on the issue of

mining versus tourism. The next section will explore government's response to the events as they unfolded.

4.5 Government's response

The Lower Zambezi case is interesting in that it created a rift in the response from government whereby the positions taken by two senior Ministers were diametrically opposed to each other. For example, the Minister for Tourism and Arts is reported to have issued a statement to a parliamentary committee which was opposed to the decision to allow mining in the national park for the following reasons, among others:

Plans to declare the Lower Zambezi as a World Heritage site may not materialise if the mining activities are allowed to proceed and this might lead to an unprecedented campaign against Zambia's tourism, which is a key sector in diversifying the economy.

(<http://lusakavoice.com/2014/02/14/masebo-kalaba-differ-over-lower-zambezi-national-park-mining/>)

One would expect the interests of the Minister for Arts and Tourism and the Minister of Lands, Natural Resources and Environmental Protection to be compatible. This is because the concerns raised by the former are not only favourable for tourism, but also for environmental protection which is one of the primary objectives for the latter. Under normal circumstances therefore one would expect this conflict to be between either of the two ministries above and the Ministry of Mines for instance.

The Minister of Lands, Natural Resources and Environmental Protection is on record to have maintained as follows:

I think government has made a position and unless there is very huge tangible evidence that will go against government's interests [sic!]. In fact, the matter is that whatever the government does, it does it for the greater good of the people and we will not be irresponsible really to begin doing things that will be outside the people's interests.

(<http://www.miningnewszambia.com/approved-construction-of-kangaluwi-mine-in-national-park-raises-dust-2/>, *The Post*, Thursday January 30, 2014).

In view of the above statement, first one would wonder where the minister expected the very huge tangible evidence to come from if what was in the EIA report, the basis upon which the experts at ZEMA decided not to approve the project could not convince him. Furthermore, if the minister's position on the matter was based on interests then it is unlikely that any additional evidence would make a difference. There is an effort in the above statement to appeal to what may be in the best interests of the people of Zambia. However, as I will argue in chapter 6 appealing to what we may consider to be in people's best interests can be misleading when dealing with communities or groups with different aspirations especially in situations of conflict.

It is also in this respect that an exclusive focus on interests, as the standard approach advocates, is not adequate in dealing with some environmental conflicts. One cannot fully explain the nature of the conflict concerning the proposed mining in the Lower Zambezi National Park by simply appealing to the fact that the interests of two Ministers are in conflict. It is also inadequate to simply maintain that the interests of government and the mining company on the one hand and the interests of some environmental groups and safari/tour operators on the other are opposed to each other. Rather, the conflict stem from the fact that the requirements of maintaining a national park and the activity of mining are incompatible. As ZEMA stated, mining at the scale proposed could compromise the ecological value of the park the ecosystem. The manner in which these two sectors interact with the natural environment means that they cannot take place in the same area. In short, it is unlikely that you can have both in the same area without one being negatively affected by the other.

While the Minister has powers under the current legislation to reverse decisions made by ZEMA, one would be primarily interested in the reasons that may be given for doing so. It is common for government officials to claim that government can act on advice or ignore it. Whatever the merits of this claim might

be, overturning a decision made by a legitimate government agency is a different matter and therefore requires some justification.

Apart from what was reported in the media there is not much information that one can use in considering the Minister's decision. In fact, given that the term interests can be understood in two different senses as explained in chapter 1, we should wonder in what sense government can be said to have interests. Taking into account the fact that government is not a person or a conscious being in the literal sense then it cannot be said to have interests in the first sense of *wanting* something. As a result, what the Minister claims to be government's interests may be a reflection of the interests of some individual members in government.

In view of the foregoing, the statement by the chief government spokesperson intended to clarify the contradiction between the two Ministers noted above does not help much. It reads:

Government expects a fair balance between the benefits of mining and the protection of wildlife conservation, the policies and laws will be respected and adhered to and the investment will create employment opportunities for ordinary Zambians.

(<http://ukzambians.co.uk/home/2014/02/16/government-clarifies-its-position-on-lower-zambezi-national-park-mine/>)

The idea of balancing wildlife conservation and mining in the same location does not sound plausible. In fact, the argument against the mining project may as well be correct in claiming that you do not even need an EIA to tell you that it is wrong to mine in the middle of a national park or to dig up a legally protected conservation area. The logic in this view is that a conservation area is not only legally protected from ordinary people and local communities but from government itself and business interests as well, especially if such interests are incompatible with the status of the area in question. Consequently, government's position on the matter and the government spokesperson's claim that 'laws will be respected and adhered to' makes it difficult for one to understand what is going on, especially behind the scenes.

In exploring the EIA framework this chapter has considered two cases, namely, the Legacy case in section 4.2 and plans to commission an open pit copper mine in the Lower Zambezi National park presented in section 4.4. I have also used these two examples to assess the significance of object value in environmental decision-making. It is clear in both examples that the decisions made by ZEMA make direct reference to impacts/object value, e.g., ecological value. Some of the concerns and arguments discussed in both examples reflect the interests of stakeholders themselves.

While it is not possible in this discussion to present all the concerns that were raised in either of these cases, what is obvious is the fact that there are concerns that reflect human values. Hence, when I argue that the EIA framework does not deal directly with conflicting human values I do not imply that there are no human values involved in the process or that it should not deal with human values. Rather, my point is that the EIA framework is not equipped to deal with conflicting human values head-on (e.g., where oil corporations and some conservation groups are involved, see also section 2.1).

As the following observations will indicate, the above challenge is substantive. The most explicit reference to value under the EIA framework comes under the criteria for assessing the impacts of a project. As it is stated, the criteria for determining the significance of possible impacts from a project is based on what *value* society places on the resources and the different *impacts* affecting the resources (ECZ 2006, p. 7). This understanding of value in terms of impacts may not tell us or satisfy a *philosopher's* curiosity about what *value* is – although it seems to be a simple and useful guideline for practical purposes. With regard to assessments the notion of impact points mainly to object value, and whatever value there is in this context, it is something that is determined, at least partly, by the characteristics of the resource in question – for example, the value of unpolluted air or water. This then makes it possible to assess the value implications of decisions to prohibit or sanction certain projects.

Some authors such as Lawrence (2000, p. 621) have, however, argued that the role of value in the EIA process has not been fully explored. In attempting

to explore this concern further the EIA literature may be more informative than the EIA framework itself. But as Tim Richardson claims, 'the question of value has become very difficult for EA [environmental assessment] theorists (Richardson 2004, p. 341)⁴². As I argued in chapter 1, the distinction between human values and object value is useful in dealing with this difficulty because 'one of the issues that the EA community must sort out is how it deals with the presence of multiple and often conflicting values, and ways of valuing' (ibid., p 348).⁴³ In the absence of the distinction between human values and object value, the question of how the EIA process can deal with *value* questions would be shrouded in controversy. For example this is the case with the debate on whether EA should embrace values, 'and attempt to mediate value conflicts' (cf. Daniels and Walker 1996), or rather, whether decisions over values should be completely removed from the process (cf. Elling 2004) and be left to politicians who have the mandate to make difficult judgements about trade-offs or irreconcilable differences (Richardson 2004, p. 349).⁴⁴ I agree with Richardson's observation that rather than merely concentrating on procedure, 'the EA/SEA community should be debating where and how value conflicts and differences are being or should be resolved' (ibid. p. 348).⁴⁵ Understanding the EIA in the context of strategic environmental assessments (SEA) or in a policy context in general also provides avenues for considering conflicting human values that may not be adequately dealt with at the project or EIA stage. I shall return to this issue in chapter 6.

Whether values should be removed from the EIA process or not as the EA debate suggests is not the real issue. The issue is whether the EIA framework is capable of dealing with value conflicts or not, and if so what kinds of value conflicts and in what ways. For example, I have argued in this chapter that while

⁴² Richardson (2004) uses the terms EIA and EA interchangeably.

⁴³ Richardson then suggests that the point is 'to move beyond acceptance of multiple values, to the realization that value judgments need to be made in the face of multiple and often conflicting ways of valuing.' However, as many would acknowledge making such value judgments is difficult (cf. Des Jardins 1997, p. 96) and may not aid the process of conflict resolution as the standard approach also cautions.

⁴⁴ The fact that the minister (under the Zambian EIA legislation for example) has powers to reverse a decision made by the environmental agency ZEMA may seem to reflect this impression. However, the same legislation also stipulates that any aggrieved part can seek redress from the courts of Law. This means that questions about values and irreconcilable differences are not left to politicians alone.

⁴⁵ As Richardson (2004, p. 351) acknowledges, the EA debate 'alerts us to the inescapable presence of values in the activity of scoping, filtering, and assessing impacts of development' however, it does not 'satisfactorily show us how to deal with them.'

the EIA framework can deal with conflicts involving object value it does not seem equipped to deal with some conflicts involving human values.

Conclusion

The purpose of this chapter was to establish the significance of object value in environmental decision-making and conflict resolution. An assessment of the EIA framework and the two examples that we have looked at have shown that object value understood in terms of impacts has a pivotal role to play in decision making as well as in the resolution of environmental conflicts. It is evident from both examples that the environmental agency relied mainly on information about the environmental impacts of the projects at issue in order to justify its decisions.

Attending to the interests of stakeholders is primarily intended to ensure their participation in the EIA process as opposed to determining the outcome. The fact that the EIA process is able to take into account *object value* and *interests* in the process of decision making and environmental conflict resolution is noted. However, the EIA framework does not offer adequate guidance in terms of how it deals with conflicting *human values*. This observation is important given that human values can play a significant role in some conflicts even though they may not be at the root of environmental conflicts. For this reason, the next chapter will examine an approach that claims to deal with conflicting human values in an explicit and adequate manner. It shall also ascertain how human values tend to be introduced in environmental conflicts, as well as the particular kind of values that may pose a difficulty in the process of resolving conflicts.

CHAPTER FIVE

DEALING WITH MULTIPLE VALUE DIMENSIONS IN ENVIRONMENTAL CONFLICT RESOLUTION

5.0 Introduction

The previous chapter has illustrated the significance of attending to object value in the process of environmental decision-making that characterises the EIA framework. I have argued that taking object value into account is central to an appreciation of the value implications of decisions arising from environmental conflict resolution. The EIA does not, however, deal directly with human values. As a result it does not offer adequate guidance in dealing with conflicting human values. This chapter will therefore examine the structured decision making (SDM) approach to environmental risk decisions based on Robin Gregory's account.

Gregory's (2002) suggests using 'structured processes' to address the challenge posed by *multiple value dimensions* for improving the quality of stakeholder input to environmental decision-making and conflict resolution, in an attempt to deal with difficult value trade-offs. While he describes his approach as a SDM approach, the ideas involved are drawn from different sources and disciplines, e.g., decision sciences and behavioural psychology, which are too numerous to be examined in this discussion. Hence, I have opted to focus specifically on the claims that are relevant to the discussion in this thesis.

In particular, I will address my concern that Gregory, in his SDM approach to conflicts involving multiple value dimensions, conflates human values and object value. This is a major drawback in his attempt because allowing for a distinction between human values and object value is fundamental to an appreciation of multiple value dimensions.

Another important aspect in looking at value dimensions is the distinction between the quantitative and qualitative dimensions of value as explained in section 5.4. This distinction is also applicable to both human values and object value. However, the distinction between the quantitative and qualitative is much

more evident in the context of human values where values that are inclined to the qualitative dimension differ significantly from those that are inclined to the quantitative dimension.

By focusing on the combination of technical analysis and stakeholder participation as the foundation for successful community participation in environmental risk decision making (Gregory 2002, p. 462), Gregory's SDM approach shares some characteristics with the EIA approach discussed in the previous chapter. However, the SDM approach is not as traditional to the government decision making context as the EIA might be.

As opposed to being a traditional process, the SDM approach therefore falls within the category of '*alternative processes*' to environmental decision-making or conflict resolution. Alternative processes can be distinguished from traditional processes. Alternative processes are often designed to address the shortcomings in traditional decision-making approaches in government. For instance, as a US government memorandum on environmental conflict resolution notes, 'Alternative Dispute Resolution (ADR) helps make the government more results-oriented, citizen-centred and provides for effective public participation in government decisions, encourages respect for affected parties and nurtures good relationships for the future.' While Gregory is cautious about the extent to which stakeholders can influence public decisions, his focus is on how the processes can be improved so as to reduce the levels of dissatisfaction among stakeholders. The next section examines Gregory's main concerns. First, an overview of his concerns is presented and then the particular claims relevant to this discussion are examined in detail.

5.1 Gregory's main concern

Gregory's main concern is about the failure of most environmental initiatives to fully incorporate conflicting values and value trade-offs in environmental risk decision making. Hence, his focus is on incorporating conflicting values into the decision making processes. He argues that we need to address people's concerns head-on in order to develop new management methods that can deal with the challenging task of incorporating value conflicts and trade-offs into controversial risk-management decisions (Gregory 2002, p. 467). In response to growing awareness of the need to involve the public in environmental management and decision making, Gregory acknowledges that 'information about the values of citizens is increasingly asked for as input to evaluating a broad range of environmental- and health-risk management decisions' (ibid., p. 464). In considering the significance of public participation, however, he argues that often 'the weighing or balancing of conflicting values, which is the essence of clarifying trade-offs, is ignored or partial' (ibid.). This happens because participants are not assisted to think through their own values or to deal effectively with value conflicts within their concerns or in relation to those of others. Consequently, value trade-offs that emerge during the course of nearly all policy consultations on environmental risk-decisions are not effectively dealt with in most environmental initiatives.

Gregory's main worry is that if stakeholder input to the decision making process is inadequate then decision-makers can make decisions which do not effectively deal with conflict thereby leaving some of the stakeholders highly unsatisfied with the outcome. This, in his view, has negatively affected the success of most environmental initiatives in that 'they fail to encourage the more deliberative [and] constructive type of decision making response' (Gregory 2002, p. 484).

There are two substantive issues in Gregory's concerns: (1) the inability of some initiatives to deal with conflicting values and value trade-offs; and (2) what it is that makes certain value conflicts and value trade-offs difficult to resolve or to deal with. The second point is crucial because the reasons given might help to

understand why some initiatives may not be able to deal with these kinds of value conflicts and value trade-offs.

On the first point (1), the reason why many initiatives may not be able to address the concerns Gregory raises is twofold: Not only do they refuse or fail to recognise the complexity of the value dimensions involved, they are also unable to provide the techniques required for addressing value conflicts and trade-offs among stakeholders. Consequently, they fail to 'help community stakeholders to make sense of their own, and others' conflicting values' (Gregory 2002, p. 462). The issue Gregory raises about the need to recognise the complexity of the value dimensions that may be involved in some value conflicts or trade-offs is important. This discussion will now examine Gregory's explanation of why value conflicts and trade-offs can be difficult to deal with as noted in (2), then I shall, in reference to (1), assess his attempts to address the challenge posed by value conflicts involving multiple dimensions of value.

5.1.1 Gregory's explanation of why some trade-offs are difficult

Trade-offs occur whenever getting more of one thing of value requires giving up something else that also is desirable: more jobs resulting in less environmental protection, a higher quality output also requiring more time, or more habitat for a rare animal species leading to fewer opportunities for recreationists (Gregory 2002, p. 462).

In addressing the question of why some value trade-offs are difficult, Gregory offers a number of reasons. First, 'addressing value trade-offs explicitly is cognitively demanding' (ibid., p. 465) especially in terms of weighing the costs and benefits, or simply in terms of assessing what will be gained and lost as a result of the trade-off in question. For example, how do we compare the loss of biodiversity with the wealth created by development (Benson 2000, p. 41)? Trade-offs involving *goods* that are not only *diverse*, but also *public* are complex to deal with. Public goods include resources which are of common benefit to the public or communities, such as unspoiled natural countryside or parks within inhabited areas, the earth's atmosphere and oceans (Gregory 2002, p. 56). Second, some trade-offs are difficult to deal with 'because they bring up emotional, moral, or ethical issues that are fundamentally hard for individuals to think about and do not easily lend themselves to resolution' (ibid., p. 465). For example, this may include

asking someone about their willingness to increase a present benefit at the risk of their own or other's future health or to forgo an economic development intended to benefit the poor in order to protect a habitat for an endangered species of animals.

Other reasons include such issues as people being uncomfortable because they feel they lack the information they need to make an informed decision; or they feel that it is not their responsibility to make the decision because they think that elected officials, for instance, should assume that responsibility; or they feel that 'a norm that is protected or regarded as sacred (e.g., the health of children) is perceived as being violated' (Gregory 2002, p.465). In view of these constraints, Gregory's concern then is that 'at such times, individuals may refuse to answer the trade-off question that is being asked or they may provide a meaningless response that gives little insight into their underlying values (ibid., p. 466). Overall, the foregoing concerns collectively translate into the following six decision making challenges to each of which Gregory suggests some useful techniques as outlined in the table below:

Table 2: Selected decision making techniques for encouraging the consideration of trade-offs.

Decision making challenge	Useful techniques
<i>Multiple value dimensions</i>	means/ends networks (value hierarchies) constructed attributes/measures
<i>Uncertainty of consequences</i> ⁴⁶	value of information assessment identification of thresholds expert judgement processes
Unfamiliarity of evaluation contexts	setting priorities (e.g., swing weighting) simplifying the decision (e.g., even swamps) evaluability: increasing ease of comparisons
Affect and process concerns	broaden legitimate range of concerns use process-based and constructed scales mental models and open-ended elicitations
Learning	multiple (sequence) decisions multiple methods monitoring and adaptive strategies

Source: Gregory (2002, p. 472).

⁴⁶ My emphasis.

While all the issues outlined above are relevant for an appreciation of Gregory's project, the focus in this thesis is on the two top rows of the above table. Given that chapter 1 has already addressed concerns about 'uncertainty of the consequences' of some environmental activities in terms of impacts, this chapter will focus only on the challenge posed by 'multiple value dimensions' in relation to the resolution of value conflicts and trade-offs.

As Gregory points out 'fundamentally, trade-offs are difficult because it is hard for people to make choices over options that may result in outcomes affecting multiple dimensions of value'⁴⁷ and 'not only are there many different dimensions of value, but their variation is often fundamental' (Gregory 2002, p. 467). He writes:

In these and many other risk contexts, the definition of some key dimensions also can be subject to substantial ambiguity: people may care intensely about protecting biodiversity or reducing respiratory illness among children without precisely understanding what these concerns imply. Even if definitions are clear to one individual or stakeholder group, the existence of multiple value perspectives means that others may disagree (*ibid.*).

Gregory's depiction of the problem above, insofar as looking at multiple dimensions of value is what is at stake, is true. However, there is need for a clear understanding of the concept of value in order to be clear about what the concern expressed above indicates.

In order to improve the quality of expressed concerns there is a need to communicate concerns about value in a manner 'that is transparent, logical, and free of arbitrariness' (Gregory 2002, p. 473, cf. Slovic 1995). This thesis has adopted the distinction between human values and object value in order to have a precise understanding of what the concept of value can mean with regard to different concerns. This is useful in terms of assessing the concerns expressed by stakeholders. Furthermore, if the distinction between human values and object value is borne in mind, we would be in a better position to appreciate what is at

⁴⁷ Trade-offs are easier to deal with if they fall within the same category of value (i.e., either within the domain of human values or object value) than the case is with trade-offs involving multiple dimensions of value. For example, trade-offs between objects do not seem to pose serious difficulties. If that was not the case, then 'barter trade' (the exchange of goods, services and so on, for other goods or services of a different kind, without using money as a common measure) would be difficult if not impossible.

stake and what the disagreements may be about. It therefore adds something substantial to Gregory's attempts to address the challenge posed by multiple value dimensions.

The next section will evaluate the effectiveness of his suggestions in order to explain why they do not seem to address the decision making challenge posed by multiple value dimensions, particularly in relation to environmental conflict resolution.

5.1.2 Gregory's solution to the challenge posed by multiple dimensions of value

I sympathise with Gregory's position on the difficulties that people may face in identifying and dealing with values because it would appear 'that people rarely proceed on the basis of a well-considered and consciously entertained comprehensive conception of their values' (Van Dyke 1962, p. 569). This is why it is important, as he suggests that people are helped to clarify their concerns in order to reveal the underlying values and to make explicit the trade-offs that their concerns may imply. Setting aside the value elicitation problem, the key issue in terms of assessing Gregory's views is how he proposes to deal with the value conflicts that are likely to emerge from the expressed concerns.

The thinking behind Gregory's view is that providing appropriate techniques for addressing difficult value trade-offs is essential to dealing with value conflicts. As he correctly claims, difficult value trade-offs involve *multiple value dimensions*. Gregory then suggests two different techniques of dealing with the challenge posed by multiple value dimensions, namely, '*means-ends analysis*' and '*constructed measures*'. From this it follows that if these two techniques can address the problem of multiple value dimensions then they will help in terms of addressing difficult value trade-offs, thereby contributing to the resolution of the value conflicts that underlie the difficult value trade-offs. This implies that if the two techniques fail to surmount the challenge posed by multiple value dimensions, then they are not as helpful as Gregory wants us to believe. To deal with this issue, this discussion will first briefly outline the two methods, viz., '*means-ends analysis*' and '*constructed measures*'. This is followed by an assessment and

explanation of why these two solutions are not successful in surmounting the challenge posed by multiple dimensions of value.

According to Gregory (2002, p. 473) the analysis of means and ends is essentially a value elicitation technique intended to help stakeholders to think through their values in order to communicate this information more effectively to decision makers. Constructed measures can be used to assist stakeholders to make trade-offs involving multiple value dimensions in relation to environmental decisions. A common example of a constructed measure is money, e.g., *dollars*. Money is often used to compare the value of different commodities or the performance of different sectors of business in terms of profits or their contribution to the economy. Another example of a constructed measure is the grades that are given to students on the basis of which for example, a faculty can come up with the best student across different disciplines and course combinations. In short, the idea behind constructed measures is to have a *common measure* which has common interpretation across different spheres.

In view of the above, it would appear that Gregory's main solution to the challenge of multiple value dimensions is the idea of constructed measures. Although there may be no problem with the use of constructed measures per se, I will argue later that there are serious constraints in terms of the extent to which constructed measures can be applied. The next two sections will provide an assessment of each of the two methods suggested by Gregory. Section 5.2 will look at the issue of means-ends analysis, while section 5.3 will assess the effectiveness of constructed measures.

5.2 An assessment of means-ends analysis

When explaining the challenge people face in making choices affecting multiple value dimensions as noted in section 5.1.1, Gregory claims that the decision context is difficult not only because there are many value dimensions involved. Rather, it is also because the variation in value dimensions is often fundamental, i.e., we cannot ignore the differences in the character of the values involved because such differences matter. As explained in section 5.1.1, for example,

these may involve things such as protecting biodiversity, human health, or considerations about financial costs and so on.

The focus on means and ends values ties Gregory's views to the distinction between instrumental and intrinsic values. However, this is just one of the aspects in considering multiple value dimensions. Once it is realised that reference to means and ends is applicable in the context of either human values or object value, then the distinction between '*means*' and '*ends*' values is not as straightforward as Gregory claims. This is because each of these two terms can be understood in two different senses, an issue which, as Katie McShane (2007, p.15) claims, has also caused tremendous confusion in discussions about intrinsic value.

Chapter 2 has already explored concerns about intrinsic value. For the purpose of this assessment, an exploration of the two different senses in which means and ends can be understood is provided given that Gregory does not take this issue into account. I will argue that the distinction between *human values* and *object value* which Gregory also does not recognise is relevant to an appreciation of the two different senses of means and ends. McShane offers a detailed analysis of the two different senses of means and ends⁴⁸.

The first sense of means is *causal* and the second one is *representational* or *symbolic*. This is clear in the example McShane cites from Elizabeth Anderson, namely, that 'something like a memento would count as a means in the second sense but not in the first', and the reason is that 'a memento has value not because of what it does – not because it is used to achieve any goal or aim – but because of what it signifies or represents' (McShane 2007, p. 51). In a similar fashion, a ring or a bouquet of flowers can be a means of showing love. They do not necessarily cause people to fall in love. Thus, while means in the first sense

⁴⁸ She writes: 'The first sense of *means* and *ends* comes from everyday speech, where we use the term *end* to denote a goal or an aim, and we use the term *means* to denote that which one uses to achieve a goal or an aim. [...] In the second sense, *end* is used to describe something that has value in its own right (nonderivative value), and *means* is used to describe something that has value in virtue of a relation it has to some end (derivative value)' (McShane 2007, p. 51).

can be associated with instrumental value, means in the second sense might be non-instrumental.

With regard to the distinction between human values and object value, the second sense of means (i.e., representational or symbolic) applies in the context of human values only, whereas the first sense of means (i.e., causal) may apply in relation to both human values and object value. It is in the causal sense that many objects have their instrumental value as a means to something else, e.g., the value of water, a piece of wood, etc. The second sense of means fits well in the context of human values. It is only in the context of human values that certain objects can be understood to represent or symbolise something else, e.g., a bouquet of flowers, a ring and so on. In short, the distinction between human values and object value allows one to appreciate the two different senses of means and ends.

In the absence of the above recognition, the analysis of means-ends networks is not very helpful in clarifying the concerns of different stakeholders in view of the challenge posed by multiple value dimensions. The concerns expressed by stakeholders can be better understood if there is recognition of the different kinds of value at stake, taking into account the distinction between human values and object value. Just appealing to means and ends in the sense that Gregory does is not revealing enough in terms of dealing with multiple value dimensions. Reference to means and ends can only be helpful in dealing with multiple value dimensions if there is a keen awareness of whether the issues at stake relate to either human values or to object value, or to the interface between the two and if the different senses of 'means' and 'ends' are borne in mind. The next section assesses the effectiveness of 'constructed measures' which is another solution Gregory provides to the challenge posed by multiple value dimensions.

5.3 Constructed measures and multiple value dimensions

The primary purpose of constructed measures, from Gregory's point of view, is to facilitate trade-offs involving multiple dimensions of value. If Gregory is using constructed measures as a common measure across different kinds of value, then he is at the same time indirectly challenging the idea that certain value dimensions are '*incommensurable*'. For example, this might be evident in the following substantive claims:

Constructed scales thus provide a possible mechanism for addressing one of the key issues giving rise to *taboo trade-offs*, which is the perceived incommensurability between value dimensions of environmental risk-policy issues under consideration. They also provide a mechanism whereby a wide range of ethical and moral and aesthetic concerns can be made legitimate, in the sense that they can be compared directly to concerns such as costs or jobs. Individuals then have the option of ranking these different components as more or less important to the overall decision: one person may assign a high weight to jobs and a low weight to cultural or aesthetic concerns, for example, whereas another person may do the opposite (Gregory 2002, p. 476).

The notion of 'incommensurability' is linked to a lack of a common measure (Kekes 1993, p. 21). If incommensurability is understood in this basic sense then it cannot in itself account for 'taboo trade-offs' as Gregory claims, because the idea of taboo trade-offs means something more than just the lack of a common measure. In fact, as Gregory also acknowledges, 'taboo trade-offs arise because of the request to express one thing of value in terms of a fundamentally different metric which is not seen as simply bizarre or illegitimate but as threatening to the organization of society' (Gregory 2002, p. 466). Hence, what might give rise to taboo trade-offs, for instance, is a tendency to think that moral concerns can be compared and possibly be traded off against other sorts of concerns such as costs or profits, or jobs and so on. The point, however, is that there is more to taboo trade-offs other than the perceived incommensurability of value dimensions. I will explore the notion of *taboo trade-offs* in detail in section 5.5.

In what follows I assess constructed measures against the challenge of incommensurability in the context of multiple value dimensions. Given that constructed measures, from Gregory's point of view, are intended to address the

issue of incommensurability, an exploration of incommensurability will be worthwhile in order to provide a framework for the assessment of constructed measures.

5.4 Incommensurability of value dimensions

Because the idea of commensurability is linked to comparability, the terms 'incommensurability' and 'incomparability' are often used interchangeably or alongside each other in some discussions in the literature (cf. Nien-hê Hsieh 2007). However, treating incommensurability and incomparability as though they are synonymous may lead to misunderstandings if not properly qualified. Many authors acknowledge (e.g. Chang 1997, Griffin 1986 and others) that incommensurability is not the same as incomparability. However, there is a way of understanding incommensurability that strongly links it to incomparability and thus goes beyond the idea of a lack of a common measure as I explain in subsequent sections. This would also help to explain Gregory's perspective.

According to Ruth Chang two things are incomparable 'if no positive comparative judgement of their values is true', that is, we can say neither that one is better nor that it is equal to the other (Chang 1997; cf. Nien-hê Hsieh 2007, p. 3). Paradoxically, this explanation does not completely show that things are incomparable because if two things are really incomparable then one cannot even be in a position to say that neither is better than nor equal to the other. To claim this means that one is able to compare the two, at least in some way. Nevertheless, what seems to underlie the above claim is the idea that two things are incomparable if there is no basis for ranking or comparing them in terms of a common measure (Kekes 1993, p. 21). To this extent incomparability and incommensurability are interconnected. However, this need not entail that they are synonymous. This is because *incomparability* can arise from two different reasons. The first is a lack of a common measure (incommensurability). The second involves a concern or an attitude that certain comparisons are undesirable or inappropriate even if possible. It is in the second sense that the notion of incomparability will be primarily understood in this discussion. That is to say two things are incomparable if comparing them is seen to be *unacceptable* or

inappropriate. Although some authors, for instance Lukes (1997) and Raz (1986) have opted to explain incomparability in terms of incommensurability, it is better to treat incomparability in the second sense as a distinct issue given that it goes beyond what is involved in the first sense where incomparability arises merely from a lack of a common measure.

To appreciate the two points above one can for instance consider the following claim: 'Incommensurability occurs when the relevant goods cannot be aligned along a single metric without doing violence to our considered judgements about how these goods are best characterized' (Sunstein 1997, p. 238). There are two distinct issues in this claim, namely, (a) incommensurability occurs when the relevant goods cannot be aligned along a single *metric* and (b) without *doing violence to our considered judgements* about how these goods are best characterised. To this effect (a) relates to the first aspect of incomparability (when there is a lack of a common measure, i.e., incommensurability) whereas (b) relates to the second aspect of incomparability (when certain comparisons are deemed to be undesirable or inappropriate even if it was possible to make such comparisons). As Sunstein further explains:

The notion of a single metric should be understood quite literally. By this I mean a standard of valuation that (1) operates at a workable level of specificity and detail, (2) effaces qualitative distinctions among the goods that it measures, and (3) allows comparisons along the same dimension (ibid.).

The claim that a metric '*effaces qualitative distinctions*' raises an important issue in terms of appreciating concerns about the incommensurability of value dimensions. In fact, this is the main obstacle to the application of a metric to different value dimensions given that value dimensions can be either quantitative or qualitative (cf. Chang 1997, pp. 16-17). It would appear that metrics are mainly applicable to the quantitative dimensions of value such as mass or profit. In contrast, metrics would seem not to be appropriate for some qualitative dimensions of value such as respect, love, trust, or worth. Consequently, comparing different kinds of value may prove to be problematic because some values are inclined to the qualitative dimension and may be insensitive to quantity (cf. Baron and Spranca 1997). For example, whether something is good or bad, right or wrong, may not directly depend on how many times it happens. If this is

correct, then the *qualitative* dimension of value is at the core of the problem of incommensurability.

The concern in (b) about doing violence to our considered judgements about how certain goods are best characterised is not merely that we cannot align goods on a single metric. Rather, it is that we *should* not align certain types of goods with any other goods on a single metric because doing so entails comparing things that are *not supposed* to be compared, for instance money and family ties or companionship. Such comparisons would be deemed to be contrary to our considered judgements, i.e., ‘our reflective assessments of how certain relationships and events should be understood, evaluated, and experienced’ (Sunstein 1997, p. 238). Secondly, as Nien-hê Hsieh (2007, p. 12) acknowledges in reference to Anderson (1997), ‘the roles that goods play in deliberation can be so different that attempts to compare them head to head are incoherent’ or ‘there is no good reason to compare their overall values with regard to some common measure.’ To this extent, incomparability is a more appropriate term than incommensurability (Nien-hê Hsieh 2007, p. 13).

What is at issue from the point of view of this analysis, for example with regard to a choice between money and companionship (Raz 1986, p. 350) is not incommensurability per se. Rather, it is incomparability in the second sense of the term, which means that it is unacceptable, for instance, to compare the value of one’s companion or spouse to the value of money (especially if money was not the basis of that relationship). The understanding is that perhaps the most valued human relationships and commitments are not based on money. In short, money cannot be applied as a metric to the value of companionship, not because people cannot consider the monetary gains or expenses of being in a relationship, but because it is unacceptable to consider the value of a companion in terms of money since that entails comparing the value of an individual to the value of money.

Monetary value is a metric, and quantity is the criterion for metrics. As Sunstein correctly claims, there are no qualitative distinctions in metrics and notions that allow for this sort of distinction, for example, ‘more important’ or ‘more honourable’ do not qualify as metrics. For this reason, ‘many possible standards –

excellence, well-being, affective allegiance – count as criteria, but not as metrics’ (Sunstein 1997, p. 238) because they are inclined to the qualitative dimension. Thus, even if some of Gregory’s constructed measures did qualify as metrics, some dimensions of value, for example, love, respect and wonder, including some environmental values are not susceptible to metrics (ibid.). Therefore, constructed measures do not seem to fully address the challenge posed by multiple value dimensions or the problem of incomparability (understood by some in terms of incommensurability) between value dimensions.

Consequently, instead of imposing constructed measures where they should not apply one would be better advised to just ‘see how goods can be plural and how they can differ in kind or quality’ and not just in quantity (Anderson 1993, p. xiii). In fact, as Sunstein also claims, ‘probably we cannot make sense of our experiences without reference to qualitatively diverse goods’ (Sunstein 1997, p. 237) because our evaluative practices are already attuned to the fact that we cannot value everything in the same manner. In fact, not only do objects of value possess different features, we also often value different features in different objects.

Furthermore, the call to constructed measures is not as compelling as one would want to believe given that incommensurability does not always entail incomparability. Gregory’s quest to compare different kinds of value can be undertaken provided it is also borne in mind that ‘the comparability of goods need not entail value commensurability’ (Nien-hê Hsieh 2007, p. 14). It may be possible to compare some incommensurable goods in certain considerations when weighing our options or choices, e.g., between creating wealth and preserving a wildlife habitat to protect biodiversity. But in comparing incommensurable goods one need not claim to have addressed the challenge of incommensurability.

In dealing with incommensurable value dimensions, especially in the context of this thesis, it is also important to recall that incommensurability (or incomparability) is not what is at the root of many value conflicts. Rather, it is ‘incompatibility’ that is at the root of value conflicts and the trade-offs or sacrifices that may result from this. Values are *incompatible* ‘if they cannot be realized together because the realization of one of them either entirely or partially precludes the realization of the

other' (Kekes 1993, p. 21). Some of the factors that contribute to such incompatibilities would include situational pressures which may be either temporal or spatial. Pressures are temporal when two things cannot take place at the same time, or they can be spatial when two things cannot co-exist or happen in the same place. The fact that values are incommensurable or incomparable does not necessarily mean that they are incompatible. For example, the fact that companionship and money are incommensurable or incomparable does not necessarily mean that they are incompatible. For this reason there is more emphasis, in this discussion, on *incompatibility* as opposed to *incommensurability* or *incomparability*.

However, conflicts can be complex when they involve incommensurable values. Nevertheless, the issue of whether a trade-off is seen as acceptable or as *taboo* does not arise from the mere fact that the values involved are incommensurable. Trade-offs can be seen as taboo if they involve goods that are deemed to be incomparable in the sense that comparing them is seen to be inappropriate or simply unacceptable.⁴⁹

Overall, taboo trade-offs arise because of the *norms* that govern certain choices. In short, it is the norms that people subscribe to which will guide them about whether a certain trade-off is appropriate or not. If this is the sense in which Gregory understands incommensurability, then there is a basis for associating *taboo trade-offs* with incommensurability (although as I explained earlier, we can avoid some misunderstandings if incommensurability and incomparability are treated as distinct concepts). But this very understanding of incommensurability also precludes the use of constructed measures as a solution to the problem of incommensurability or multiple value dimensions as Gregory would want to have it. In dealing with multiple value dimensions we do not only encounter incommensurability with regard to a lack of a common measure, we encounter incomparability as well, i.e., a refusal to compare certain things or a refusal to accept such comparisons. Hence, if understood in terms of incomparability, incommensurability can pose a challenge and may lead to taboo trade-offs.

⁴⁹ In the absence of this perception or norm certain relationships, attachments, and attitudes would not be tenable (Sunstein 1997, p. 242, Raz 1986).

What Gregory refers to as constructed measures—e.g., ‘the creation of an index that describe the range of possible impacts’ for issues such as forest or ecosystem health (Gregory 2002, p. 475)—do not qualify as metrics but simply as indicators. An indicator is a measurable property of the environment ‘defined in a time, space and policy context’ (SADC 2001, p. 3). While indicators are measurable or quantifiable they don’t qualify as a common measure because indicators are developed for a specific variable or value dimension. For example it is possible to develop indicators for issues such as biodiversity, forest health or deforestation. But these same indicators cannot be applied to other issues such as water quality, sanitation or child nutrition. If Gregory’s constructed measures do not qualify as common measures or metrics then it is difficult to see how they can address the problem of incommensurability. In contrast money, as a common measure, can be used to communicate information about costs and investments into all of the above issues and their contribution to the economy. However, we cannot use money to determine their relative importance because that would come up against the issue of incommensurability.

Constructed measures do not offer an adequate solution to the challenge of multiple dimensions of value, or the problem of taboo trade-offs, as Gregory claims. Furthermore, the very notion of a ‘trade-off’ may be part of the problem in that it may not be an adequate reflection of what is going on when people make decisions that seem to reflect choices. For example, choosing between alternatives may not be ‘the same as a judgement about their comparative worth’ (Lukes 1997, p. 186). If someone chooses to tell a lie instead of telling the truth, it does not necessarily mean that the person thinks that telling lies is more important than telling the truth. As Lukes claims:

The mere fact of taking, or having to take, a decision between options does not show that that decision is based on a judgement as to the relative worth of the options, even if the decision is part of a systematic pattern of such decisions and is not arbitrary (ibid.).

In contrast to the above claim, the notion of *trade-offs* seems to rely on the assumption that the options are either equivalent or that the option that is chosen is more important than the one that is not chosen. In fact, this is the trap Gregory finds himself in by suggesting that individuals can compare and rank moral

concerns in relation to other concerns such as costs or jobs, and be in a position to decide which of these concerns is more or less important. This is a line of thinking that leads directly to *taboo trade-offs* as opposed to addressing or avoiding the problem altogether. The reason is that it may be inappropriate to trade-off concerns about the health of people with profits for instance. This challenge is prevalent in industries such as mining where the health of employees or local communities is at stake.

People can make choices which do not carry the implication that the chosen option is more important than the one that is not chosen. This is what facilitates the idea behind the standard approach which is to look for immediate interests that hopefully can be shared in an attempt to ease the resolution of conflicts. From this perspective it is easy, especially for conflict resolution purposes, to take into account the options individuals have chosen without going into the difficult or controversial issue of determining which of the options is or should be more important. The point, however, is that where comparison is possible then *choice* is plausible. From this perspective, incommensurability need not be an obstacle to choice. In fact, it is not only that 'commensurability is not required for choice' (Sunstein 1997, p. 241; Nien-hê Hsieh 2007, p. 19), rather incommensurability can also aid certain choices. As some authors (e.g., Raz 1997) have indicated there may be no reasonable basis for *choosing* (as opposed to merely picking) between things that are exactly the same either in quantity or in quality.

In considering the extent to which Gregory is willing to apply constructed measures to different value dimensions, it is also important to note, as he acknowledges that 'the point is not to reach agreement in value structures, but rather to present the full range of relevant values and demonstrate the diversity of concerns that any broadly supported policy alternative will need to address' (Gregory 2002, p. 476). In this respect, it is difficult to come up with a consistent hierarchy or ranking of values among different people, which in turn makes it difficult to resolve value conflicts as the standard approach indicates (see chapter 3).

5.5 Notable concerns about the concept of trade-offs

To appreciate the key concerns about some trade-offs it is essential to take into account the fact that the circumstances in which *choices* or decisions are made can be complex. As a result the notion of 'trade-off' may not constitute an adequate explanation or reflection of what actually goes on when people make decisions that involve incommensurable values. In short, the notion of trade-off may not be an adequate explanation⁵⁰ of what choices entail in certain circumstances as Gregory for instance wants to maintain.

In exploring the above concern, Lukes compares the notion of trade-off to the notion of '*sacrifice*', which I believe sheds some light on the key concerns about the idea of trade-offs. Comparing the idea of a trade-off with that of sacrifice draws a sharp and interesting contrast in that the two notions have different implications. As Lukes claims, a trade-off has the connotation of exchanging valued objects at an equivalent price while the idea of sacrifice has the connotation of obligation. He writes:

Trade-off suggests that we compute the value of the alternative goods on whatever scale is at hand, whether cardinal or ordinal, precise or rough and ready. Sacrifice suggests precisely that we abstain from doing so: Devotion to the one exacts an uncalculated loss of the other (Lukes 1997, p. 188).

The above comparison can help one to reflect on what is actually going on when people make what seem to be choices between incommensurable values. This is because it might be more appropriate to understand some choices in terms of *sacrifice* as opposed to a *trade-off*.⁵¹ For example, a parent may decide to spend

⁵⁰ As Steven Lukes claims: 'We speak of *weighing* goods, of *balancing* considerations, and, very often, of *trade-offs* that must be made when values clash: that is, when a choice must be made between valued alternatives that instantiate different and incompatible values. Indeed all thought about these questions that is based on or influenced by economic thinking typically takes the (never analysed) idea of a trade-off for granted as an adequate characterization of what such evaluative choice between valued alternatives consist in' (Lukes 1997, p. 187).

⁵¹ In the context of human values, trade-offs may be difficult or demanding so that some might prefer the term *sacrifice* as opposed to the concept of a *trade-off*. For example, those who have sacrificed their lives for freedom or justice are called *heroes*, which would not be the case if they sacrificed their lives for money, in which case *greed* may seem to be the correct description of their actions.

more on medical resources for a child in hospital while leaving those at home with no food or other essentials. This will strike most of us as a sacrifice as opposed to a trade-off. Of course, there is a trade-off between food and medical resources, but it does not at the same time imply that there is a trade-off between the value or well-being of the children at home and the health of the child in hospital. Trade-offs entail that we compare alternatives. It is these comparisons that people would refuse to make in some instances. For instance, it would be morally problematic to compare the health of children to the number of jobs that a factory which is detrimental to their health will provide. To use another example, a mining company can decide whether or not to invest more in safety and health issues. But it may be unacceptable, at least to some people, to *directly* compare the costs that may result from such a decision to the value of the lives of miners or communities affected.

If the concern is that such comparisons are undesirable, then this might suggest that ‘the values that the attitude of incommensurability protects are sacred values’ (Lukes 1997, p. 188.). This understanding of incommensurability goes beyond the basic sense of a lack of a common measure, to include incomparability. These normative aspects are relevant to the concerns about trade-offs this section will consider.

The notion of *sacred values* is helpful in terms of explaining the problem of *taboo trade-offs* which Gregory also seems to be concerned about. The presumed existence of these values raises an ethical question of whether it is correct or fair to seek to elicit certain difficult trade-offs from people if this would mean that they undermine their established norms and principles⁵² (Gregory 2002, p. 466). In this sense, the concern about taboo trade-offs is no small matter.

In exploring the notion of ‘taboo trade-offs’, Peter McGraw and Philip Tetlock make an important observation. The two authors emphasise the

⁵² ‘The logic of choice often may not be consequential: What is in this for me? Rather, the logic of choice often may be that of role constraint obligation: What kind of person do I claim to be in my relation to particular others, and what types of decision would be compatible with this image of who I am?’ (McGraw and Tetlock 2005, p. 2).

importance of distinguishing between *routine* trade-offs (the sort of trade-offs we make on a daily basis, for instance, between quality and price) from *taboo trade-offs*. In agreeing with Fiske and Tetlock's (1997) view of 'taboo trade-offs', McGraw and Tetlock state that 'such trade-offs entail comparisons of the relative importance of *secular values* (e.g., money, time, and convenience) with *sacred values* that are supposed to be infinitely significant' (McGraw and Tetlock 2005, p. 4). In view of the above, it should not be difficult to appreciate people's concerns about these kinds of trade-offs.

In consideration of McGraw and Tetlock's views, resistance to trade-offs across the different kinds of values cannot be explained fully by simply appealing to value incommensurability, as Gregory seems to suggest. Rather, of more concern is the claim that such trade-offs may violate 'deeply held intuitions about the integrity, even sanctity, of the individual-to-individual or individual-to-society relationships and the values that animate those relationships' (ibid.). As explained in section 5.4, incomparability is what is at the root of the above concern as opposed to mere incommensurability (understood with regard to lack of a common measure). In particular, trade-offs involving different kinds of value can be difficult or controversial if some values are assumed to be more important than others, as the case may be with 'sacred values' in relation to 'secular values'.

Another way to understand the idea of *sacred values* is in terms of '*protected values*'. The main claim behind the notion of 'protected values' is that they 'resist trade-offs with other values, particularly economic values' (Baron and Spranca 1997, p. 1). The reason is that 'protected values derive from rules that prohibit certain actions, rather than values for potential outcomes of actions' (Baron and Spranca 1997, p. 4). To this effect, protected values are explained in contrast to *compensatory values* which are based on consequences or potential outcomes of actions⁵³.

⁵³ As Jonathan Baron and Mark Spranca observe: 'Of course, people do have rules based on consequences, but almost all of these rules trade off with other considerations, so that they do not lead to this problem [of taboo trade-offs]. Moreover, people who hold protected values for some things also hold compensatory values for other things, and these compensatory values trade off in the usual ways' (Baron and Spranca 1997, p. 8).

While protected values are based on 'deontological rules' (rules that are based on the relevant principles of duty), compensatory values are based on prudential or 'consequentialist' considerations in terms of what someone stands to gain from certain actions. In agreement with McGraw and Tetlock, Baron and Spranca also maintain that the important implication in dealing with protected values is to avoid '*trade-offs of the usual sort*' (ibid.). The point is that subjecting protected values to the same kind of trade-offs involved in dealing with compensatory values is likely to be met with resistance, at least from some people or certain sections of society.

More importantly, protected values can be difficult to trade-off because they are 'a function of both the value and the person' and they are different from compensatory values because protected values 'are treated like commitments' (Baron and Spranca 1997, p. 9) or obligations. Another way to appreciate the distinction between protected and compensatory values is to consider the difference between values that determine *who we are* and those that determine *want* (Sagoff 1988), where values that determine 'who we are' are likely to be protected or held sacred as compared to values that define what we want.

It is evident from the foregoing that human values, understood in terms of *sacred* or *protected* values, are a major factor behind taboo trade-offs. In short, only certain human values would pose the challenge of taboo trade-offs. As the standard approach to conflict resolution suggests, it is these kinds of values (sacred or protected) that may pose serious difficulties in terms of conflict resolution if the value systems among stakeholders are different. However and unlike what the standard approach would want us to believe, the foregoing analysis has also shown that not all human values can be difficult to deal with as secular/compensatory values can be traded off.

The next section will provide an overall assessment of Gregory's claims in order to ascertain insights that are relevant to this thesis.

5.6 An assessment of Gregory's claims

In assessing Gregory's claims this thesis also wishes to draw on some of his insights into the challenge posed by multiple value dimensions, which he does not seem to follow through. He acknowledges that 'fundamentally, trade-offs are difficult because it is hard for people to make choices, over options that may result in outcomes affecting multiple dimensions of value' (Gregory 2002, p. 467). However, Gregory does not offer the solution which his own analysis seems to demand, which is that it is helpful to deal with different kinds of value in a distinct manner in order to navigate the challenge posed by multiple value dimensions or taboo trade-offs. For instance, this insight is apparent when Gregory makes the following observation about trade-offs involving multiple value dimensions:

There are many reasons for such trade-offs, relating not only to people's choices and beliefs but also to limits on resources, including time, that are available for producing technologies and products or for engaging in activities. Unless these reasons are carefully expressed and disentangled, policy makers can be left with frustrated stakeholders and long lists of issues and concerns that provide little guidance for how to develop, prioritise, or communicate appropriate risk-management responses (*ibid.*, p. 462).

In the context of this discussion, there are two issues that need to be '*disentangled*' in addressing questions about trade-offs: (1) Is a particular trade-off about '*people's choices*' and '*beliefs*', or (2) is it something that is inevitable because of the '*limits on resources*'? If trade-offs are primarily about people's choices and beliefs, then the significance of human values cannot be ignored. If a trade-off is a direct consequence of the limits on resources, then attending to the object value of the resources in question would be appropriate or more informative about what is at stake. Nevertheless, Gregory's approach fails to treat the above issues in an adequate manner because of a lack of a clear distinction between human values and object value.

Gregory refers to values 'as an expression of concerns or interests about what matters to individuals, in terms of both their preferences for different goods or activities and the underlying moral or ethical beliefs that give rise to these choices' (Gregory 2002, p. 462). This conception of 'values' refers primarily to human values. This is because the primary focus is about '*what matters to*

individuals in terms of their preferences, beliefs and choices'. In contrast, most of the examples Gregory gives of trade-offs are primarily about object value, as is the case, for instance, with his definition of trade-offs cited at the beginning of this chapter, such as more jobs resulting in less environmental protection or a higher output also requiring more time.⁵⁴ In this sense, it is difficult to appreciate Gregory's conception of, as well as his concerns about, multiple value dimensions in the absence of a clear recognition of the distinction between human values and object value.

Conclusion

In concluding, Gregory's view to the effect that differences in the values of stakeholders need not be a drawback to the decision making process is plausible. This is because there are other things upon which people may agree or which may seem compelling. They can be based on other considerations, such as object value as this thesis suggests, or on the immediate interests of stakeholders, as the standard view of conflict resolution suggests.

Gregory's intention to improve stakeholder input and to aid the decision making process by incorporating their values in a structured fashion is commendable. However, a major limitation to this attempt stem from the fact that he is working with a limited conception of value. Hence, while Gregory is aware of the challenge posed by multiple value dimensions in relation to value conflicts and trade-offs, the solutions he offers fails to surmount the problem. Addressing the challenge posed by multiple value dimensions with regard to conflict resolution requires an appreciation of human values and object value as different dimensions of value. This then makes it possible to disentangle the different concerns among stakeholders.

⁵⁴ To this extent Gregory does not seem to have tackled his own concern about most environmental initiatives, i.e., '... in a few cases that trade-offs are addressed, it is usually not in terms of clarifying the fundamental values but rather in terms of setting out priorities for action (e.g., restoring wetlands as opposed to municipal drinking water), which are unlikely to provide an accurate window into the underlying value structures' (Gregory 2002, p. 465).

In view of the discussions in this chapter, it is better not to conflate human values and object value. Additionally, dealing with conflicts involving human values and object value requires a broader perspective than the one-to-one kind of trade-offs that Gregory seems to suggest. The next chapter will explain how an alternative way of looking at value conflicts and the interconnections between human values and object value can avoid problems such as taboo trade-offs.

CHAPTER SIX

THE SIGNIFICANCE OF INTERESTS AND VALUE IN ENVIRONMENTAL CONFLICT RESOLUTION

6.0 Introduction

The aim in this chapter is twofold: (1) To provide a critical assessment of the role that interests and value play in the resolution of environmental conflicts; (2) explore alternative ways of understanding and dealing with conflicts involving multiple value dimensions. Aim number (1) is intended to reconsider what I have discussed in chapter 3 and 4 whereas (2) is intended to address the issues I raised in chapter 5. In particular, (2) will be looked at by comparing holistic perspectives (e.g., systems thinking) with the tendency to consider individual values against each other. A holistic perspective makes it possible to examine how the interconnections among human values and object value can help in environmental decision-making and conflict resolution. The purpose is to explain why and how human values can be taken into consideration even though they may not be at the root of an environmental conflict.

In view of the above, we have to recall how the different senses in which *interests* and *value* can be understood, align with the three different approaches discussed in the preceding chapters, namely, the Standard Approach, the EIA framework, and the SDM approach. The concepts involved in the three approaches are based on two key distinctions, namely, the distinction between object value and human values and the distinction between objective and subjective interests.

The standard approach to conflict resolution relies on the contrast between human values and subjective interests. The standard approach then is primarily concerned with subjective interests, in the sense of what the parties to a conflict actually want. This is because the approach clearly distinguishes between interests and needs, where needs in the context of this discussion have been understood to be a kind of objective interests. In short, the distinction between

interests and needs that characterises the standard approach corresponds to the distinction between subjective interests and objective interests.

Given that interests in both senses of the term (subjective and objective) are relevant to the EIA framework, there are two issues that are relevant in assessing the EIA approach. These involve the contrast between object value and subjective interests on the one hand, and between human values and objective interests on the other (see section 1.3). However, the EIA framework does not deal directly with human values but focuses instead on object value understood on the basis of impacts. Hence, the contrast between object value and subjective interests is much more evident in the EIA approach than the contrast between human values and objective interests.

An appreciation of the focus on object value is therefore helpful in terms of considering the differences between the standard approach and the EIA framework. The standard approach does not deal with the issue of object value, but only makes reference to human values. On this basis then the distinction between object value and human values is crucial in terms of comparing both the standard approach and the EIA framework with the SDM approach. Unlike, the standard approach or the EIA framework, the SDM approach does not deal directly with interests (objective or subjective) but raises an important question about the extent to which the standard approach and the EIA framework address concerns about conflicting values, especially in terms of human values. In fact, a failure to attend directly to conflicting human values, as noted under the SDM approach, is a criticism of both the standard approach and the EIA approach.

The EIA framework is not explicit in dealing with human values. In contrast, the standard approach recognises that conflicts involving human values may be difficult to resolve and advocates that we focus instead on interests that hopefully may be shared by the parties to a conflict. Nevertheless, the distinction between object value and human values is central to the analysis of the similarities and differences among the three approaches thereby constituting a key basis not only for how they can be assessed, but also for how one can reconcile the insights gained from each one of them.

The SDM approach, however, seems to conflate object value and human values despite giving the impression that it recognises multiple dimensions of value. The position in this thesis, therefore, is that adopting a strategy that deals with human values and object value in a distinct fashion is helpful for the resolution of environmental conflicts. The reason is primarily because the difficulty associated with human values with regard to conflict resolution, as recognised by the standard approach, does not apply to object value.

In view of the discussions in the preceding chapters, this chapter will explore two things: first, the shortcomings of an exclusive focus on interests in the context of environmental conflict resolution; and second, the disadvantages with a tendency to conflate object value and human values in an attempt to resolve value conflicts. To this effect, consideration will be given to the following: (a) The scope and challenges for an exclusive focus on human interests (both subjective and objective); and (b) alternative ways of looking at the interconnections between human values and object value, as opposed to conflating them. Overall, the task is to determine an adequate basis upon which environmental conflicts can be resolved.

6.1 The scope and challenges of human self-interest

People generally value the natural environment for reasons relating to their present and long-term interests (Light 2002; Norton 2003; cf. Jamieson 2008, p.156). Hence, concerns about environmental matters are often based on 'human self-interest.' I use the term *self-interest* to include both objective and subjective interests. In examining the standard approach in chapter 3 the focus was on subjective interests while the EIA framework in chapter 4 caters for both subjective and objective interests. In exploring the scope and challenges for human self-interest, this chapter will also take into account subjective and objective interests as well. My intention is not to reject this basis for environmental concerns entirely. Rather, it is simply to point out that it is not adequate for some of the concerns about environmental issues that at least some people might express. Other reasons, such as concerns about the existence of other living things can also supply strong convictions for some environmental concerns, 'since

life on earth, and not just human life, is at stake' (Attfield 2003, p. 114). In fact, these other concerns are more pertinent especially where human self-interest is not directly relevant.

For example, how do we justify the preservation of certain elements in the natural environment whose contribution to our wellbeing is either negligible or unknown, or perhaps non-existent? Prudential arguments based *solely* on human self-interest do not seem to work convincingly. Often a common argument is to claim that such elements, for example a particular species, should be preserved because there might be some future benefits of which we are currently unaware. There is a problem with this prudential argument, as Jamieson argues, because 'it is an argument from ignorance'⁵⁵ (Jamieson 2008, p. 157).

In view of the above challenge, to argue for the protection of a species on the basis of the interests of its members or the interests of other species which interact with it would be more appropriate than focusing on prudential considerations that may be unfounded. In short, preservation or protection of species, especially those that are endangered, need not make reference to any (unknown) present or future human benefits. What this means is that there are environmental concerns that cannot be subsumed under human self-interest. As a result, human self-interest alone is insufficient to underpin *some* of our environmental concerns. Being open to concerns other than human self-interest adds to the case for prudent environment management and is likely to support stronger policies (Attfield 2003, p. 114). In short, there are some environmental concerns that cannot be subsumed under human self-interest whether in relation to current or to future generations. So when these concerns are voiced out in situations of conflict they should be given due attention as well to ensure that environmental conflicts are dealt with adequately.

Furthermore, in order to appreciate the challenges of an exclusive focus on human self-interest, we have to bear in mind that the notion of *interest* is not as

⁵⁵ He writes: 'It assigns a positive value to preserving a particular species on the grounds that we do not know that there will not be positive benefits from preserving it. Think about what is being said: if we don't know that something is not the case, then we can assume that there is some chance that it is. This inference is fallacious. All that follows from ignorance is ignorance. To say more than this, we have to know something' (Jamieson 2008, p. 157).

simple as this focus seems to assume. The claim that all of our environmental concerns simply boil down to human self-interest seems to assume that what is in our best interest could be an adequate basis for all of our concerns about the environment. But this assumption does not seem to work well once it is realised that the interests of different people (both objective and subjective) can, in practice, be in conflict with each other. Of course, working on the basis of shared interests can present some opportunities for resolving conflict. However, things change somewhat as soon as it is recognised that people actually do have different interests either as groups or as individuals, and that these interests may come up against each other.

For example, interests in the appreciation and preservation of wilderness areas often come up against developmental interests both of which can reasonably be assumed to be in everyone's interests. For instance, the construction of shopping malls has tended to threaten whatever wilderness areas or parks might have remained in cities or towns. If it is not possible to satisfy the different interests at stake by some compromise, the question then is on what basis such conflicts should be resolved.

Certainly, it will not help to appeal to interests when the interests in question are opposed to each other⁵⁶. First, to claim that not 'all interests are equal or that some interests deserve special consideration' is not advisable from a *facilitation* or *mediation* point of view where the emphasis is on finding common ground upon which the parties to a conflict can be engaged in further deliberations. Second, value judgements do not seem to offer a viable or easy solution if it is correct to assume that values are relative to individuals or groups. The main claim behind relativism is that human values have no eternal or universal appeal because they are relative to persons and groups. In considering the relativist challenge one should also take into account the fact that human values can be considered from two standpoints, as explained in chapter 1, viz.,

⁵⁶ One suggestion in response to this challenge, as attributed to Mark Sagoff by Des Jardins (1997, p. 96) is as follows: 'We need to make a political and ethical judgment that some preferences are more worthy of being satisfied than others. Not all interests are equal, and some deserve special consideration. Unfortunately, as Sagoff acknowledges, articulating and defending such value judgments is notoriously difficult. The relativist challenge remains in the background: Who are you to say that what you want is more valuable than what I want?'

the personal and the social/impersonal. If personal values are understood in terms of preferences then the relativist challenge is obvious.

While social values may be shared by members of the same group, they can vary from one group to another. However, this does not preclude the possibility that different groups or individuals across different groups can at least share some values. While individuals or groups may share some values, we should also consider that different groups may be motivated by different interests or priorities. 'Quite often, environmental interests are pitted against entrenched and influential corporate and government interests' (Des Jardins 1997, p. 198). This is often the case with conflicts involving environmental groups and transnational corporations (TNCs). At the global level both the TNCs and environmental groups can surmount, or at least lessen, the cultural relativist challenge because of their organizational reach across different regions. However, what seems to be the problem is that the interests of these parties can be so opposed to each other as to rule out viable negotiations or cooperative relationships. In short, value relativism is not the only challenge we have to deal with. Rather, the interests of different stakeholders can equally pose a significant problem.

What this also means is that even appeals to objective interests would be blocked by the disagreement. While it is possible to identify objective interests, people may still disagree on how, when, or whether such interests should be pursued. Of course, we cannot rule out the fact that human values have a significant bearing on these disagreements (see section 1.5). Nevertheless, it would appear that both the focus on interests and on human values seem to raise the same difficulty in terms of dealing with conflicts where the interests at stake are opposed to each other. In view of the above, focusing on interests can only make conflict resolution tractable as the standard approach assumes when the parties to a conflict have some shared interests that can be satisfied in a mutually agreeable way.

If resorting to human values in an attempt to deal with conflicting interests will just complicate issues as the standard approach cautions, considering how object value can inform or legitimise decisions that emerge from the resolution of

conflicts is a viable alternative. Object value is also indirectly useful in assessing the interests of stakeholders in order to understand how they relate to the impacts associated with the project at the centre of the conflict. The next section explores how attending to object value can help decision-makers to assess disagreements among stakeholders with regard to environmental decision-making and conflict resolution.

6.2 Object value and environmental conflict resolution

One of the advantages of attending to object value, in the context of environmental conflict resolution, is that it gives a real sense of what is actually at stake, unlike focusing on human interests or values. At the core of attending to object value is the need to understand the various impacts at stake and the value implications of such impacts. Attending to object value makes the process of environmental decision-making and conflict resolution much more transparent than is the case with entrenched or vested interests which can easily be concealed.

For instance, impacts under the EIA framework are best understood in terms of object value. It is easier to subject impacts to independent verification through the review process as explained in chapter 4 than the case may be with interests. Often, vested interests can make parties to a conflict over-emphasise the perceived benefits and play down the costs associated with their preferred course of action. Given that a proposed project is usually what is at the centre of an environmental conflict, decision-makers want to understand the impacts of the project in order for them to make an informed decision. Attending to object value provides an impartial way to explain why a certain course of action was chosen and not another. In this way, object value is central in terms of dealing with many of the concerns that arise in environmental conflict situations.

In considering the interaction between object values in the environment and human values, one cannot ignore the fact that the possibility of conflict looms large. Conflict is inevitable where human values, for example, profit can only be realised at the expense of the object value of certain elements in the environment.

Harmony obtains when human values and the object value of certain elements in the environment are compatible, for instance, as the case might be with the human values that inform certain practices under *ecotourism*, as compared to timber production or logging. Understanding the dynamics of interaction between object value and human values has a significant bearing in terms of how environmental conflicts can be resolved.

Dealing with value conflicts, especially in the context of environmental conflicts, requires that the issues are understood in a broad context. For this purpose, Frederick Ferré's account of what he refers to as a 'guiding vision', in terms of 'dealing with the tough questions' or generally in terms of resolving problems 'when genuine obligations to the environment or to humanity conflict' (Ferré 2010, p. 158) is a good starting point. As he claims:

Such a vision must reveal a single, continuous worldscape in which human culture is situated fully within nature. It must offer conceptual clarity on what constitutes value, intrinsic and instrumental. It must show how genuine values of both sorts in nature can extend beyond (and sometimes conflict with) human values (ibid., p. 158).

There are a number of issues in Ferré account above, some of which I have already alluded to in the preceding discussions on value. First, the need for conceptual clarity goes beyond the distinction between instrumental and intrinsic value. The distinction between instrumental and intrinsic value is applicable in relation to either human values or object value (cf. Rokeach 1967). Hence, it is important to be clear about whether one is considering it in the context of human values or object value. Ferré's account above also implies a distinction between 'human values' and 'values in nature'. This discussion understands *values in nature* as object *values*. The important thing then is to understand how human values can in some instances conflict and how they can in some ways be in harmony with object values in nature.

In dealing with conflicts between object values in the natural environment and human values, we have to bear in mind that harmony and conflict can be endemic to interactions between different systems, for instance, between economic and ecological systems. (The next section will explore the concept of systems thinking). Harmony obtains when interaction between different systems

supports co-existence. This means that systems do not undermine other systems with which they interact. In fact, by undermining other systems a system may also end up undermining itself. For example, harmony between human societies and the natural environment requires the maintenance and promotion of ecologically viable and socially desirable conditions (cf. Ulrich 2009, p. 133).

In considering the issue of harmony between object values in the natural environment and human values, one cannot ignore the fact that human beings also need to use the natural environment. In fact, human beings and the natural environment are inseparable, 'not simply because we are natural beings but rather because we are always already actively involved in the natural environment' (Bookchin 2010, p. 263). This thesis, however, is not only concerned about how use of the environment by some people affects others, but also about how use of the environment by human beings affects other living things or the long term health of the entire biosphere (cf. Norton 2003, p. 172). Concerns about harmony cannot be restricted to the welfare of human beings only because we share many 'needs' with other living things, for example, the need for non-toxic air and water, and other elements that are essential to the sustenance of life on earth. As a result, the object value of certain elements in the natural environment to other living things cannot be subsumed entirely under concerns for our own wellbeing.

With this background, the next section will explore alternative ways of dealing with conflicts involving multiple value dimensions. This discussion will argue that the difficulty in resolving some value conflicts and the problem associated with some trade-offs often results from a tendency to consider single values against each other thereby giving the impression that the *only* option is to choose between them.⁵⁷

⁵⁷ This approach often assumes win-lose solutions as opposed to win-win solutions.

6.3 Alternative ways of dealing with value conflicts

This section examines a holistic perspective on value conflicts. I am using the term '*holistic*' primarily to underscore the need to appreciate how different issues may be interconnected in ways that reveal significant relationships in an ecological, social, economic and other relevant aspects. For this reason I shall not digress into discussing any contentious issues that may be associated with the term '*holism*'⁵⁸.

My main concern as I argue is that adopting a holistic perspective on value conflicts as opposed to considering individual values against each other is a better alternative. As noted in the preceding section, looking at value conflicts from a holistic perspective creates more *scope* in terms of how such conflicts can be resolved. From a holistic perspective, what is vital in terms of resolving value conflicts is not to look at conflicting values in isolation⁵⁹. For this reason, as Anthony Weston suggests, 'we should prefer a conception of values which ties them to their contexts and insists not on their separability but on their relatedness and interdependence' (Weston 2003, p. 312). This approach is informed by the understanding that values 'define themselves in dynamic interactions and dependencies on each other' (Mayer 2008, p. 81). In terms of human values, for example, love is interlinked with other values such as care or respect.

A holistic perspective makes it possible to appreciate not only how values can conflict, but also how they can be interconnected. To this extent there are some insights from 'systems thinking' that we can draw on in dealing with value conflicts from a holistic perspective. Generally, a system is defined by the structure and patterns of interaction among its various components, or in short,

⁵⁸ The term '*holism*' is used in environmental ethics debates to consider individualist positions that put emphasis on the welfare or moral significance of individuals (such as animals) against holistic approaches that focus on '*wholes*' understood for example as ecosystems or the entire biosphere (see Keller 2010, p. 17, Palmer 2003, p. 23-5.). In other discussions, it (holism) is also used to refute 'dualist' positions, for example those that insist on the separability of human beings from animals or from nature (Jamieson 2008, p. 2-3, cf. Barry).

⁵⁹ In terms of conflict resolution the point, as Kekes (1993, p. 24) points out then is that ... 'the resolution of any particular conflict involves not merely deciding what ought to be done about the situation at hand but also considering how resolving the conflict by opting for one value, or for the balancing of one value against another in some compromise, would affect the whole system of values of which conflicting values are merely a part.'

the 'organising relations' (Capra 2009, p. 125). Hence, in attending to a system the focus is on properties or aspects of the *whole* system which cannot be attributed to any of its individual parts. There are two insights from systems thinking that are relevant to this discussion: (a) an understanding of conflicts as emerging from the interaction between different systems and within; (b) an appreciation of the need to shift our 'attention back and forth between systems levels' (ibid.) in an attempt to resolve conflicts.

The insight in (a) deepens our understanding of environmental conflicts as emerging from interactions among different systems (e.g., economic and ecological systems). In section 1.4, I explained environmental conflicts primarily in terms of disagreements arising from the concerns of the parties involved, i.e., where at least one party has concerns about the environmental impacts of the other party's projects. In following a systems perspective, in an attempt to resolve conflicts, decision-makers can be assisted by considering the interactions among the systems involved as opposed to merely looking at the disagreements arising from the expressed concerns.

Point (b) is relevant in terms of considering how scenarios at different levels can lead to a transfer of insights gained from one level to another level. As Fritjof Capra writes:

Throughout the living world, we find systems nesting within other systems, and by applying the same concepts to different systems levels – e.g. the concept of stress to an organism, a city, or an economy – we can often gain important insights. On the other hand, we also have to recognize that, in general, different systems levels represent levels of differing complexity (Capra 2009, p. 125).

While Capra's example focuses on stress, the focus in this discussion is on how to understand value conflicts at different system levels or in terms of the interaction between different systems. I want to argue therefore that how value conflicts are dealt with at the level of individuals can offer some insights and lessons in terms of how to approach value conflicts at higher levels, such as the community or the state. To this effect, an exploration of value conflicts from a systems perspective at the level of individuals is worthwhile.

Misha Hebel claims that the fact 'that each individual has a set of values appears undisputed and these can be seen to be the components of a value system' (Hebel 1998, p. 395). In her view, value systems or domains for an individual, for example, 'might include one for work, another for home or family, and another for environmental matters' (ibid., p. 396).

Tension and conflict between values is inevitable, or at least likely, as an individual interacts with the different value domains or systems. In attempting to address such tensions or conflicts, it is important, from a systems perspective, not to just consider individual values against each other. Rather, it is helpful to appreciate the dynamic interactions and interdependencies among the value domains involved.

For example, there may be tension between one's work and family life. From a systems perspective, the solution is not always or necessarily to *choose* between work and family. Such a move would violate some of the obvious connections between the two domains. For instance, work is important for one to support one's family, while family wellbeing is also crucial to the performance and reliability of employees. The value systems at work and at home may not be the same. Nevertheless, in order to maintain a system level functioning involving both of these domains and the interaction or interdependence between the two, it is vital to ensure that one value system or domain is not sustained at the expense of the other.

The same way of understanding value conflicts at the level of individuals can be applied at a different level, provided one is alert to the fact that different levels present *differing levels of complexity* (as noted earlier with reference to Capra). However, the point still remains that the insights gained from examining how value conflicts can be handled at the level of individuals at least offers a model for a systems perspective on much higher levels involving the social, economic, and ecological spheres of community life or the state. A systems perspective can be adopted in terms of looking at value conflicts involving the social, economic, and ecological spheres as interactional systems. What matters is a broad understanding of the linkages and feedback-loops among these systems.

For example, the negative environmental impacts of agriculture cannot be ignored. However, by improving food security, agriculture can also have a positive bearing on environmental protection given that food-secure households are unlikely to engage in coping strategies that are detrimental to the environment. Damming rivers for electricity is another economic activity that has tangible negative environmental impacts especially on biodiversity in the area that is dammed. But access to clean energy from such dams also has a positive bearing on environmental issues in terms of reducing pollution from unclean sources of energy.

In comparison to the individual or community levels, dealing with certain issues at the national level may pose some challenges given that there are more variables over which reliable information will be required. However, what may not be achievable at lower system levels can be achieved at higher system levels. For example, let us consider the case of the proposed mine in the Lower Zambezi National Park discussed in sections 4. If understood at the level of the area in question, that is the national park, the idea of balancing, as some commentators have pointed out is contradictory, if mining and wildlife conservation cannot take place in the same area. In particular, mining is likely to 'compromise the ecological value of the park as well as the ecosystem' as ZEMA stated in its decision to reject the proposed mine.

It is only at the national level that government can claim to balance the benefits from mining and the protection of wildlife conservation provided they take place in different areas. From a conservation point of view a game park has to be seen in its totality as a system. Hence, you cannot introduce alien activities like mining in the middle of a game park for a period of 25 years without disturbing the system. In addition to destroying old growth vegetation and landscapes, it is likely that the territory for some animals and birds would be negatively interfered with in some way.

In the argument in favour of mining, the proponent points out that there are countries in the world that do not have game parks and that such countries are not any worse off. While this observation is outside the scope of Zambia's economic system, one can also argue that there are countries without mines

which are doing far better economically than countries with mines. However, the relevant issue at the national level would be to consider how many national parks there are in comparison to the number of mines and other areas where there are mineral deposits which are not being mined yet. In this respect, if the Lower Zambezi National Park was the only area with copper or other mineral deposits then the scenario would be different. But obviously that is not the case. According to experts, Zambia has been the largest copper producer in Africa for some time (*Zambia Daily Mail Friday*, March 14, 2014). If this is the case then we should ask why it should start mining in a national park as well. What benefits will the country gain from mining a national park which it has not gained so far from being the largest copper producer in Africa? The issue does not seem to be about value. Rather, it is about *interests* and *government's interests* in particular, as the Minister who overturned ZEMA's decision stated.

In view of the above perspective, it is now widely recognised by environmental experts that EIAs should be undertaken within the broader context of strategic environmental assessments (SEA) so that certain issues are brought to the attention of decision makers at the earliest possible time. The realisation behind the SEA approach is that the significance of certain impacts (e.g., cumulative, regional and non-project impacts) 'may be better assessed initially at the policy, plan or programme level, rather than at the project level' (Wood and Dejeddour 1992, p. 3).

At national level and in the context of policies and plans, the mining and tourism sectors are part of the same economic system and can co-exist as such. However, at the regional level and in terms of the geography of a national park it is unlikely that the two systems can co-exist given that mining tends to be destructive at the source. It is at this level that one would be able to appreciate whether opening a mine in a national park would be the best thing to do. A park such as the Lower Zambezi National Park is essentially a system of catchment areas, flora and wildlife. Hence, it is something that needs to be looked at holistically. On a systems perspective the judgement by ZEMA that the mining project would 'compromise the ecological value of the park as well as the ecosystem' was well informed.

In addition, if one is following a systems perspective at this level then a question that arose in the argument in favour of the mine would either be irrelevant or inappropriate, namely, 'why are animals and plants or natural beauty of the park more important than people?' A trade-off that this question wants to highlight is either false or non-existent. On the contrary, some of the key arguments against the mine were based on the fact that people are already benefiting from tourism activities in the park especially through revenue paid to government. In fact, the main difference between the two sides is that those who are in favour of mining seem to be motivated by short-term interests whereas those who want to protect the park for sustainable tourism have adopted a long-term perspective. And in terms of government policy, tourism has been identified as a key sector with regard to diversifying the country's economy from its dependency on copper mining. Overall, the issue here is not about whether the park or animals are more important than people. Rather, it is about whether or not you can have mining and wild life conservation in the same area. From what the experts know about open pit mining and wild life habitats this issue can be decided factually without introducing any spurious factors like the above question does.

With regard to human values, however, the fact that there are more stakeholders or individuals involved also means that there are more value systems to deal with, given that it appears indisputable that each individual has a value system. For this reason it is prudent, whenever possible, for different dimensions of value, i.e., human values and object value to be addressed in a distinct fashion. This means that decision-makers can deal with object value in considering the interactions between the ecological, economic and social systems at the community or national level as opposed to dealing directly with human values. If the focus is on object value, for example, then value conflicts and trade-offs can also be guided by scientific or technological considerations. The advantage in this case is that trade-offs involving object values can be made without forcing people to compromise on their values.

Nonetheless, and as explained in the previous chapter, often the expressed concerns in an environmental conflict will involve human values and object value. However, instead of conflating the two different dimensions of value,

it is better to try and understand the linkages between human values and object values. In addition to revealing the character of values, appreciating the interconnections and interdependencies between these two value dimensions is also crucial in terms of assessments, choice, as well as in providing justifications (Weston 2003, p. 313) as to why a certain course of action should be chosen.

To further appreciate the role that object value can play in dealing with value conflicts we have to consider how object values and human values can interrelate, for example, object value can inform human values as suggested by the following claim:

To the extent that environmentalists can show that values are formed and informed by contact with nature, nature takes on value as a teacher of human values. Nature need no longer be seen as a mere satisfier of fixed and often consumptive values – it also becomes an important source of inspiration in value formation (Norton 2003, p. 165).

In looking at ‘the value of nature in forming, rather than satisfying human preferences’ Norton has in mind the value of experiencing ‘natural objects and undisturbed places’ (ibid., p 165). The above claim brings out two important issues. First, the *object value* of certain objects can be the basis for some human values. Second, we can think of other kinds of values in the natural environment besides the instrumental values that feed consumptive values. For instance, some objects in the natural environment may inspire wealth creation whereas others may inspire awe, thereby resulting in an appreciation of different types of value. In both of these ways it is clear that object value and human values are linked.

In addition, it is possible that human values can be attuned to environmental concerns. Mark Sagoff, for instance, writes:

[Aldo] Leopold argued that land use and environmental policy ought to respond to the love, admiration, and respect many of us feel for the natural world. Love, admiration, and respect are human values, of course, but they do not necessarily involve human welfare. Rather, these values (although they arise in human beings) may be directed to the well-being and integrity of the rest of nature (Sagoff 1988, p. 148).

There may be controversies or disagreements about what the ‘well-being’ or ‘integrity’ of the rest of nature might entail or for that matter even what ‘nature’ is.

The fact of the matter, however, remains that at least some people adore or care about certain things in the natural environment.

In another discussion Sagoff (1988) suggests that we may value in nature aspects that we find valuable in our own lives e.g. freedom, nobility and so on. For instance, some people may object to damming a river because flowing naturally is akin to or symbolises freedom. This view need not be a source of controversy given that it does not seem to imply that that is the only plausible way in which people can value nature. The important thing to realise, however, is that by so doing we would still be considering nature within the framework of human values as opposed to the object value of the elements in nature⁶⁰.

Distinguishing between human values and object value with regard to our understanding of '*environmental values*' is important in terms of dealing with environmental concerns and problems. The object value of environmental objects is determined by how the object functions or how it affects other things in the environment. This is the kind of value at issue when reference is made to the ecological value of organisms, wetlands, forests and so on.

The significance and relevance of human values with regard to environmental issues depends on how they interlink with the object value of certain elements in the environment. The interdependencies between human values and object value cannot be ignored. Ideally, therefore, one would hope for a framework that incorporates both human values and object value. Nevertheless, and for the purpose of resolving environmental conflicts, we need to be clear about what constitutes human values and object value. Only then can we be able to appreciate how these two different kinds of value can be interdependent, or how they may at times conflict with each other. As explained at the beginning of this section, interdependencies among values have a significant bearing on how conflicts should be resolved.

⁶⁰ We should also note as Robert Elliot points out: 'Val Routley has eloquently reminded us that people who value wilderness do not do so merely because they like to soak up pretty scenery. They see more and value much more than this. What they do see, and what they value, is very much a function of the degree to which they understand the ecological mechanisms which maintain the landscape and which determine that it appears the way it does' (Elliot 2003, p. 387; cf. Rolston 1988).

Conclusion

In concluding this chapter, it should be noted that both interests and value have a role to play in environmental conflicts depending, of course, on the type of conflict at issue. Consequently, any attempt to focus only on any one of these issues to resolve an environmental conflict stands in need of justification. An exclusive focus on interests might work in some instances. However, in view of the concerns that have been raised in this discussion and from other sources in the literature, it cannot be recommended as a comprehensive approach to all kinds of environmental conflicts. An exclusive focus on interests, especially on subjective interests, is not the only option, nor is it adequate in some cases of environmental conflict resolution. This is because objective interests, object value, human values and the interconnections among these issues all have a crucial role to play in environmental conflict resolution or in environmental decision-making in general.

As both the standard approach to conflict resolution and the structured decision making approach recognise, it cannot be denied that human values have a role to play in conflicts. However, as the standard approach explains, attending to human values can pose some serious difficulties in attempts to resolve conflicts. My argument therefore is that object value, as opposed to an exclusive focus on interests, also provides a viable basis for resolving environmental conflicts. In fact, the prospect of appreciating the significance of human values to environmental concerns can be greatly assisted by appeals to the object value of elements in the environment, or at least to the dynamic interactions or interdependencies between the two.

CONCLUSION

This thesis set out to contribute to an enhanced understanding of environmental conflicts and to establish an adequate basis upon which they can be resolved. To accomplish this task the thesis has ascertained the role that value and interests play in environmental conflicts and in their resolution. In the process the thesis has examined three different approaches with regard to environmental conflict resolution, viz., the standard approach, the EIA framework, and the SDM approach.

Being a philosophical discussion, the thesis has relied heavily on the analysis of the key concepts informing the three different approaches, namely, value and interests in order to draw out the relevant distinctions between human values and object value; subjective and objective interests. By taking all of these issues into account this discussion has deepened and broadened the understanding of environmental conflict resolution, based on a clear articulation of the distinctive roles that interests, human values and object value play in environmental conflicts. In particular, it has contributed to the provision of a conceptual analysis within which decisions that emerge from the resolution of environmental conflicts can be properly analysed and understood.

To begin with, I examined the standard approach to conflict resolution and concluded that it is inadequate in some important respects in dealing with some environmental conflicts (e.g., where there are environmental effects at stake as opposed to conflicts about mere access to resources). It is understandable, as the standard approach suggests that it might be convenient to avoid the human values that may underlie some conflicts and to focus instead on interest in an attempt to make the resolution of conflicts more feasible. However, taking into account the fact that there are environmental impacts to be considered also, the proposal in this thesis is that attending to object value has a fundamental role to play in the resolution of environmental conflicts. The understanding of environmental conflict resolution in this thesis is therefore different from the standard approach which only takes into account human values and interests.

I have also explored the concern that approaches such as the EIA framework do not deal adequately with conflicts involving human values. This thesis appreciates the fact that human values can pose a challenge in the process of resolving conflicts. Nevertheless, it has recognised that it is essential to be clear about what kind of human values might pose difficulties, given that not all human values may be difficult to deal with. In addition, and in contrast to claims under the SDM approach, I have further argued that dealing with multiple dimensions of value requires sensitivity to the distinction between human values and object value. Furthermore, the thesis has maintained that understanding the interconnections between human values and object value is essential in dealing with the multiple value dimensions that characterise some environmental conflicts.

In maintaining that an adequate basis for environmental conflict resolution should take into account interests, human values, and object value as well, I am at the same time mindful of the fact that these issues can often be in conflict. Therefore we should take into account the following recommendations: (1) attending to subjective interests as opposed to focusing on human values may be helpful in the resolution of some conflicts; (2) a pursuit of certain objective interests may be preferred to adhering to some human values; (3) certain human values should be adhered to at the expense of certain subjective interests; and (4) ultimately, object value has a central role to play in an *informed* attempt to resolve environmental conflicts. This is because object value can (and does) inform both interests and human values.

BIBLIOGRAPHY

- Agarwal, B. (2001) "Participatory exclusions, community forestry and gender," *World Development*, 29: 1623-1648.
- Alexander, W. (1999) *Social Theory of International Politics*. Cambridge: Cambridge University Press.
- Angeles, P. A. (1981) *A Dictionary of Philosophy*. London: Harper and Row.
- Anderson, E. (1997) "Practical Reason and Incommensurable Goods." In Chang, R. (ed.), *Incommensurability, Incommensurability and Practical Reason* (90-109). Cambridge, Mass.: Harvard University Press.
- . (1993) *Value in Ethics and Economics*. Cambridge, MA: Harvard University Press.
- Arrow, K. (1997) "Invaluable goods," *Journal of Economic Literature*, 35: 757-765.
- Attfeld, R. (2003) *Environmental Ethics*. Cambridge: Polity Press.
- . (2001) "Postmodernism, Value and Objectivity," *Environmental Values*, Vol. 10, No. 2: 145-162.
- . (1995) *Value, Obligation and Meta-Ethics*. Amsterdam : Editions Rodopi.
- . (1994) *Environmental Philosophy: Principles and Prospects*. Aldershot: Ashgate.
- . and Belsey, A. (eds.) (1994) *Philosophy and the Natural Environment*. Cambridge: Cambridge University Press.
- . (1987) *A Theory of Value and Obligation*. London: Croom Helm.
- Audi, R. (2004) "Theoretical Rationality: Its Source, Structure, and Scope." In A.R. Mele and P. Rawling (eds.), *The Oxford Handbook of Rationality* (17-44). Oxford: Oxford University Press.
- Barbour, I. G. (1980) *Technology, Environment, and Human Values*. New York: Praeger.

- Barde, J. and Pearce, D. (1991) *Valuing the Environment*. London: Earthscan.
- Baron, J. and Spranca, M. (1997) "Protected Values," *Organizational Behaviour and Human Decision Processes*, 70: 1-16.
- Baumann, P. and Betzler (eds.) (2004) *Practical Conflict*. Cambridge: Cambridge University Press.
- Beauchamp, T. L. (1982) *Philosophical Ethics: An Introduction to Moral Philosophy*. New York: McGraw-Hill Book Company.
- Becker, A. H. (1997) *Social Impact Assessment*. London: University College London.
- Beckerman, W. and Pasek, J. (2010) "In Defence of Anthropocentrism." In Keller, D.R. (ed.), *Environmental Ethics: the big questions* (83-88). Sussex: Wiley-Blackwell.
- . (1995) 'How Would You Like Your "Sustainability", Sir? Weak or Strong? A Reply to My Critics,' *Environmental Values*, 4: 169-79.
- . (1994) "Sustainable Development: Is it a Useful Concept?" *Environmental Values*, 3: 191-204.
- Bell, D. (2004) "Environmental justice and Rawls' differential principle," *Environmental Ethics*, Vol. 26, No. 3: 287-306.
- Benson, J. (2000) *Environmental Ethics: An Introduction with Readings*. London: Routledge.
- Bermudez, J. L. (2009) *Decision Theory and Rationality*. Oxford: Oxford University Press.
- Boardman, R. (2001) *The Political Economy of Nature: Environmental Debates and the Social Sciences*, New York: Palgrave.
- Bookchin, M. (2010) "What is Social Ecology." In Keller, D.R. (ed.), *Environmental Ethics: the big questions* (268-274). Sussex: Wiley-Blackwell.
- . (1988) "Social Ecology versus Deep Ecology," *Socialist Review*, 88: 11-29.

Bradley, B. (2006) "Two Concepts of Intrinsic Value," *Ethical Theory and Moral Practice*, Vol. 9, No. 2: 111-130.

Brännmark, J. (2009) "Goodness, Values, Reasons," *Ethical Theory and Moral Practice*, Vol.1, No. 4: 329-343.

Burgess, J., Clark, J. and Harrison, C. (1995) *Valuing Nature: What Lies Behind Responses to Contingent Valuation Surveys?* London: UCL.

Burton, J. (1990) *Conflict: Resolution and Prevention*. New York: St. Martin's Press.

Callicott, J. B. and Frodeman, R. (eds.) (2009) *Encyclopedia of Environmental Ethics and Philosophy*. Detroit: Gale, Cengage Learning.

———. (1992) "Rolston on Intrinsic Value: A Deconstruction," *Environmental Ethics*, 14: 129-143.

———. (1989) *In Defence of the Land Ethic*. Albany, NJ: SUNY Press.

———. (1985) "Intrinsic Value, Quantum Theory and Environmental Ethics," *Environmental Ethics*, 7: 257-275.

———. (1984) "Non-Athropocentric Value Theory and Environmental Ethics," *American Philosophical Quarterly*, Vol. 21, No. 4: 299-309.

———. (1982) "Hume's *Is/Ought* Dichotomy and the Relation of Ecology to Leopold's Land Ethic," *Environmental Ethics*, 4: 163-74.

Capra, F. and Ulrich, W. (2009) "Systems Thinking for Environmental Responsibility." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (121-137). London: Zed Books/The Open University.

Capra, F. (2009) "The Web of Life." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (124-132). London: Zed Books/The Open University.

Carson, R. (1962) *Silent Spring*. London: Hamish Hamilton.

- Carter, A. (2000) "Humean Nature," *Environmental Values*, 9: 3-37.
- Chang, R. (ed.) (1997) *Incommensurability, Incommensurability and Practical Reason*. Cambridge, Mass.: Harvard University Press.
- Chappell, T. (2001) "The Implications of Incommensurability," *Philosophy*, 76: 137-48.
- Coker, A. and Richards, C. (eds.) (1992) *Valuing the Environment*. London: Belvan Press.
- Connelly, J. and Smith, G. (1999) *Politics and Environment*. London: Routledge.
- Crisp, R. (2006) *Reasons and the Good*. Oxford: Clarendon Press.
- Crisp, R. (2005) "Value, Reasons, and the Structure of Justification: How to Avoid Passing the Buck," *Analysis*, 65: 80-85.
- Preston, C. (1998) "Epistemology and Intrinsic Values," *Environmental Ethics*, 20: 409-428.
- Crowfoot, J.E. and Wondolleck, J.M. (1990) *Environmental Disputes: Community Involvement in Conflict Resolution*. New York: Island Press.
- Daly, H. (1995) "On Wilfred Beckerman's Critique of Sustainable Development," *Environmental Values*, 4: 49-55.
- Daniel, S. E. and Walker, G. B. (1996) "Collaborative Learning: improving public deliberation in ecosystem based management," *Environmental Impact Assessment Review*, 16: 71-102.
- Davis, M. A. (2003) "Biotic Globalization: Does Competition from Introduced Species Threaten Biodiversity?" *Bioscience*, 53: 481-9.
- Des Jardins, J.R. (1997) *Environmental Ethics: An Introduction to Environmental Philosophy*, Second Edition. Belmont, CA, Wadsworth Publishing Company.
- Dickson, B. (2000) "The Ethicist Conception of Environmental Problems", *Environmental Values*, 9: 127-52.

Disch, R. (ed.), (1970) *The Ecological Conscience: Values for Survival*. Englewood Cliffs, N.J.: Prentice-Hall.

Douglas, A. (1987) *The Politics of Environmental Mediation*. Columbia: Columbia University Press.

Dower, N. (ed.) (1989) *Ethics and Environmental Responsibility*. Aldershot: Avebury.

Dryzek, J. (1996) "Political and Ecological Communication," *Environmental Politics*, Vol. 4, No. 4: 13-30.

Ducasse, C. J. (1968) "Intrinsic Value," *Philosophy and Phenomenological Research*, Vol. 28, No. 3: 410-412.

Elliot, R. (2009) "Deontological Environmental Ethics." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (60-65). London: Zed Books/The Open University.

——. (ed.) (1995) *Environmental Ethics*. Oxford: Oxford University Press.

——. (1992) "Intrinsic Value, Environmental Obligation and Naturalness," *The Monist*, No. 75: 138-160.

——. (1985) "Metaethics and Environmental Ethics," *Metaphilosophy*, No. 16: 103-17.

Elling, B. (2004) "Modernity and communicative reflection in environmental assessment." In Hilding-Rydevik, T. and Hlökk, T.A. (eds.), *Planning for sustainable development – the practice and potential of environmental assessments, proceedings from the 5th Nordic Environmental Assessment Conference*, Keykjavik, Iceland, 25-26 August 2003. Stockholm: Nordregio.

Environmental Council of Zambia (ECZ) 2006 "Environmental Impact Assessment Process in Zambia," *The Enviro-Line*, Issue No. 27, Lusaka.

Engel, R. and Subb, J. (1990) *Ethics of Environment and Development*. London: Belvan.

Feldman, F. (2000) "Basic Intrinsic Value," *Philosophical Issues*, 99: 319-346.

———. (1998) "Hyperventilating about Intrinsic Value," *The Journal of Ethics*, Vol. 2, No. 4: 339-354.

Ferré, F. (2010) "Persons in Nature: Toward an Applicable and Unified Environmental Ethics." In Keller, D.R. (ed.), *Environmental Ethics: the big questions* (154-160). Sussex: Wiley-Blackwell.

Firth, L. J. (1998) "Role of values in public decision-making: where is the fit?" *Impact Assessment Appraisal*, 16: 325-9.

Fischer, T. B. (2003) "Strategic environmental assessment in post-modern times," *Environmental Impact Assessment Review*, 23: 155-70.

Fiske, A. P. and Tetlock, P. E. (1997) "Taboo Trade-Offs: Reactions to transactions that transgress spheres of Justice," *Political Psychology*.

Gauss, G. (1990) *Value and Justification*. New York: Cambridge University Press.

Godfrey-Smith, M. (1979) "The Value of Wilderness," *Environmental Ethics*, 1: 309-319.

Goodin, R. (1992) *Green Political Theory*. Cambridge: Polity Press.

Goodpaster, K. (1978) "On Being Morally Considerable," *Journal of Philosophy*, 75: 308-25.

Goulet, D. (1995) *Development Ethics: A Guide to Theory and Practice*. New York: The Apex Press.

Green, K. (1996) "Two Distinctions in Environmental Goodness," *Environmental Values*, 5: 31-46.

Gregory, R. S. (2002) "Incorporating Value Trade-offs into Community-Based Environmental Risk Decisions", *Environmental Values*, Vol. 11, No. 4: 461-488.

Griffin, J. (1997) "Incommensurability: What's the Problem?" In Chang, R. (ed.) *Incommensurability, Incommensurability and Practical Reason* (184-195). Cambridge, Mass.: Harvard University Press.

———. (1986) *Well-Being: Its Meaning, Measurement and Moral Importance*. Oxford: Clarendon Press.

Gruen, L. (2002) "Refocusing environmental ethics: from intrinsic value to endorsable valuations," *Philosophy & Geography*, Vol. 5, No. 2: 153-164.

Hargrove, E. (2003) "Weak Anthropocentric Intrinsic Value." In A. Light and H. Rolston 111 (eds.), *Environmental Ethics: An Anthology* (175-190). Malden, MA: Blackwell Publishing.

Hargrove, E. (1988) *Foundations of Environmental Ethics*. Englewood Cliffs, New Jersey: Prentice-Hall.

Hansson, S. O. (2001) "The Modes of Value," *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, Vol. 104, No. 1: 33-46.

Harman, G. (2000) *Explaining Value and Other Essays in Moral Philosophy*. Oxford: Clarendon Press.

Hebel, M. (1998) "Value Systems – A Way to Greater Understanding," *Systems Practice and Action Research*, Vol. 11, No. 4: 381-402.

Helleiner, G. K. (2000) "Markets, Politics and Globalization: Can the Global Economy be Civilised?" Paper presented at The Tenth Raúl Prebisch, Geneva, 11 December.

Hitlin, S. and Piliavin, J. A. (2004) "Values: Reviving a Dormant Concept," *Annual Review of Sociology*, Vol. 30: 359-393.

Holbrook, D. (2009) "The Consequentialist side of Environmental Ethics." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (52-59). London: Zed Books/The Open University.

Holland, A. (2002) "Are choices trade-offs?" In Bromley, D. and Paavola, J. (eds.), *Economics, Ethics and Environmental Policy* (17-34). Oxford: Blackwell.

Jamieson, D. (2008) *Ethics and the Environment: An Introduction*. Cambridge: Cambridge University Press.

Jamieson, D. (ed.) (2000) *A Companion to Environmental Philosophy*. Oxford: Blackwell.

Johnson, L. E. (1991) *A Morally Deep World: An Essay on Moral Significance and Environmental Ethics*. New York: Cambridge University Press.

Kagan, S. (1998) "Rethinking Intrinsic Value," *The Journal of Ethics*, Vol. 2, No. 4: 277-297.

Kaplan, M. A. (1976) "Means/Ends Rationality," *Ethics*, Vol. 87, No. 1: 61-65.

Katz, E. (1993) "Artefacts and functions: a note on the value of nature," *Environmental values*, 2: 223-232.

Katz, E. and Oechsli, L. (1993) "Moving beyond anthropocentrism: environmental ethics, development and the Amazon," *Environmental Ethics*, 15: 49-59.

Keeney, R. L. (1992) *Valued-Focused Thinking: A Path to Creative decision-making*. Cambridge, MA: Harvard University Press.

Kekes, J. (1993) *The Morality of Pluralism*. Princeton. NJ: Princeton University Press.

Keller, D.R. (ed.) (2010) *Environmental Ethics: The Big Questions*. Sussex: Wiley-Blackwell.

Korsgaard, C. M. (1983) "Two Distinctions in Goodness," *The Philosophical Review*, Vol. 92, No. 2: 169-195.

Lawrence, D. P. (2000) "Planning theories and environmental impact assessments," *Environmental Impact Assessment Review*, 20: 607-25.

Lee, K. (2003) "The Source and Locus of Intrinsic Value: A Reexamination." In A. Light and H. Rolston III (eds.), *Environmental Ethics: An Anthology* (163-174). Malden, MA: Blackwell Publishing.

Leopold, A. (1966) *A Sand County Almanac: With Other Essays on Conservation from 'Round River'*. New York: Oxford University Press.

——. (1949) *A Sand County Almanac and Sketches from Here and There*. New York: Oxford University Press.

Lewis, C. I. (1946) *An Analysis of Knowledge and Valuation*. LaSalle, Ill: Open Court.

Libiszewski, S. (1992) "What is an Environmental Conflict?" Paper presented at the first coordination meeting of the Environmental and Conflicts Project (ENCOP), April 30-May1, (revised version), Spillmann, K. R. and Günter, B., (eds.) *ENCOP Occasional Papers*. Berne/Zürich: Centre for Security Studies.

Light, A. (2009) "Contemporary Environmental Ethics." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (90-102). London: Zed Books/The Open University.

Light, A. and Rolston III, H. (eds.) (2003), *Environmental Ethics: An Anthology*. Malden, MA: Blackwell Publishing.

Light, A. and Katz, E. (eds.) (1996) *Environmental Pragmatism*. London: Routledge.

Lukes, S. (1997) "Comparing the Incomparable: Trade-offs and Sacrifices." In Chang, R. (ed.) *Incommensurability, Incommensurability and Practical Reason* (184-195). Cambridge, Mass.: Harvard University Press.

Mackie, J. (1997) *Ethics: Inventing Right and Wrong*. Harmondsworth: Penguin Books.

Mackinnon, B. (2012) *Ethics: Theory and Contemporary Issues*. United States: Wadsworth, Cengage Learning.

MacIntyre, A. (1988) *Whose Justice? Which Rationality?* Notre Dame, Indiana: Indiana University Press.

Magness, V. (2000) "Economic Values and Corporate Financial Statements," *Environmental Management*, Vol. 32, No. 1: 1-11.

Majone, G. (1989) *Evidence, argument and persuasion in the policy process*. New Haven: Yale University Press.

Martell, L. (2009) "On Values and Obligations to the Environment." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (28-39). London: Zed Books/The Open University.

Martin-Schramm, J. B. and Stivers, R. L. (2003) *Christian Environmental Ethics: A Case Method Approach*. Maryknoll, New York: Orbis Books.

Mason, E. (2011) "Value Pluralism." *The Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/archives/fall2011/entries/value-pluralism/>.

Mayer, C. H. (2008) *Managing Conflict across Cultures, Values and Identities: A Case Study in the South African Automotive Industry*. Unpublished PhD thesis, Grahamstown: Rhodes University.

McCormick, J. (1991) *Reclaiming Paradise: The Global Environmental Movement*: <http://books.google.co.za/books>.

McGraw, A. P. and Tetlock, P. E. (2005) "Taboo Trade-Offs, Relational Framing and the Acceptability of Exchanges", *Journal of Consumer Psychology*, Vol. 15, No. 1: 2-15.

McShane, K. (2007) "Why Environmental Ethics Shouldn't Give Up on Intrinsic Value," *Environmental Ethics*, 29: 43-61.

Mele, A. R. and Rawling, P. (eds.) (2004) *The Oxford Handbook of Rationality*. Oxford: Oxford University Press.

Moore, G. E. (1903) *Principia Ethica*. Cambridge: Cambridge University Press.

Morris, A. P. "Politics and Prosperity in Natural Resources," *Social Philosophy and Policy*, Vol. 26, No. 2: 53-94.

Myers, S. and Filmer, B. (1994) *Mediation across Cultures. A Handbook about Conflict and Culture*. San Diego: Amherst Educational Publishing.

Naess, A. (2003) "The Deep Ecological Movement: Some Philosophical Aspects." In A. Light and H. Rolston III (eds.), *Environmental Ethics: An Anthology* (262 – 274). Malden, MA: Blackwell Publishing.

Neill, W. (1998) "An Interest-Satisfaction Theory of Value," *Ethics and the Environment*, Vol. 3, No. 1: 55-80.

Nicholson, M. (1992) *Rationality and the Analysis of International Conflict*. New York: Cambridge University Press.

Nien-hê, H. (2008) "Incommensurable Values," *The Stanford Encyclopedia of Philosophy*:<http://plato.stanford.edu/archives/fall2008/entries/value-incommensurability/>.

Norton, B. G. (2003) "Environmental Ethics and Weak Anthropocentrism." In A. Light and H. Rolston III (Eds.), *Environmental Ethics: An Anthology* (163-174). Malden, MA: Blackwell Publishing.

———. (1992) "Epistemology and Environmental Values," *The Monist*, 75: 208-26.

———. (1991) *Toward Unity among Environmentalists*. New York: Oxford University Press.

———. (1987) *Why Preserve Natural Variety?* Princeton: Princeton University.

———. (ed.), (1986) *The Preservation of Species: The Value of Biological Diversity*. Princeton, N.J.: Princeton University Press.

Nunez, T. W. (1999) "Rolston, Lonergan, and the Intrinsic Value of Nature," *The Journal of Religious Ethics*, Vol. 27, No. 1: 105-128.

O'Connor, M. (ed.), (1994) *Is Capitalism Sustainable?* New York: The Guilford Press.

O'Neill, J. (2003) "The Varieties of Intrinsic Value." In A. Light and H. Rolston III (Eds.), *Environmental Ethics: An Anthology* (131-142). Malden, MA: Blackwell Publishing.

———. (1993) *Ecology, Policy and Politics: Human Well-Being and the Natural World*. London: Routledge.

Pan African Climate Justice (PACJA) (2009) *The Economic Cost of Climate Change in Africa*.

- Parayil, G. (1998) "Sustainable Development: The Fallacy of Normatively Neutral Development Paradigm," *Journal of Applied Philosophy*, 15: 179-94.
- Passmore, J. (1974) *Man's Responsibility for Nature*. London: Duckworth.
- Paul, G. (1991) *The Conception of Value*. Oxford: Clarendon Press.
- Pearce, D. (1993) *Economic Values and the Natural World*. London: Earthscan.
- Perry, R. B. (1926) *General Theory of Value*. New York: Longmans, Green and Company.
- Pelletier, D. L., Kraak, V., McCullum, C. and Uusitalo, U. (2000) "Values, public policy, and community food security," *Agriculture and Human Values*, 17: 75-93.
- Pichler, T. and Gas'paraikova' (eds.) *Interests and Values, Slovak Philosophical Studies*, II. Washington DC: The Council for Research in Values and Philosophy.
- Plumwood, V. (2002) *Environmental Culture: The Ecological Crisis of Reason*. London: Routledge.
- Pojman, L. P. and Pojman P. (eds.) (2012) *Environmental Ethics: Readings in Theory and Application* (6th edition). United States: Wadsworth, CENGAGE Learning.
- Ramsbotham, O. Miall, H. and Woodhouse, T. (2005) *Contemporary Conflict Resolution*. Cambridge: Polity Press.
- Rawls, J. (1971) *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.
- Raz, J. (1997) "Incommensurability and Agency." In Chang, R. (ed.), *Incommensurability, Incommensurability and Practical Reason* (110-128). Cambridge, Mass.: Harvard University Press.
- . (1986) *The Morality of Freedom*. Oxford: Oxford University Press.
- Regan, T. (1993) *The Case for Animal Rights*. Berkeley: University of California Press.
- Reid, D. (1995) *Sustainable Development*. London: Earthscan.

Reynolds, M. (2009) "Environmental Ethics." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (131-133). London: Zed Books/The Open University.

Richardson, T. (2005) "Environmental assessments and planning theory: four short stories about power, multiple rationality, and ethics," *Environmental Impact Assessment Review*, 25: 341-365.

Rokeach, M, (ed.) (1979) *Understanding Human Values: Individual and Societal*. New York: Free Press.

———. (1973) *The Nature of Human Values*. New York: Free Press.

———. (19967) *Value Survey*. Sunnyvale , CA: Halgren Tests.

Rolston, H, III. (2010) "Value in Nature and the Nature of Value." In Keller, D.R. (ed.), *Environmental Ethics: The Big Questions* (130-136). Sussex: Wiley-Blackwell.

———. (2003) "Feeding People versus Saving Nature?" In A. Light and H. Rolston III (eds.), *Environmental Ethics: An Anthology* (451-462). Malden, MA: Blackwell Publishing.

———. (1988) *Environmental Ethics: Duties to and Values in the Natural World*. Philadelphia: Temple Press.

———. (1985) "Valuing Wildlands," *Environmental Ethics*, 7: 23-48.

Sagoff, M. (1988) *The Economy of the Earth*. Cambridge: Cambridge University Press.

Sandler, R. L. (2007) *Character and Environment: A virtue-oriented approach to environmental ethics*. New York: Columbia University Press.

Sarkar, S. (2005) *Biodiversity and Environmental Philosophy: An Introduction to the Issues*. New York: Cambridge University Press.

Scanlon, T. (1998) *What We Owe to Each Other*. Cambridge, Mass.: Harvard University Press.

Schmidtz, D. (2002) "Natural Enemies: An Anatomy of Environmental Conflict." In D. Schmidtz and E. Willott (eds.), *Environmental Ethics: What Really Matters, What Really Works* (417-424). New York: Oxford University Press.

———. (1997) "Why Preservation Doesn't Preserve," *Environmental Values*, 6: 327-39.

Schroder, M. (2012) "Value Theory", *The Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/archives/sum2012/entries/value-theory/>.

Schwartz, S. H. (1994) "Are there Universal Aspects in the Structure and Content of Human Values?" *Journal of Social Issues*, 50: 19-45.

Sen, A. (1987) *On Ethics and Economics*. Oxford: Blackwell.

Singer, P. (2010) "All Animals are Equal." In Keller, D.R. (ed.), *Environmental Ethics: The Big Questions* (169-174). Sussex: Wiley-Blackwell.

———. (1979) *Practical Ethics*. Cambridge: Cambridge University Press.

SRK Consulting (2006) "Mwambashi Copper Development Impact Statement." Lusaka, Zambia.

Slovic, P. (1995) "The construction of preference," *American Psychologist*, 5: 364-71.

Smith, M. J. and Pangsapa, P. (2009) "Strategic Thinking and the Practices of Ecological Citizenship: Bringing Together the Ties that Bind and Bond." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (28-39). London: Zed Books/The Open University.

Sober, E. (1995) "Philosophical Problems of Environmentalism." In R. Elliot (ed.), *Environmental Ethics*. Oxford: Oxford University Press.

Southern Africa Development Community (SADC) (2001) A Guide to Indicators for State of Environment Assessment and Reporting in Southern Africa. Maseru: DS Print Media.

Sterba, J. (1995) "From Biocentric Individualism to Biocentric Pluralism," *Environmental Ethics*, 17: 191-207.

Stone, C. (1988) "Moral Pluralism and the Course of Environmental Ethics," *Environmental Ethics*, 10: 139-134.

Sunstein, C. R. (1997) "Incommensurability and Kinds of Valuation: Some Applications in Law." In Chang, R. (ed.), *Incommensurability, Incommensurability and Practical Reason* (234-254). Cambridge, Mass.: Harvard University Press.

Taylor, P. W. (1998) "Biocentric Egalitarianism." In L. Pojman (ed.), *Environmental Ethics: Readings in Theory and Application*. Belmont, California: Wadsworth Publishing Co.

Taylor, P. W. (1986) *Respect for Nature: A Theory of Environmental Ethics*. Princeton: Princeton University Press.

Thomas, D. A. L. (1990) "Hume and Intrinsic Value," *Philosophy*, Vol. 65, No. 254: 419-437.

Thompson, J. (2000) "Environment as Cultural Heritage," *Environmental Values*, 22: 241-58.

Tom, R. (1993) "Ethical Thinking and Theory." In S. J. Armstrong and R. G. Botzler (eds.), *Environmental Ethics: Divergence and Convergence* (71-76). New York: McGraw-Hill, Inc.

Trigg, R. (1985) *Understanding Social Science*. Oxford: Basil Blackwell.

Ulrich, W. (2009) "Can we secure future-responsive Management through Systems Thinking and Design." In Reynolds, M., Blackmore, C. and Smith, M. J. (eds.), *The Environmental Responsibility Reader* (132-137). London: Zed Books/The Open University.

United States Institute of Peace (USIP) *Module 3. Conflict Management*: <http://www.usip.org>.

United States Government (2005) US Memorandum on Environmental Conflict Resolution: <https://www.ecr.gov/Resources/Federal/ECRP>.

Van Dyke, V. (1962) "Values and Interests," *The American Political Review*, Vol. 56, No. 3: 567-576.

Varner, G. E. (1998) *In Nature's Interests? Interests, Animal Rights, and Environmental Ethics*. New York: Oxford University Press.

Vincent, A (1998) "Liberalism and the Environment," *Environmental Values*, 7: 443-59.

Vogel, S. (2010) "On Environmental Philosophy and Continental Thought." In Keller, D.R. (ed.), *Environmental Ethics: the big questions* (257-267). Sussex: Wiley-Blackwell.

Walker A. (1866) *The Science of Wealth: A Manual of Political Economy*. Boston: John Wilson and Son.

Walker, G. (2012) *Environmental Justice: Concepts, Evidence and Politics*. London: Routledge.

Wallace, R. L. (2008) "Practical Reason," *The Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/archives/fall2008/entries/practical-reason/>.

Wallensteen, P. (2002) *Understanding Conflict Resolution: War, Peace and the Global System*. London: SAGE Publications Ltd.

Warthern, P. (ed.) (1988) *Environmental Impact Assessments: Theory and Practice*. London: Unwin Hyman.

Wenz, P. S. (2001) *Environmental Ethics Today*. New York: Oxford University Press.

Wenz, P. S. (1988) *Environmental Justice*. New York: State University of New York.

Weston, A. (2003) "Beyond Intrinsic Value: Pragmatism in Environmental Ethics." In A. Light and H. Rolston III (eds.), *Environmental Ethics: An Anthology* (307-318). Malden, MA: Blackwell Publishing.

Wiggins, D. (2000) "Nature, respect for nature and the human scale of values," *Proceedings of the Aristotelian Society*, 100: 1-32.

———. (1998) *Needs, Values, Truth*. Oxford: Oxford University Press.

Williams, R. M. Jr. (1979) "Change and Stability in Values and Value Systems: a sociological perspective." In Rokeach, M, (ed.) *Understanding Human Values: Individual and Societal* (15-46). New York: Free Press.

Wood, C. and Dejeddour, M. (1992) "Strategic Environmental Assessments: SEA of Policy, Plans and Programmes", *Impact Assessment Bulletin*, Vol. 10, No. 1: 3-22.

Woods, M. and Moriarty, P. (2001) "Strangers in a Strange Land: The Problem of Exotic Species," *Environmental Values*, 10: 163-91.

Wood, P. (1997) "Biodiversity as the source of biological resources: a new look at biodiversity values," *Environmental Values*, 6: 251-268.

Wringe, C. (1998) "Reasons, Values and Community in Moral Education", *British Journal of Educational Studies*, Vol. 46, No. 3: 278-288.

Young, S. C. (1993) *The Politics of the Environment*. Manchester: Baseline Books.

Zagzebski, L. T. (1996) *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge*. Cambridge: Cambridge University Press.

Zimmerman, M. J. (2012) *A New Environmental Ethics: The Next Millennium for Life on Earth*. New York: Routledge.

——. M. J. (2010) "Intrinsic vs. Extrinsic Value," *The Stanford Encyclopedia of Philosophy*: <http://plato.stanford.edu/archives/win2010/entries/value-intrinsic-extrinsic/>.

——. M. J. (2001) *The Nature of Intrinsic Value*. New York: Rowman & Littlefield.

——. M. J. (1999) "In Defence of the Concept of Intrinsic Value," *Canadian Journal of Philosophy*, 29: 389-410.

Zambia Electricity Supply Cooperation, (ZESCO) (2010), Environmental and Social Affairs Unit, "Kariba North Bank Extension 330kv Environmental Impact Statement Report", Lusaka, Zambia.

Newspapers

The Post, Thursday January 30, 2014

The post, Friday April 21, 2006

Zambia Daily Mail, Friday March 14, 2014

Websites

<http://www.zambian-economist.com/2014/02/reframing-lower-zambezi-mining-copper.html>

<http://newswatch.nationalgeographic.com/2014/01/23/zambia-approves-a-massive-private-copper-mine-in-the-heart-of-lower-zambezi-national-park/>

<http://victoriafallsheritage.blogspot.com/2006/11/wildlife-and-environmental.html>

<http://lusakavoice.com/2014/02/14/masebo-kalaba-differ-over-lower-zambezi-national-park-mining/>

<http://www.miningnewszambia.com/approved-construction-of-kangaluwi-mine-in-national-park-raises-dust-2/>

<http://ukzambians.co.uk/home/2014/02/16/government-clarifies-its-position-on-lower-zambezi-national-park-mine/>