Open Research Online

**The Open University's repository of research publications
and other research outputs**

A major wind farm development in a valued natural environment : a thematic discourse analysis of public responses to a proposed wind farm on the Island of Lewis, Scotland

Thesis

oro.open.ac.uk

ROBERT DUNCAN WEMYSS MA, MSc

A MAJOR WIND FARM DEVELOPMENT IN A VALUED NATURAL ENVIRONMENT: A THEMATIC DISCOURSE ANALYSIS OF PUBLIC RESPONSES TO A PROPOSED WIND FARM ON THE ISLAND OF LEWIS, SCOTLAND

A THESIS SUBMITTED FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

THE OPEN UNIVERSITY

THE UNIVERSITY OF THE HIGHLANDS
AND ISLANDS

OCTOBER 2011

ABSTRACT

Where it has been determined that government renewables targets can be met through the construction of onshore wind farms the number of rural land use conflicts has increased. This research used the proposed major wind farm on the Island of Lewis (the LWF) in Scotland as a case study to explore such contested perspectives of rural land use. This wind farm would have been located in a locally, nationally and internationally valued natural environment underpinned by national and international statutory protection. A structured thematic discourse analysis (TDA) was devised to analyse the intrinsic and utility values of the natural environment contained within stakeholders' planning submissions. Although relatively underutilised planning submissions proved to be a rich source of research data. The principal findings revealed the extent to which stakeholders' discourses of objection were shaped through interactions at different social and geographical levels and how narratives of rurality, biodiversity and landscape were socially constructed in stakeholders' discourses. The findings also demonstrated that a strong sense of place attachment and place association had been woven into stakeholders' discourses and provided a better explanation for motivating objections than either NIMBYism or inverse NIMBYism. The location of the LWF within statutory protected areas (PAs) influenced the composition of stakeholders' discourses in ways which challenged the more prevalent academic perception that the public regarded PAs as being top-down impositions which constituted 'scientific colonialism'. The impact of the LWF on environmental and socio-cultural values was considered by stakeholders to be crucial in assessments of sustainability and quality of life. Perceptions of fairness and weaknesses in local governance and the communicative planning process were also important influences on stakeholders' discourses and their perception as to whether a decision reached on the LWF would be environmentally just.

DEDICATION

I would like to dedicate this thesis to my late parents for giving me

the start in life for which I will always be grateful,

ACKNOWLEDGEMENTS

CONTENTS

CHAPTER 1 INTRODUCTION

1.1 THE RESEARCH AIM

The aim of this research is to examine the relationships and tensions that arise over a planning proposal for a major wind farm within a statutorily protected area. At its heart lies the messy problem of generating electricity sustainably while at the same time protecting a natural environment on which society has placed certain intrinsic and utility values. The research will therefore involve the identification and analysis of the often contested beliefs and values concerning the nature of sustainability associated with major wind farm developments. Traditional rural land uses create the backcloth against which this research has been undertaken with the statutory planning system providing the decision-making apparatus.

1.2 WHY WIND FARMS?

The complexity of the concepts of sustainability and sustainable development can create intellectual confusion. However, they also create a conceptual framework for the analysis of wind farms. An ever growing lexicon on themes such as environmentalism and sustainable development illustrates the level of concern expressed about human-environment relationship. For example in Lovelock's (1979) controversial Gaia hypothesis the Earth was self-regulating, like the human body, maintaining a delicate balance between living organisms, oceans and the atmosphere. In this context nature had value for and of itself (Lovelock 2006 pp190-191). Environmentalism was another manifestation of the concern about, and a justification for taking action on the human-environment relationship. This stressed the fragility of nature and landscape and the damage done by human activities (Woods 2003 p247). Many religious traditions have helped play an important role in

steering man's attitude towards a more respectful relationship with the natural environment (e.g. Brennan 1987; Lovelock 2006; Hulme 2009). This may seem surprising as Christianity in particular has been assailed for nurturing an anti-Nature ideology which is usually traced to the notion of 'dominion' found in the book of Genesis (White 1967). However, all the main religious traditions including Christianity also contain a contrasting idea of 'stewardship' in which humans administered a creation with innate values divinely created (Hulme 2009). The idea that nature possesses intrinsic value is thus shared by both secular and religious traditions.

However, Gaia and environmentalism are only two of the metaphors for describing humans' relationship with the natural world. Other metaphors and examples of eco-ethics include anthropocentrism, the balance of nature, biocentrism, chain of being, creation, ecocentrism, deep ecology, Earth Goddess, economy of Nature, land ethic and sustainability (Wissenburg 1993; Verhagen 2008). The radical steps needing to be taken by governments, businesses and civil society are thus limited by the basic assumptions made about nature, the unspoken, often unrecognised perspectives from which humans view the environment (Botkin 1990).

Sustainability and its relevance to the planning system will be analysed in more detail in Chapter 4. The origins of sustainability as a philosophy to guide human activities and relationships with nature date back to Classical times with more modern manifestations in the US in the 1950s (Glacken 1956; Katz and Kirby 1991; Pearce 2002). The 1960s however, were the most influential decade in the re-emergence of sustainability as a paradigm and it was in this decade that thinkers such as Rachel Carson, Paul Ehrlich, Barry Commons and Garrett Hardin came to prominence. The discourse of environmental limits

was made most salient in the Meadows Report published by the Club of Rome in 1972 and it was this report which introduced sustainability into political language. This was followed by the 1980 World Conservation Strategy which adopted the language of development that was sustainable and culminated in the Brundtland Report's coinage of the term sustainable development in 1987 (WCED 1987; Grober 2007).

Electricity generation by fossil fuels, a source of energy vital to a modern economy and society, is an example of what some citizens perceive as an unsustainable development. This perception has arisen because of the scale of the utilisation of finite natural capital, fossil fuels, and the environmental damage caused as a result (Goodland 1995; Jepma and Munasinghe 1998 p57). The Scottish Government recognised that climate change was one of the greatest challenges threatening human life and the sustainable development of natural resources (Scottish Government 2009a). The Climate Change (Scotland) Act 2009 is (2011) the legislation being used as a basis for achieving a reduction in greenhouse gasses. The Act set an interim 42% reduction target of greenhouse gasses by 2020 and an 80% reduction target by 2050. The targets set in 2005 aimed at 18% of electricity being generated from renewables by 2010 rising to 40% by 2020 (Scottish Government 2005b). The ambitious targets were perceived to be the prime driver for the growth of interest in wind energy and projects and the booming state of the wind energy sector in the UK (Mitchell and Connor 2004).

Breukers and Wolsink (2007) made the controversial claim that corporate responses to climate change focused on economic and industrial development and paid little attention to social capital. Social equity and equality in governance were considered to be important in addressing climate change and contributing to sustainable development (Jepma and

Munasinghe 1998). Although the need to slow global warming through a reduction in greenhouse gas emissions has widespread support, in situations where a renewable energy development is perceived to impact negatively on the local environment it may become a contentious issue (Woods 2003 p274). The potential therefore exists for disagreements between those promoting wind based renewables as one solution to achieving greenhouse gas reduction targets and those who oppose the location of a particular wind farm on the basis that they negatively impact on key elements of sustainability at a local scale. Wind farms might therefore be perceived as an example of a land use that has been regarded by environmentalists as both environmentally beneficial at a global scale yet locally destructive. This apparent clash between two visions of environmental sustainability has been described by Warren et al (2005) as an example of a new type of controversy- 'Green on Green'. This pitted environmentalists against each other with strong 'green' arguments on both sides. This new type of conflict can be contrasted with the traditional dichotomy of economic development versus nature conservation which placed the green lobby unequivocally on one side of the argument (Warren et al 2005; Jessup 2010, p21). A fundamental issue in this research is the public perception of the actions taken to sustainably generate electricity through wind farm development. At what stage in this process are these actions perceived by the public to have become unsustainable? It is this conundrum that forms the focus of this research.

The balance to be struck between the 'greens' is determined by the planning system. One theoretical lens through which wind farm and rural land use conflicts can be analysed is what Frank Fischer and John Forester (1993) called the 'argumentative turn' in planning theory and policy analysis. This paradigm shift motivated by a transition from positivism to post-positivism in planning theory has inspired new epistemological and normative

approaches towards the interpretation of rural land use conflicts. These approaches have centred on the analysis of discourses utilised by stakeholders to articulate their values and beliefs in planning conflicts (Fischer and Forester 1993). The discourses were those composed within what Habermas called the public sphere an autonomous created space where mediation was possible between the private sphere composed of private individuals and the state which was the sphere of public authority (Habermas 1962). He argued that through a process of reasoned dialogue between citizens a rational consensus on key issues could be reached (ibid). This consensus derived its legitimacy not from strategic negotiation between self-interested actors but from the emergence of the 'the unforced force of the better argument' as a product of rational discourse and (critical) public opinion. This operated in what Habermas called the 'lifeworld' (basically the same as civic society) influencing government and thereby lending moral legitimacy to law and validity to 'administrative power' (Habermas 1996). However, the 'lifeworld' was under perpetual threat from 'the system' comprising both the market and state bureaucracies governed by strategic rather than moral imperatives thereby giving rise to the potential 'colonisation' of the lifeworld (Habermas 1984; 1987; 1996).

Habermas's (1962) conception of a rational public sphere has had a major influence on re-orientating planning policy analysis from its roots in positivism and technical rationality towards a more communicative rationality. However, in the context of the planning system an uncritical acceptance of Habermasian rationality would be unrealistic as its image of a unitary public sphere leads to a dichotomy between the ideal and what is real. Habermas's insistence on the need for discourse to be rational was perceived by Hauser (1999) among others to be at variance with the workings of existing democracies (Hauser 1999). Hauser's conception of a rhetorical public sphere aimed to rectify what he regarded as weaknesses in

Habermas's idealised notion of discourse (ibid). It also reflected the even more radical post-modernist approach espoused by theorists such as Foucault. From a Foucauldian perspective discursive interaction was viewed within the context of conflicts between citizens possessing very different values and perspectives with power inequalities being a constant given (Richardson 1996). These are the issues that lie at the heart of the democratic planning decision-making process. Therefore in the context of analysing discourses on wind farms it is important to bear in mind that understood from a Faucauldian post-modernist perspective a Habermasian 'rational' approach to resolving rural land use conflicts such as the location of wind farms, may be judged to have been unrealistically optimistic.

Studies of wind farms explore the complex interactions between major development, rural land uses and the protection of the values attached to the natural environment. The Western Isles (also referred to as the Outer Hebrides) off the north-west coast of Scotland has been chosen as a case study because it has some of the most valued natural environment in Scotland with 65% of the land area designated for Global, European and Nationally important natural environment (Hassan 2002). The Region is also recognised as being one of the areas of Europe with the greatest potential for harnessing the wind for electricity generation (Scottish Executive 2001). The presented case study analyses a major wind farm proposal, 234 wind turbines, planned to be located in an area of outstanding environmental importance. This combination of circumstances makes for an ideal location to analyse the extent to which the acceptance of a major wind farm is determined by the values held by the stakeholders involved in the planning process.

1.3 THE RESEARCH RATIONALE

The rationale for choosing this research topic has been a long-term interest in the interactions taking place between rural development, land use and the protection of the natural environment. The issues arising are encapsulated in the choice of case study – a major wind farm development. This class of development has been strongly influenced by the Scottish Government setting a target of 100% of electricity being generated by 2020 in order to reduce Scotland's greenhouse gas emissions and mitigate climate change. In order to meet this target the construction of wind farms has been promoted through policy instruments and subsidies. Large wind farms have tended to be located where the wind as a source of generating renewable electricity is more reliable. Many of the sites for wind farms have therefore been in relatively remote rural areas. Where these rural locations also have a natural environment valued highly by local communities and protected by national and international legislation there is the potential for conflict. This creates the green on green conundrum. This arises from the environmental objective of the expansion of wind energy conflicting with the potentially damaging effects that could result from the construction of a large wind farm in a valued natural environment. The planning system creates the legislative and governance forum within which such potentially conflicting values can be debated. The data resulting from the planning deliberation process provides a valuable insight into the relevant value systems.

1.4 THE RESEARCH OBJECTIVES

The objectives are:

1. To determine to what extent the location of a proposed major wind farm within a protected natural environment influences stakeholder attitudes towards the proposed development;

2. To gain knowledge about how stakeholders' intrinsic and utility valuation of the natural environment influences the views expressed in their planning submissions;

3. To identify the relevant values held by individuals and civic society used to assess if a major wind farm development within a protected area is sustainable;

4. To assess the extent to which inter-stakeholder actions have a role to play in the articulation of stakeholder discourses.

1.5 THE RESEARCH QUESTION

What are the values that motivate members of the public acting within the public sphere to object to a major wind farm development in a protected area?

In order to assist in answering this question a working hypothesis will be formulated based on the findings of the literature review.

1.6 THE STRUCTURE OF THE THESIS

1.6.1 LITERATURE REVIEW

Chapter 2 examines the natural environment's intrinsic values and how these values have found their way into society's consciousness. The environmental conservation discourse is followed by an analysis of how this has been channelled into a legislative framework. Chapter 3 contains an analysis of extrinsic utility values attached to the natural

environment. This analysis relates mainly to crofting as the traditional land use in the Western Isles and the associated quality of life. Chapter 4 contains an analysis of sustainability with the focus on how the sustainability paradigm has become embedded within planning as a mechanism for mediating between environmental conservation and land uses and development.

1.6.2 METHODOLOGY

Chapter 5 contains a discussion of the thematic discourse analysis (TDA) methodology relevant to this research topic and a justification for the research methodology chosen.

1.6.3 THE CASE STUDY

Chapter 6 has a detailed environmental and socio-economic description of the Western Isles, the geographical location of the Case Study, and a description of the major wind farm to be located within this area.

1.6.4 THEMATIC DISCOURSE ANALYSIS: FINDINGS AND DISCUSSION

Chapter 7 is a macrocosmic view of the findings of the application of Thematic Discourse Analysis (TDA) methodology to stakeholders' discourses. Chapter 8 contains the findings of a more detailed and in-depth application of the TDA methodology to individual stakeholders' discourses. Chapter 9 contains the findings of the application of the TDA methodology to the submissions which have been subscribed to by informal groups of individual stakeholders.

1.6.5 GENERAL DISCUSSION

Chapter 10 brings together and discusses the key findings from the empirical chapters 7, 8 and 9. The findings are contextualised in relation to the literature reviewed in Chapters 2-5. This chapter also highlights how the findings have contributed to existing knowledge in each subject area.

1.6.6 CONCLUSIONS

This chapter assesses the extent to which the Research Question has been answered, highlights the new contributions that this research has made to the existing knowledge about the research topic and demonstrates the academic robustness of the research findings. The chapter also sets out to discover if more research is required to further investigate the issues that have been revealed in the case study analysis.

CHAPTER 2   THE NATURAL ENVIRONMENT: PROTECTING INTRINSIC VALUES

2.1 INTRODUCTION

The objectives of this part of the literature review are: to identify and analyse the intrinsic values of the natural environment; with the focus on Scotland, to analyse how intrinsic values have found their way into the conservation consciousness; to examine how this consciousness has informed Protected Area (PA) statutes and protocols; to identify and analyse the intrinsic values of the landscape and biodiversity; examine the perceived efficacy of Protected Areas (PAs) as a means of protecting landscape and biodiversity; and probe into the public perceptions of PAs. PAs are statutory but artificial constructs with boundaries drawn to delineate the parts of the natural environment that have been deemed to have the relevant sufficient landscape and biodiversity value. The PA boundaries are not necessarily fixed and may change over time as societal values change. However, the PA boundaries relevant to this research are those that were in place at the time of the case study.

2.2 THE NATURAL ENVIRONMENT – SEEKING OUT INTRINSIC VALUES

Metaphysically 'intrinsic' can be a complex concept. However, some brief comments should assist in the analyses of intrinsic values as they relate to this research. The concept of intrinsic value has been characterised in relation to the (good) value that an entity has "in itself", "for its own sake", "as such" or "in its own right" (Zimmerman 2010). The problematic aspects of 'intrinsic' stem from the fact that: it is subjective and

varies from person to person; it is not fixed in time; and it is dependent upon the extent to which the summation of different components (not all of which may have intrinsic value in themselves) is involved in determining intrinsic value (Ross 1930; Zimmerman 2010). Therefore the intrinsic value of the natural environment need not be fixed in time. What was of intrinsic value in the past may not have that value now. What is of intrinsic value to an individual now may not have value to the same or another individual at some point in time in the future. This view of intrinsic value was predicated on a subjectivist conception of intrinsic and not on a non-subjective or non-contingent conception whereby the object in question has a priori intrinsic properties (Moore 1922). Of particular interest here are the methods by which intrinsic values are transmitted. This transmission may involve consciousness of an object, the existence of an object, properties and facts known about an object all of which can lead to a holistic intrinsic value and the sum of its intrinsic parts (Zimmerman 2010).

Bearing in mind that the values attached to the natural environment are the focus of this research it is considered important to highlight some of the differences perceived to exist between intrinsic and extrinsic values. It has been argued that nothing is such that its value is wholly intrinsic and that objects with an intrinsic value also had an extrinsic value (Beardsley 1965). Values that were extrinsic were those that were valuable for the sake of something else to which they were related in some way (ibid). This is disputed to some extent by Brennan and Lo (2009) who pointed to a clear distinction between them. Intrinsic values were considered as being ends in themselves (regardless of whether they were useful as a means to other ends) while extrinsic or instrumental values were attached to things that were a means to further some other ends (extrinsic values will be analysed in Chapter 3). Nevertheless, despite the metaphysical

ambiguities surrounding 'intrinsic' and the sometimes problematic attempts at a differentiation between intrinsic and extrinsic values, the terminology is still useful in progressing with this research and assisting in the analysis of the stakeholders' discourses. One ontologically positivist, materialistic and essentialist all-embracing concept of nature is that it referred to everything that was non-human and distinguished from the works of humanity (Soper 1995 p15). Another example of an essentialist orientated definition stated that the natural environment encompassed all living and non-living things occurring naturally and the interaction between all living things (Johnson et al 1997 p581).

Katz and Kirby (1991 p262) claimed that the task of science was as much social as scientific and for this task nature was the ideal object. They illustrated succinctly these links by stating that in the context of nature, science had rationalised a class-based society through taxonomy, masked the military ends of research through scientific objectivity and rationalisation and rationalised capitalism through species competition. There are a number of other post-positivist conceptualisations of the natural environment. For example Dingler (2005) argued from a discourse theoretic perspective that conceptualisations of the environment in the UK were not ecologically value neutral. At the very moment that nature was mentioned the respective conceptualisation of nature was already situated in discourse and was consequently discursively constructed (ibid p216). This discursive and cultural conceptualisation of nature has been echoed by others (e.g. Grundmann 1991 p285 quoted in Dingler 2005 p214; Vogel 1996 p123; Graham 2002 p31). Such a conceptualisation of nature implies that there cannot be a nature independent of discourses and consequently that there may be varying and sometimes strongly contrasting conceptions of the natural environment.

Discursive complexity juxtaposed with the essentialist concept of the natural environment reveals potentially the wide range of natural environments capable of being perceived and analysed. Understanding the natural environment as a discursive concept rather than an essentialist one reveals potentially the wide range of meanings of the natural environment capable of being perceived and analysed.

2.3 FROM INTRINSIC VALUES TO CONSERVATION CONSCIOUSNESS

2.3.1 CHANGING ENVIRONMENTAL VALUES: CLASS, CULTURE AND CONTRASTS

An historical perspective can have importance in understanding the social constructions of nature (Harrison and Burgess 1994 p294). How society's evaluation of the natural environment has changed can be illustrated by a brief examination of the time-line of the most significant trends. The writings of early travellers contributed to some sectors of society widening their horizons and re-evaluating the natural environment. For example Celia Fiennes and her travels through England between 1685 and 1705, William Stukely between 1710 and 1725 and Thomas West who published "A Guide to the Lakes of Cumberland, Westmoreland and Lancashire" in 1778 (Haines 1973). However, this 'widening of horizons' re-evaluation of the environment was constrained by issues of social class and personal wealth (Smout 1991). Despite an increasing interest in the natural environment by the 'polite and educated', the 18th Century did not witness any radical change in perceptions of how the natural environment related to man's activities (Smout 1991).

Towards the end of the enlightenment there did appear to be a growing awareness of the countryside. This was reflected in the works of some influential writers. For example Gilbert White's Natural History of Selbourne first published in 1788-89 became one of the most published books in the English language (Mabey 1986). A strong spiritual and cultural dimension was evident in how the natural environment was perceived in the Highlands and Islands. For example Duncan Ban MacIntyre has been described as the most environmentally aware of the Gaelic poets (Hunter 1995 p79). This is evident in his poem 'Beinn Dobhrainn'. His poetry has been described as in stark contrast to James MacPherson's gloomy and desolate portrayal of the Highlands in his works of Ossian published in 1760 later used by Sir Walter Scott as a backdrop in his Lady of the Lake (Hunter 1995 p91-96). The writers in the 1920s and 1930s during what has come to be known as the Celtic Twilight portrayed the landscape, wildlife and people in terms wholly disconnected from reality (Hunter 1995 p116).

Contrasting urban and rural characteristics may also have played a role in how the natural environment's intrinsic values were assessed. A manifestation of this in the UK was the concept of the rural idyll and its relative attractiveness (Jones et al 1984; Johnson and Rasker 1995; Strong 2011). In this context the countryside was perceived as a pleasant contrast to the grim polluted and insanitary conditions endured by many of the workers living in the industrialised cities and towns. However, in contrast to the previous century, after the First World War 'ordinary' people had more leisure time, motivation and more disposable income to facilitate more visits to the countryside to appreciate the Scottish natural environment and participate in outdoor activities (Lorimer 1997). This example can be seen to illustrate the analytical dilemma referred to earlier in the context of the close relationship here between intrinsic and extrinsic

values. The former relates to the intrinsic and pleasurable aesthetic appreciation of the beauty of the environment and the latter to the extrinsic pleasure obtained from outdoor pursuits in the same natural environment. However, this relationship also highlights the potential for a conflict in values such as for example where the extrinsic utility values become dominant over the intrinsic values.

2.3.2 A 'CONSERVATIVE' APPROACH TO INTRINSIC VALUE PROTECTION

An early example of the UK publics' organisational response to potential environmental damage was the formation of the Council for the Preservation of Rural England founded in 1926 by the planner Patrick Abercrombie. The Scottish dimension was added by the founding of the Association for the Preservation of Rural Scotland in 1927. These organisations can be perceived as taking a 'conservative' approach to protecting natural environment's intrinsic values by retaining strong links with the 'landowning classes' and property rights and seeking change through non-radical incremental methods (Shoard 1997 p 83). Another manifestation of this 'conservative' approach to conservation was also reflected in the formation and activities of the National Trusts. In 1930 a group of 'distinguished' gentlemen drawn from the 'great and good' convened the first council meeting of the National Trust for Scotland (NTS), officially established as a company in 1931, despite the Government in Westminster's opposition to a trust separate from the National Trust (NTS 2006). The NTS's strength and its ability to conserve heritage was (in addition to its membership) derived from its power as a landowner although it had been accused of focussing on the conservation of scenery/landscape values as opposed to wildlife/biosphere values (Holdaway 2007). Holdaway's observation could also be applied to conservation organisations such as the

16

Royal Society for the Protection of Birds (RSPB) and the Scottish Wildlife Trust (SWT) which also rely, in addition to their membership, on the property rights over their nature reserves. These rights ensure that land is used to optimise their natural environment conservation activities.

2.3.3 THE COUNTY TRUSTS

The first county naturalist trust established in the UK was the Norfolk Naturalists Trust founded in 1926. Early conservationists concluded that in addition to species legislation, which was regarded as the most effective means of conservation, education was the long-term solution to conserving the environment (Sheail 1976). The more holistic approach in Scotland was adopted by the Scottish Wildlife Trust founded in 1964. The Trust's 25 year vision now goes beyond conserving the natural environment through the strength of its membership and the control of land through the establishment of nature reserves. Their updated vision now provides a more contemporary perspective on nature conservation by advocating the re-building of biodiversity at an ecosystem scale with an acceptance that natural processes should often be the main driver for determining the development of wildlife communities (Scottish Wildlife Trust 2011). The Trust's success in gaining support for its conservation goals can be gauged by its membership (32,000 in 2009 organised into 20 local groups) and the potential for their implementation by the area of land controlled (120 reserves covering 20,000 ha) (SWT 2011). The SWT by way of its 22 urban wildlife reserves plays an important role in making the intrinsic values of the natural environment more accessible to those living in urban areas (SWT 2011). This can be seen as an attempt to bridge the urban-rural natural environment gap referred to above.

2.3.4 THE ENVIRONMENTALIST APPROACH

The move from hunter-gatherers to an industrialised society has had a profound influence on the human-environment relationship (Worster 1993). Environmentalism arose to try to redress the resulting imbalance between the two and has now become one of the most influential social movements in recent decades (Porritt and Winner 1988). Common causes around which environmental groups rallied included Rachael Carson's (1962) Silent Spring a pioneering work in relation to the impact of pesticides on the natural environment, the foundering of the Torrey Canyon supertanker on the Seven Stones Reef off Cornwall (contaminating 120 miles of beach and killing an estimated 15,000 sea birds) and the Exxon Valdez supertanker which foundered in Prince William Sound in Alaska in 1989 (releasing 11,000,000 gallons of crude oil) (Cowan 1968). These common causes increased awareness among the general public of man's impact on and dependence upon the environment and illustrated what Harrison and Burgess (1994 p305) observation that the free market's self regulation's lack of sympathy for nature conservation.

A number of all-encompassing expressions of man's activities and the environment's carrying capacity followed on from these environmentalist common causes. For example Hardin (1968) warned that there was no technical solution to the ever-growing world population. Lovelock's (1979) Gaia hypothesis was modified to accommodate environmentalism and became the essential basis of a moral, coherent and practical environmentalism countering the belief that the Earth was a property to be exploited for the benefit of mankind (O'Riordan 1999; Lovelock 2006, p135). However, environmentalism itself encapsulates several different eco-ethics and attitudes to nature.

In this context Wissenburg (1993) identified anthropocentrism, eco-centrism, deep ecology, shallow sustainability, land ethic, bio-regionalism among the key approaches.

2.3.5 THE 'NEW' CONSERVATIONISTS

A more holistic and radical environmentalist conservation consciousness led to conservation groupings towards the end of the 1960s coming under the generic heading of the 'new conservationists'. The central discourses of the new conservationists have been described as predominantly strongly negative and emotive, deriving its causality from Darwinian and Malthusian science (Harrison and Burgess 1994). They began to question accepted attitudes, drawing the public's attention to broader conservation issues, everyday situations and the wider implications for society and the economy of carrying on its present unsustainable course of material consumption (Evans 1992; Harrison and Burgess 1994). A high profile example of the new conservation groupings are Friends of the Earth (FoE) founded in the US in 1969, in the UK in 1971 and with a Scottish branch founded in 1979. The increasing strength and international acceptance of what the new conservation movement stood for can be gauged through its 100,000 financial supporters and 75,000 volunteers in the UK (Friends of the Earth 2011).

The tensions that have arisen between capitalism and the 'new conservationists' discourses have led at times to what Durland (1987) referred to in the context of Greenpeace as 'guerrilla theatre'. An important difference between the more established conservationist organisations such as the RSPB and the SWT and the new environmentalists was initially for the former to perceive nature conservation as

19

practiced in Britain mainly as a cultural activity whereas the wider economic and environmental issues were being tackled by organisations such as FoE and Greenpeace (Nature Conservancy Council 1984). However, as can be seen from the SWT's vision statement (2.3.3) this differentiation is now less evident.

2.4 THE LEGISLATIVE APPROACH TO CONSERVING INTRINSIC VALUES

2.4.1 THE LEGISLATIVE INTERVENTIONIST ETHOS

In the traditional approach to the politics of groups an assumption can be made that individuals, including those antithetic to conservation, who share a common interest in achieving political outcomes, combine forces to advocate and lobby for those outcomes (Schroder 1998). Government functions as an interactive as opposed to a command system, where power is ever-changing based on the policies under consideration (Sheail 2000). Economic and other forms of liberalism have been criticised for their marginalisation of matters relating to ecology and the environment. Some political theorists have even argued that democracy is at worst, a slave to economic liberalism and at best, only contingently capable of promoting half-hearted piece-meal environmental solutions (e.g.Wissenburg 1998). However, some 'green' political theorists in the context of weak sustainability have argued that economic growth can be achieved by technologies that are environmentally more benign and that liberalism need not necessarily be anti-green (e.g. De Geus and Doherty 1996). Environmental legislation may itself reflect the machinations of self-interest politics rather than an honest effort at procuring a public good and there may be a normative case for the whole body of such legislation being suspect (Hornstein 1998, p63). However, the durability of environmental law may reflect that even a system of government so

heavily influenced by the politics of self-interest, must give way occasionally to the momentum of public-regarding ideas (Hornstein 1998).

Foley (2004) concluded that most political philosophers have traditionally viewed issues relating to the environment separately from issues of social justice. Rawls's Theory of Justice (1971) espoused an economic rather than an environmental principle of intergenerational justice with social justice considered largely in the context of the distribution of economic benefits and burdens (Heikkila 2001 p273). The Commission on Social Justice (1994) in examining issues relating to poverty, unemployment, poor education and ill health also neglected to look at issues relating to the environment. Foley (2004) argued that this may have been because some environmental issues did not naturally find a home within the political concerns of the social democratic left. However, in Scotland recent statutes and policies have directed that the exploitation of natural capital, where appropriate, is done in a sustainable manner thereby ensuring that environmental justice is done and consequently that social justice is achieved (Scottish Executive 2003). Therefore defining whether social justice in Scotland has been achieved now includes the consideration of environmental justice. This aims to ensure that no group of individuals should be environmentally disadvantaged because of their ethnicity, national origin or socio-economic position, the latter linked in Scotland (rural in this context) with the uneven distribution of landownership (Slater and Pederson 2009). Todd and Zografos (2005) included the environmental impact of industrialised wind farms on rural communities within the context of what determined environmental justice.

2.4.2 THE EVOLUTION OF CONSERVATION LEGISLATION

An analysis of some significant events should help to explain how conservation of the natural environment has been absorbed by past and present systems of governance. Although the Victorians adored the Highlands they did little to protect them except for the game found on the sporting estates (Smout 1991 p240). This implied that in the Highlands at least conservation legislation was a relatively recent addition to the region's governance. Events such as the indiscriminate and discriminate killing of birds in the 19th Century eventually led to the 1869 Sea Birds Preservation Act, the 1872 Wild Birds Protection Act and the 1876 Wildfowl Protection Act which introduced a closed season, and the Wild Bird Protection Acts of 1880, 1881, 1896, 1902 and 1904 and the Protection of Birds Act of 1925. The corresponding public reaction was the founding of the Society for the Protection of Birds in 1889 which gained its Royal status in 1904. Initially voluntary member organisations established to conserve the natural environment took a species targeted approach. By contrast some forms of wildlife e.g. mammals, insects and plants, received comparatively little legislative protection. Stamp (1969 p7) has referred to this inconsistent British attitude to nature. For example birds and some mammals such as Grey Seals (protected by legislation in 1914, 1932 and 1970), Red Deer (protected by the Red Deer (Scotland) Act 1959) were more popular than reptiles and insects and consequently the latter attracted less interest in their preservation. There is some chronological evidence to support this assertion. The first significant Bill to protect plants was not introduced until 1967 and failed although another introduced in 1974 succeeded.

The establishment of statutory bodies can be seen as evidence of a relatively recent absorption of conservation into governance. For example the Huxley Committee recommended the creation of a national biological service and the Nature Conservancy Council (NCC) was established in 1947 (Stamp 1969 p 18). The Nature Conservancy Council adopted a scientific approach to determining the parts of the natural environment that should be conserved. Its statutory roles were to "provide scientific advice on the conservation and control of the natural flora and fauna of Great Britain; to establish, maintain and manage nature reserves in Great Britain, including the maintenance of physical features of scientific interest; and to organise and develop the scientific services thereto" (Tinker 1972). A Scottish dimension resulting from differing administrative and cultural issues, led to the establishment of a separate body in Scotland (NCCS, later to be combined with the Countryside Commission Scotland in 1992 to become Scottish Natural Heritage (SNH)) by statute (Ritchie Committee 1973). Statutory powers contained in the National Parks and Access to the Countryside Act, 1949 enabled the Conservancy to own land, lease land or enter into an agreement with a landowner in order to implement a management programme to achieve nature conservation objectives. These landownership powers may be perceived as a statutory extension of the conservative approach to conservation discussed above.

2.4.3 LEGISLATING FOR A SPATIAL APPROACH TO CONSERVATION

Evidence going back many centuries illustrated the need by almost all organised human societies to identify certain areas under their control to be protected. For example forest reserves were set up in India 24 centuries ago and the hunting reserves in many parts of Europe were declared by medieval rulers (Bishop et al 1995). It is however, generally

accepted that a model of the first 'modern' closely regulated spatial protectionist regime was the National Park (NP) established at Yellowstone in the US in 1872 followed later by the founding of the Mount Tongariro NP in New Zealand (Leitmann 1998). The international dimension to the spatial approach to conservation is evident in the International Union for the Conservation of Nature (IUCN) definition of a Protected Area (PA). This stated that a PA was an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and the associated cultural resources managed through legal or other effective means (IUCN 1994). The IUCN have identified six categories of PA: Strict Nature Reserves; Wilderness Area; National Park; Natural Monument; Habitat Management Area; Protected Landscape/Seascape; and a Managed Resource PA (IUCN 1994). In this definition the inclusion of cultural resources illustrated that protecting biological diversity need not exclude non-biological issues.

An increased emphasis on the state interventionist approach in the UK to the conservation of the intrinsic values of the natural environment is also evident in the adoption of the spatial approach. Protected Areas (PAs) were proposed in the Scott Report (1942) which recommended inter alia, the establishment of National Parks. The Dower Report in 1945 set out the role of NPs in England and the Hobhouse Report in 1947 proposed 12 NPs in England and Wales. These Reports were followed by enabling legislation in the National Parks and Access to the Countryside Act of 1949. This resulted in the first 5 National Parks (NPs) in England and Wales being established in 1951.

An instance of a distinctive Scottish approach to conservation is evident in the Scottish Council on National Parks pressing the Scottish Secretary for a separate survey of potential parks in Scotland (Sheail 1975). In 1948 the Scottish Secretary identified 5 National Park Direction Areas. However, despite the pioneering work of John Muir, by the end of the 20th Century Scotland was one of the few developed countries in the world without a national park. A popular fear was voiced that the first PAs (the National Parks) would become depopulated recreational areas for townspeople (Sheail 1975 p 51). This illustrated that even in the early years of the PA designations concerns were being expressed about the negative implications for rural communities of the spatial approach to conservation. However, the passing of the National Parks (Scotland) Act, 2000 under the devolved Scottish Parliament provided the legislative catalyst for the establishment of two NPs, the Cairngorms National Park and the Loch Lomond and the Trossachs National Park. Each had its own National Park Authority and planning powers despite earlier fears being expressed that these powers would hinder renewable energy schemes.

One example of governance caution in relation to PA establishment can be observed in the Western Isles of Scotland where there are currently no NP designations. A proposal to establish a National Park on the Isle of Harris in the Western Isles of Scotland resulted in a local referendum being held in February 2009 under the supervision of a local community development organisation, the North Harris Trust. The residents of Harris voted 70% in favour of the establishment of the Park. Despite local support, when this proposal was discussed by Comhairle nan Eilean Siar (The Western Isles Council) the Comhairle expressed reservations that: the designation would be a major deterrent to creating jobs; that there was a possible negative impact on fishermen if a

marine area was included in the NP; that there would be implications for the Council's other functions; and assurances were required that governance would be in the control of local residents if there were any moves towards the creation of the NP (Stornoway Gazette 2009). This local case mirrored the national perception already referred to above that using spatial means to protect environmental values could inhibit development within the area being protected.

An important national landmark in the development of PAs was that of the Site of Special Scientific Interest (SSSI) designated to protect the best examples of the UK's flora, fauna or geological and physiographic features. These sites were notified originally under the National Parks and Access to the Countryside Act 1949 with improved provisions for their protection under the Nature Conservation (Scotland) Act 2004. Powers devolved to the Scottish Executive/Government in 1998 included the environment, land use planning, transport, economic development and the justice system and allowed for a distinctive Scottish 'stamp' to be put on this legislation. A review of environmental legislation was embarked upon and it was regarded as one of the most ambitious and wide-ranging package of nature conservation powers since the Wildlife and Countryside Act of 1981 (Scottish Executive Environment Group 2003). The outcome of this and the consultation exercise that followed was contained in the Nature Conservation (Scotland) Act 2004 which attempted to create a coherent sustainable approach to the wider challenges of managing the natural environment.

Some 80-90% of UK conservation legislation now originates at European Union level (European Environmental Agency 1999) highlighting the increase of the influence of

international legislation and obligations underpinning UK conservation. Climate change, air pollution, waste disposal, water purity, the quality of the urban and natural environment have all been linked to negative environmental externalities, depressed property values, a decline in people's physical and psychic wellbeing and have therefore provided valid reasons for international environmental regulation (Jacobs 1991; Wills 1994; Joseph 1997; Scott 1998). At the global level the Ramsar Convention (held in 1971 at Ramsar in Iran) included the United Kingdom as one of the 34 'Contracting Parties'. These parties agreed to designate and conserve wetland sites especially waterfowl habitats. Crucially, European Community treaties form the backbone of a supranational legal regime in the UK governing not only transnational free trade issues but domestic environmental protection standards (Cichowski 2000 p1). Consequently, a tension has developed between the EU and member states because of the international principle that the 'ownership' of environmental goods located within the boundaries of a particular state should not be seen as the exclusive property of that state to be disposed of at will (Scott 1998). The Natura network and European Union Directives have resulted in two important designations, the Special Areas of Protection (SPAs) (the Birds Directive) and the Special Areas of Conservation (SACs) (the Habitats Directive). However, it has been difficult in the United Kingdom to ascertain if a true network of SPAs has been created or to gain an understanding of how effective the protection given to species has been (Baker 2001).

2.5 LANDSCAPE – ALL THINGS TO ALL PERSONS?

That landscape is a concept that has had a long gestation period is evidenced by its appearance first in the English language in the 16th century probably having been

derived from the Middle Dutch word landskip, a painter's term for a view (Pryor 2010 p5). The Council of Europe defined landscape as an area, as perceived by people, whose character was the result of the reaction and interaction of natural and/or human factors (Council of Europe 2003). The Scottish Landscape Forum, while adopting this basic definition asserted that landscape encompassed natural and cultural features and through feelings and memories shaped the experience and perception that turned physical fabric into landscape (Scottish Landscape Forum 2007 p10). The complex interactions that contribute to landscape perception can be made more complex when a temporal dimension is added. For example Foster (2010 p180) also made reference to the strong interplay between highly personal landscape preferences and aesthetic perceptions conditioned by the social knowledge that had accumulated over time since childhood.

Landscapes have strong phenomenological elements and can be perceived as the products of continuous dialogue between external stimuli and internal readings informed by a wide range of cultural norms and personal experiences (Herring 2009). Therefore, the same landscape may potentially have different meanings for example for the rural residents, the tourist or rambler, the crofter, the forester, the estate manager, the artist, the poet, the geographer, the geologist, the ecologist the landscape architect, the historian and the archaeologist. Thus depending upon the observer's frame of reference the same landscape may be viewed differently along with landscape values and the desire to protect them.

An intrinsic value embedded in some landscapes is what has been referred to as wild character, wildness or wilderness derived from the Anglo-Saxon wil-deor-ness meaning

the place of wild animals. Perceptions of wilderness have changed over time. The early Christians regarded the wilderness found in remote places, e.g. North Rona, as a place where the individual might find God. This is in contrast to modern civilisation where the wilderness has tended to be feared (Hunter 1995 p51). A postmodern critique of wilderness argued that it is a state of mind embodying an untenable dualistic vision where what is human can be found entirely outwith and opposite to the 'natural' (Cronon 1996). However, this, or any other conception of wild, wildness or wilderness, is more problematic within the context of the 'developed' landscapes of Scotland. Nevertheless, four definitions of wild land have been identified from governmental and organisations' existing literature (McMorran et al 2006). These refer to: uninhabited and inaccessible countryside with minimum human influence (National Planning Policy Guideline 14); limited core areas of mountain and moorland and remote coast beyond human artefacts (Scottish Natural Heritage); relatively remote and inaccessible land offering opportunities to escape from the pressures of everyday living (National Trust for Scotland); and uninhabited land containing minimal evidence of human activity (John Muir Trust). SNH (2003) identified a number of non-designated wild land search areas to provide a starting point for the identification of wild land in Scotland. However, it could be argued on the basis of the postmodern critique of wilderness referred to above that drawing any line to demarcate these areas is problematic. An additional dynamic visual factor in considering the aesthetic appreciation of the natural environment in the Western Isles is the seascapes and maritime or peri-maritime coastlines. Seascape refers to the visual and physical conjunction of land and sea, which combines maritime, coast and hinterland character (Grant 2006 p2). These are constantly changing phenomena with the natural dynamism of waves, tides, currents, wind and coastal processes a key characteristic of seascape frequently influencing both the physical environment and people's experience of the coast (Grant 2006 p14).

An important issue in analysing public perceptions of landscape in Scotland are significant historical events which have resulted in strong regional landscape identities. For example the crofting landscape in the Western Isles has been described as the most distinctive landscape in Western Europe, a landscape created by smallholdings and townships with their lines of scattered croft houses and common grazings (Willis 1991). This relative uniformity of township settlement is the outcome of a conscious attempt to accommodate displaced people in a restricted setting and represents the tangible expression of a distinctive way of life dictated by events at a particular point in history (Willis 1991). Another important historical event was the Highland Clearances in the 19th Century which have left a legacy of past human influences on the landscape evidenced by the crumbling ruins, roofless stone buildings or abandoned rigs (Hunter 1976; Devine 1994; Mackenzie 2004). Both past and present human activities and artefacts play an important role in how landscapes are now perceived. For example the Neolithic duns, traditional land uses such as crofting practices, the 'wet deserts' caused by overgrazing the land, sheilings and peat banks have all left their mark on the landscape (Smout 1991 p242). Landscape has therefore become one key symbol of nationhood providing as it does links between blood and soil (Rennie 2006).

Culture and community can assimilate the local environment into its consciousness with language reflecting a local culture's interpretation of a landscape's physical features (Ball 2002). In the Western Isles the past Celtic and Norse influences and the contemporary Gaelic influence have left their imprint on place names. The close relationship between the Gaelic language spoken in the North West Highlands of

Scotland and the Western Isles has a strong bearing on the perception of a landscape's visual beauty. That language articulates diversity is evidenced by the Gaelic names for water features and geophysical features, there are for example 70 Gaelic terms that mean hill, mountain and high ground, the size and shape of a feature and landscape colours (Maclleathain 2007).

2.5.1 LANDSCAPE EVALUATION

Landscape evaluation methodologies have shifted from quantitative to qualitative techniques reflecting the challenge to positivism evident in other disciplines such as planning and the emergence of post-positivist paradigms. For example following the Countryside in 1970 Conference and in the lead up to the designation of National Scenic Areas (NSAs) three broad techniques for landscape evaluation emerged: measurement techniques; preference techniques; and consensus approaches (Turner 1975). Linton (1968) devised one of the cartographic measurement techniques used in Scotland in the late 1960's. Six types of landscape were defined and then allocated a numerical value based largely upon relief and boldness of form. Among the criticisms of this methodology were that it did not evaluate the varying qualities of the types of landscape identified and that it relied too heavily on land-form (O'Riordan 1971; Clout 1972; Gilg 1976).

In the mid 1970's there were growing criticisms of quantitative methodologies. Dunn (1974) concluded that it was important to dispose at the outset with the myth of objectivity that underpinned quantitative techniques. One critical issue was that any

landscape analysis involved an initial 'subjective' evaluation by the 'expert' or the public before any 'objective' evaluation or measurement could be made (Penning-Rowsell 1974; Appleton 1975). In addition to concerns about objective measurement methodologies longer-term factors such as soils and climate change were considered important before policy making and decision-making could take place (Crofts 2000). Another critique of quantitative measurement was that in the context of policy making not enough consideration was being given to the dynamic nature of the values attached to landscapes, particularly cultural landscapes (Mather 1996). In addition Scott (2006) argued that there were several possible more subjective approaches that could serve as useful models. These involved taking into account the role of cognition, the engagement of the real world, as well as the role of the visual.

Nevertheless, it has been accepted for some time that landscape evaluation methodologies can assist with the formulation of planning policies for the better protection and enjoyment of the landscape (Linton 1968; Laurie 1970; CCS 1971). For example particular indicators have been advocated to guide development in the landscape in a sustainable manner. Indicators reflect the complexities and dynamics of landscape change assist decision makers and users to assess progress towards a sustainable countryside, provide early warnings of environmental damage and can communicate and simplify ideas, thoughts and values (Falzon and Scott 2004). The carrying capacity of a landscape has also been used to inform planning policy formulation. Carrying capacity has been defined as the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type (Swanwick and LUC 2002). Characterisation, a form of minimalisation or reductionism, can work with

32

the complexity of landscape by simplifying the world to its barest essentials and elements (Herring 2009 p63).

An example of a characterisation methodology was the detailed assessment of landscape character within the Western Isles. This was carried out as part of a national programme of assessments prepared by SNH in partnership with local authorities between 1994 and 1998 (SNH 1994; Richards 1998). The eleven character types identified in the Western Isles assessment were: Crofting Type 1; Crofting Type 2; Crofting Type 3; Uist Crofting; Machair; Boggy moorland; Rocky Moorland; Knoc and Lochan; Rock and Lochan; Mountain Massif 1 and Mountain Massif 2. It could be argued critically that this exemplified the 'expert' qualitative approach to landscape evaluation examined above which had in effect resulted in a reductionist exercise. The key forces for change and design guidance for potential development were also incorporated into the report thereby providing potentially important land policy guidance.

Because the expert-led approach has tended to feature prominently in landscape evaluation and policy formulation, a perception amongst some of the public has arisen that only trained professionals had the ability to assess scenic quality (Zube et al 1982; Grant 2006). Linton (1968) recognised the value of 'scenery' as an asset but maintained that its potential was recognised only when valued and exploited by a society that had reached a particular cultural and economic level. Therefore farmers can be perceived as 'experts' in that they come to know the landscape from their engagement with it and the relationship between being, doing and knowing within the landscape becomes blurred (Setten 2001 p221 quoted in Scott 2006 p3). In a world where perception and the virtual

can matter more than 'reality' mental images of the landscape may prove to be the key to its survival (Pryor 2010).

2.5.2 LANDSCAPE VALUE PROTECTION - NATIONAL SCENIC AREAS

Because of the subjective elements involved in landscape evaluation incorporating landscape values into governance has proven to be particularly problematic. The conservation of intrinsically valuable landscapes within the UK has traditionally relied on designating 'special' areas and attempting to protect and enhance them through a combination of planning control, grant aid and countryside management (Powell et al 2002 p279). Of the 40 areas in Scotland defined as nationally important and known as the National Scenic Areas (NSAs), there are three designated in the Western Isles. As described below, the evidence available points to subjectivity playing a part in the methodology used in the delineation of NSAs. The Countryside Commission for Scotland (CCS) adopted a multi-stage approach to identifying NSAs: the diversity of landform, vegetation and/or ground cover, or other outstanding visual characteristics were used as criteria to identify areas of national merit; a desk appraisal was carried out on areas that had already formed part of the background work for the CCS report "A Park System for Scotland"; and the subjective judgement and opinions of a group of surveyors based on field inspections. The CCS (1978) defended the omission of geology, geomorphology, petrology, climate and biodiversity by indicating that these were factors not considered unimportant. The CCS believed instead that enjoyment of fine scenery was based on a perception of the whole and did not require a more formal analysis (CCS 1978). Another fundamental weakness identified in the CCS methodology was the exclusion of cultural criteria (Cosgrove and Jackson 1987).

Bearing in mind some of these methodological weaknesses, doubts can be raised about some of the areas designated as NSAs and whether there were other areas that should have been chosen but were not. An alternative viewpoint might be put forward that there is a permanency in the choice of NSAs because their boundaries have remained largely unchanged since they were first designated.

Turner (1975) supported the consensus approach in the assessment of landscape quality. In the context of the planning system he considered a simple intuitive committee approach more easily defendable than the quasi-objectivity and dubious statistics employed in some of the quantitative methods. However, no empirical evidence was put forward to support this conclusion. The NSAs actually chosen have become enshrined in a legislative framework that has given them a degree of permanence and legitimacy that they might not otherwise have possessed. However, the word 'landscape' does not appear in the Town and Country Planning Acts of 1947, 1968 or 1972 (Turner 1975). The 1967 Countryside (Scotland) Act as well as establishing the CCS gave Local Authorities the duty to conserve the natural beauty and amenity of the countryside although again landscape as a separate entity was not mentioned. This lack of joined-up landscape protective legislation was rectified by the Town and Country Planning (Scotland) Act 2006. Section 263A of the Act requires special attention to be paid to the desirability of safeguarding or enhancing an NSA's character and appearance.

In 1997 the British Government endorsed the need for a national landscape designation but recognised some of the concerns that had been expressed about the concept of an NSA since its establishment in 1980. The SNH Report on NSAs (SNH 1999) identified

a number of weaknesses: the absence of a statutory basis in primary legislation; the lack of a strong policy framework; the absence of a clear vision and strategy and the lack of understanding among public bodies, land managers, communities and the wider public. Most of the respondents to the NSA consultation exercise supported the priority objective of strengthening the NSA framework or criteria to make it a more effective designation. A small number of respondents suggested that the NSA designation should be set aside (SNH 1999). In the main the latter view came from individuals or from community councils who felt that there were too many designations which had become an unwanted barrier to local development. Powell et al (2002) succinctly made the argument for reconciling these competing opinions. They stated that in pursuing the management of landscape protected areas the primary concern should be to avoid simply preserving landscape but should also involve the implementation of policies that promoted social and economic activities conducive to environmental integrity. This was what was referred to as a 'virtuous circle'. These comments point to a shift from the rather sterile preservation ethos towards a more holistically sustainable approach to managing change in NSAs.

2.6 PROTECTING BIODIVERSITY INTRINSIC VALUES

2.6.1 BIODIVERSITY?

Potential confusion exists in the many scientific and legislative attempts to define the neologism that is biodiversity. 'Biodiversity' was coined as an abbreviation of 'biological diversity' in 1985 but the term has arguably taken on a meaning all of its own and it would be very difficult to count the number of times biodiversity is used every day by scientists (Faith 2007 p1). However, the pluralistic characteristics of

biodiversity as a concept result in it remaining ill-defined (Norton 1994; Callicott et al 1999). The discussion on the 'nature' of nature above illustrated the potential difficulties involved in finding a consensual definition of the related concept of biodiversity. Indeed Noss (1990) has pessimistically forecast that a simple and comprehensive definition of biodiversity that can be applied in a regulatory framework is unlikely to be found. Despite this prediction, some biologists (e.g. Wilson 1988 quoted in Faith 2007 p2) have concluded that as a paradigm biodiversity has transformed a disaggregated science into a much more holistically based science.

Nevertheless, despite misgivings the concept of biodiversity has become increasingly prevalent in the global conservation lexicon and become incorporated into many policy documents at different geographical levels. In addition to the anthropocentric definition of biodiversity incorporated into many policy documents an approach which is clearly biocentric was adopted by the 1992 Earth Summit in Rio. This defined biodiversity as "the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part: this includes the diversity within species, between species and ecosystems". This definition which was adopted by the Convention on Biological Diversity (CBD 1992 Article 2) has influenced governing bodies at international, national and local levels. It included the UK amongst its signatories and has also been endorsed by the European Union which included the objectives of the Convention in the sixth EU action programme. The UK Biodiversity Action Plan was prepared in 1994. This was followed by the Scottish Biodiversity Strategy (Scottish Executive 2004c) which established the framework for Local Biodiversity Action Plans (LBAPs). This completed the geographically top-down approach from the global to the local level and

illustrated at least in policy terms the transferability of the Convention's definition of biodiversity.

However, what has emerged from some of the policy documents designed to conserve biodiversity is that as a result of the ambiguities surrounding the term already referred to, the policies within the documents may refer to species, habitats individually or may take the more holistic approach referred to by Wilson (1988). This point is well illustrated by Treweek (2009) who uses the term 'wider biodiversity' to differentiate between listed species and habitats and other parts of the biosphere. Therefore despite the wide geographical range in the usage of biodiversity it remains a concept linked to an unknown level of biological variations and their future values (Faith 2007). In addition to a positivist conceptualisation of biodiversity the concept has also been regarded as post-positivist in that it depended upon more than just scientific criteria. For example Roebuck and Pfifer (1999) argued that the biodiversity embedded in conservation activities and some policies is rooted primarily in ethics, values and advocacy.

The compilation of the Scottish Biodiversity List incorporated an attempt to combine both positivist and post-positivist stances. The overall aim was to identify a list of flora, fauna and habitats of importance for the conservation of biodiversity in Scotland under the Nature Conservation (Scotland) Act 2004. In addition to the scientifically based criteria a social criterion was used to identify non-domestic species and habitats of greatest importance to the public (Wilson 2005). A 'top ten' list of animals, plants and habitats was then compiled (Fig. 1.1). A very small percentage of the public considered

38

that no part of Scottish biodiversity was important – 6% for plants, 5% for animals and 2% for habitats (Stewart 2006). Wilson (2005 p16) concluded that the public illustrated in their choices some degree of prior awareness of vulnerable species and habitats.

Consequently an issue that may contribute to the acceptance of conservation measures is the extent of the correlation between the scientifically defined important elements of biodiversity and the factors considered by the public to be important. In the survey importance was linked to conservation, one's own enjoyment, the local economy or aesthetics. In effect the criteria combined the intrinsic and utility value of the natural environment. In the context of the case study moor and peatland and bog were well outside this top ten gaining only 8% and 5% support respectively. The public top ten contributed an additional eight species and two habitats to the list (Stewart 2006). This exercise can be perceived as a significant attempt to incorporate public opinion into a document with an important role to play in the formulation of conservation policy.

Woods (2003 p273) claimed that nature was socially constructed and contested but employable by human actors to legitimise particular actions. As with landscape there is a cultural dimension to the understanding and appreciation of biodiversity. For example in the Gaelic language the names of plants and animals have become embedded in many Scottish and Western Isles place names. These names give some indication as to what part of the local biodiversity is perceived to have the most important intrinsic and utility value and gives an insight into how the ecology of an area has changed over time (MacIlleathain 2007).

FIG. 1.1 SCOTTISH BIODIVERSITY LIST – PUBLIC TOP TEN

NUMBER	TOP TEN ANIMALS	TOP TEN PLANTS	TOP TEN HABITATS
1	RED OR ROE DEER	HEATHER	HILLS/MOUNTAINS*
2	RED SQUIRREL	SCOTS PINE	LOCHS*
3	GOLDEN EAGLE*	BLUEBELL/HAREBELL	WOODLANDS*
4	DOLPHIN*	OAK	BEACHES*
5	SALMON*	THISTLE	RIVERS/STREAMS*
6	BADGER	ROWAN*	PARKS
7	OSPREY*	SCOTTISH PRIMROSE*	COAST*
8	OTTER*	POPPY*	GARDENS
9	BUTTERFLY*	FERNS*	FARMLAND
10	ROBIN	ORCHID*	OPEN SEA
* SPECIES AND HABITATS ALSO MEETING SCIENTIFIC CRITERIA			

Ball (2002) observed that biological communities could be perceived as 'stakeholders' in their own right. In this context biodiversity has assumed an intrinsic value. However, with biological communities providing a range of ecosystem services, for example a source of food, fuel and clothing and providing services such as water purification, converting carbon-dioxide into oxygen and generating revenue from tourism (Ball 2002) they have also assumed utility value. This is another illustration of some of the analytical complications which can arise from attempting to differentiate between the intrinsic and utility valuations that society places on the natural environment. However, this confusion is not foremost in Callicot's (1986 p140) conclusion that there is an

ethical obligation towards biodiversity conservation because species have values "in and for themselves" in other words an absolute intrinsic value.

2.7 THE SPATIAL PROTECTION OF INTRINSIC BIODIVERSITY VALUE – THE PUBLIC PERCEPTION

2.7.1 PERCEPTIONS OF PROTECTED AREAS EFFECTIVENESS IN CONSERVATION

Because of the growing primacy of the supranational scale of conservation legislation the UK individual, group and governance stakeholders may perceive that they are less able to influence conservation legislation and/or its outcomes. On the other hand the potential also exists for some stakeholders to perceive the supranational scale of some PAs as an accolade in the sense that it symbolises the international significance of the designation and the natural environment within it.

There are over 200 pieces of secondary legislation involving environmental protection. Cichowski (2000) argued that this resulted in a fragmented and un-coordinated suite of UK legislation that could be very difficult for individual stakeholders and conservation groups to navigate through. A complex system has evolved rather than being planned, as environmental needs have changed and become better understood (Scottish Office 1998). Despite a review of PAs carried out in 1997 the number of designations has increased due to international obligations. Despite this the extent of UK designations has come in for some criticism from several conservation groups. The World Wildlife Fund and FoE for example pointed out that the UK compared unfavourably with other

EU countries in terms of the percentage of territory nominated (2.8%) (Coudray1998). Significant omissions from the UK list were cited as the Atlantic Oakwoods habitat (only 5% nominated) and some of the important Atlantic salmon rivers (Cairns 1999). Consequently although certain parts of rural space are legally designated as valuable for the nature they provide, only a small percentage of valuable habitats do get protection spatially, often demarcated by boundaries that are not always ecologically sharp and do not exist in reality (Boothby 2004).

Bishop et al (1995) have compiled a list of criticisms that they have identified in the PA approach to the protection of biodiversity. These include: the negation of a holistic approach; the encouragement of the idea that conservation is a sector of land use; that environmental problems do not stop at PA boundaries; a growing problem of diminishing returns as PAs proliferate; the possibility that physical changes may make PAs obsolete; that PAs are too defensive a concept; and that the PA system creates geographical and functional separation. Bishop et al (1995) add that crucially the multiple meanings of biodiversity necessitates a more active management approach to an area than the 'static' PA designation which is more orientated towards preserving and safeguarding a natural environment. Some of these criticisms of current measures aimed at biodiversity protection are echoed by Crofts (2004 p144) when he stated that PAs are too small, lack a recognition of cross-boundary ecological interactions, are overly static with an excessive emphasis on the preservation of key features rather than wider ecological and environmental processes and that their management is too exclusive. These criticisms may well have implications for how well society understands the biodiversity dynamics within PAs and for the assessment of the effectiveness of the PA network in relation to conserving biodiversity values.

2.7.2 THE NATURAL ENVIRONMENT: CONSERVATION AND DISASSOCIATION

At a local level public perceptions and evaluation of PAs have been influenced by the history of nature protection, the power balance between stakeholders and the economic circumstances prevailing at the time (Wallner et al 2007). The first of these influences was analysed in section 2.6, the second and third influences are analysed here. The selection of a Site of Special Scientific Interest (SSSI) is based on pre-determined scientific criteria defined by the Joint Nature Conservation Committee. The selection procedure therefore contrasts starkly with the post-positivist approach taken to evaluate the natural environment discussed in section 2.6. The SSSI designation procedure has been criticised for not involving local interests and because its reliance on scientific expertise has the potential to concentrate power in the hands of the technically and scientifically adept, transforming a democracy into a technocracy (Ball 2002). However, this conclusion needs to be qualified as local opinion has to be sought by SNH by statute through consulting the democratically elected local planning authority. Another important local input was made through the SNH Regional Boards (disbanded in 2007). These comprised of members from within the area of the designation and had powers delegated to them from the main Board for much of the notification procedure. However, the involvement of the non-scientific communities in SSSI selection procedures appear almost tokenistic when compared with the role played by the non-scientific communities in the management of Local Biodiversity Action Plans and the selection of the Scottish Biodiversity List already referred to in section 2.6.

PAs may therefore be criticised for inter alia, being expert-led and top-down, not involving community stakeholders' participation in the designation process and having a restrictive and prescriptive approach to management. An extreme form of this 'biocentric' approach towards conceptualising wilderness and biodiversity conservation is illustrated by PAs where there is a policy of excluding local people from protected areas altogether (Brown 2002).

The shift in nature conservation from species protection to habitat protection was implicated in the head-on collision with landowners which led to the perception that landowners' property rights had been weakened and the power of land managers had been diminished by external 'technocrats' through the adoption of stricter regulation of landowners' activities (Ball 1985; Grando 2007). Therefore despite extensive consultations by SNH to counteract this criticism the potential still existed for considerable antipathy on the part of some landowners to the SSSI designation due to what was perceived as a violation of their property rights (Harrison and Burgess 1994 p294). This potential for antipathy was exacerbated due to the large extent of the land area being notified. For example the Highlands and Islands of Scotland contain 55% of Scotland's SSSI coverage (Watson 2000). Goodier (1984) when comparing areas inside and outside SSSI's claimed that the natural heritage had been progressively destroyed by a great variety of mainly agricultural and forestry operations while by contrast the damage done by development subject to planning control was less severe because of the much more limited area involved. Therefore if landscapes and ecosystems were the result of a long-term interaction between man and nature, preserving them meant preserving the relationship of local communities with their environment (Grando p329).

Although PAs in different forms have continued to play a major role in biodiversity conservation the top-down 'fortress conservation' approaches have alienated local resource users and were unsustainable in the sense that they did not further social equity (Brown 2002). The primacy of the European Directives in conservation legislation was referred to in section 2.7.1 and Scott (1998) has argued that these Directives actually threaten in the name of conservation to obstruct initiatives brought forth in the name of development. The relationship between nature protection and local development in PAs was widely debated at both scientific and political levels with these alternative options working against each other (Grando 2007 p327). Among the criticisms levelled at PAs by Crofts (2004 p144) in this context was that: social and economic forces driving change in and adjacent to PAs were often ignored; that PAs were affected by activities funded by business and/or subsidised by the government which had a detrimental effect on ecology and landscape; and funding for pro-active management of PAs was often limited.

The spectrum of potential and existing conflicts between nature conservation and development in Scotland have been stated concisely by Selman (1998): that conservationists in Scotland have been accused of being elitist and attempting to thwart any local progress in order to preserve a landscape still evocative of aristocratic privilege; that many users of the Scottish countryside resented the stamp of officialdom apparent in PA designations; and a perception that there was a need for the Highlands be more productive. The conservation/development debate is exacerbated by some conservation organisations assuming that public objections to PA designations are based on an incomplete knowledge of or concern for the environmental benefits associated with PA designation (Stoll-Kleemann 2001). This view has the potential to support the

45

PA protagonist argument that PAs are run by 'nature people' for themselves and that they ignore the views and needs of local people and the wider community (Crofts 2004).

It can be argued however, that potentially the conflict between conservation and development need not necessarily be as acute as these authors imply in their comments. In a review of National Nature Reserves (NNRs) SNH indicated that local communities would have a greater involvement in their management. This was aimed at increasing NNR's contribution to the economic and social wellbeing of the countryside (Markland 2000). SNH also has an important statutory duty, important in the context of the perceptions of PAs, under the Natural Heritage (Scotland) Act, 1991 to take appropriate account of the needs of agriculture, fisheries and forestry; of social and economic development; of sites with archaeological and historic interest; and of the specific interests of owners and occupiers and local communities as well as ecological and environmental changes to the natural heritage in carrying out its functions. This is referred to in the 1991 Act as the "balancing duty". In this context SNH has emphasised that SSSIs are not no-go areas for economic development and that the challenge for SNH was to strike the right balance between ensuring the conservation of the area's special interest whilst not inhibiting the delivery of social and economic benefits more than was absolutely necessary (Markland 2000). However, it is clear from some of the comments referred to above that individuals and communities do not consider that they have been given adequate opportunities to become involved in the management of PAs and that many do not believe that the correct balance between conservation and social and economic benefits has yet been struck.

2.8 CONCLUSIONS

Describing the natural environment as having defined intrinsic values has sometimes proved to be problematic. Nevertheless, the definition of intrinsic value has proved to be a useful tool in advancing this research. The discursive post-modernist critique of the 'nature' of nature has added another dimension to the analysis of the already complex evolution of measures to protect the natural environment from over-exploitation. A significant part of the national and increasingly internationally legislative approach to conservation of the natural environment has been based on the spatial approach. The lack of public participation in what some still perceived essentially as an 'expert' scientifically directed approach to the designation process imbued the process with a top-down ethos that risked alienating stakeholders (Waller et al 2007). The complexities involved in landscape and biodiversity perception and valuation discussed in section 2.6 illustrate the difficulties faced in drawing any firm conclusions about how the success or failure of the spatial approach to conservation may be perceived by publics. It is the intention of this research to explore in detail the natural environment/development relationship and the divergent perceptions that stakeholders possess of how this relationship should be mediated.

In the new post-modern era in which the traditional metaphysical dualisms underpinning Enlightenment modernism have been discredited and presumed dichotomies between facts and values, nature and culture and science and politics should be jettisoned, with nature becoming a negotiable concept represented not only by scientists but by poets, architects, farmers and the layman (Hajer and Versteeg 2005 p178). However, there may also be some circumstances whereby this negotiable nature

may be better viewed as a nature which is the product of cooperation involving different epistemologies. For example in the case of farming, the farmer in addition to his farming knowledge and intuitive understanding and instinctive appreciation of the natural environment, may also be dependent to some extent on the objective positivist scientific knowledge necessary for farming to be carried out efficiently and sustainably. It is within this negotiable and cooperative framework of nature that the next chapter will examine the utility values attached to the natural environment.

CHAPTER 3 THE UTILITY VALUE OF THE NATURAL ENVIRONMENT: TRADITIONAL LAND USE AND QUALITY OF LIFE

3.1 INTRODUCTION

This chapter will review the literature in order to better understand the interaction between the natural environment and traditional land uses. The word value has been used here to highlight the importance of the natural environment in relation to the resources it provides for humans. But what does value mean in this context? Values have occupied a central place in the benefits that the natural environment brings to humans (More et al 1996). Philosophers from Plato onwards have used value in the context of good, the right, the ultimate end, obligation, virtue, morality and aesthetics (Frankena 1967 quoted in More et al 1996 p398). In the context of natural resource management, Brown (1984) distinguished between preference-based and non-preference values indicating that the former was the most relevant to economics and social studies. The fact/value relationship can be perceived in the context of facts being objective and values being subjective in that they specify unique relationships between a particular person and a particular object (More et al 1996 p400). In order to progress this research, the position taken here is that values are preferenced and subjective so that an individual or group perceives the utility value of the natural environment within their own frame of reference.

What values can be classified as utility values in relation to the natural environment? Put succinctly by Zimmerman (2010), whereas an intrinsic value is a non-derivative value, an extrinsic value can be classified as a derivative value. However, as will be illustrated later in this chapter any distinctive qualities attached to the natural environment may become blurred in the context of the natural environment. This is especially so bearing in mind what was revealed in Chapter 2 concerning the cognitive vagueness surrounding what constituted 'nature'. The natural environment's extrinsic value covered here is the utility value. This refers to the natural environment's ability to provide the goods and services that satisfy the needs of producer and consumer. The first part of this chapter will analyse the utility value of the natural environment in the context of the traditional means of living off the land in a crofting area. The second part of the chapter will examine those common goods that are provided by the natural environment. These are of concern not just to the individual but to society (Maler 1985; Jacobs 1997). The natural heritage is important as a key element of individual and social wellbeing and its protection and management entails rights and responsibilities for everyone (Council of Europe 2003).

3.2 INTRINSIC VALUE + UTILITY VALUE = INTRINSIC VALUE

3.2.1 PROTECTED AREA MANAGEMENT

The concept of land encompasses a variety of functions – the environment, economics, society, a sense of space for locating economic activity and the provision of organic and inorganic materials for agriculture (Hubaceck and van den Berg 2006 p5). Protected Areas (PAs) involve land as a resource for the conservation of the natural environment. PAs form part of what MacFarlane (2002) calls the 'conservation estate' in recognition of their landscape or ecological importance. This estate includes areas and sites that may not be formally designated but are under the control of conservation organisations. Protected

Areas provide functions and public goods which are critical to society. Examples include biodiversity, tourism, local amenity, natural products, soil, carbon sequestration and cultural values (Schelhas et al 2001 p28). The functions of land designated as a PA mean that PAs have a wider remit than conservation and can therefore be perceived as playing a part in the protection of rurality and vice versa (Woods 2003).

PA management effectiveness has involved several approaches by government and land owners and land users. The regulatory measures attempted have included establishing public bodies with the sole aim of regulating land use and the passing of legislation such as planning legislation (Leitmann 1998). However, regulations by themselves are usually inadequate to protect natural areas because they are inadequately enforced, costly to enforce, place landowners on the defensive, fail to take positive action to implement conservation measures and confine management practices to the minimum required by law (ibid p133). Consequently in pursuing the sustainable management of protected areas the primary concern must be to avoid the 'preservation' ethos whereby landscapes are stopped from evolving (Powell et al 2002 p282). Alternative means of ensuring that the natural environment within a PA is protected include land management measures such as adaptive management, where existing practices are adjusted to ensure that the natural environment is not harmed and collaborative management, where more than one stakeholder, e.g. an NGO and landowner, are involved in PA land management (Schelhas et al 2001 p9).

If landscapes and ecosystems are the result of long-term interactions between man and nature protecting them means preserving the relations of local communities with their environment (Grando 2007 p329). The Convention of Biological Diversity marked a significant shift in the perception of PAs by linking them with issues of larger public

concern, e.g. sustainable development, traditional knowledge, access to genetic resources and the equitable sharing of benefits (Convention of Biological Diversity 1992). These views imply strongly that there are conservation issues within PAs that extend well beyond the boundaries of PAs. In other words conservation objectives and land management within PAs cannot usually be considered as if the PA was an 'island' of natural heritage importance. Bryden and Shucksmith (2000) take on this widening of the conservation/agricultural agenda by making reference to concepts of sustainable agriculture and environmentally sensitive farming quoting the most often used definition of sustainability, that of the Brundtland Commission: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987, p4 and p43). The sustainability paradigm will be analysed in more detail in Chapter 4 and within this broader context this section will examine the relationship between PAs, natural environment conservation and agricultural activities.

3.2.2 AGRICULTURE – A SUBSIDISED LAND USE IN A NATURAL ENVIRONMENT

Agriculture has been the dominant use of rural land in Scotland with the result that Scotland's biodiversity and landscapes and environmental management have been closely interlinked (Powell et al 2002; McMorran et al 2006). The type of agriculture practiced is very dependent upon the natural environment. For example geology, soils, topography and climate have had a significant and important influence on agriculture in the hill and upland areas (McMorran et al 2006). Altitude and climate are both important determinants of agricultural land use with little cultivation above 30 meters in West Highland most of which is used as rough grazing (Robinson 1994; Royal Society of Edinburgh (RSE) 2008).

Most of the uplands have multiple land uses resulting in semi-natural and non-tree vegetation and those parts used for grazing of livestock closely associated with land in use primarily for the conservation of wildlife, including PAs (Coppock 1994).

It has been argued that some agricultural practices and their support mechanisms have in some instances led to negative impacts on landscape and biodiversity. For much of the post-war period agriculture policy has been primarily determined by strategic and economic considerations with an expansionist policy of encouraging production and promoting technological change (Marshall 1988 p419; Lloyd et al 1989 p19).The impact of this policy on the hill and island landscapes and biodiversity has been well documented (e.g. Mowle 1988; Shucksmith 1988). "The open moors regarded as wild are a product of man's mismanagement" (Mowle 1988 p319). Nevertheless, the paradox is that it is the uplands used for grazing livestock that are closely associated with the land used primarily for the conservation of wildlife, including PAs (Coppock 1994).The utility value of the natural environment in this context means that it becomes a public good. Damage to the utility and intrinsic values placed on the natural environment in the context of it being a public good can be considered morally wrong because any damage to it becomes an ethical issue as well as an economic issue (Hubacek and van den Berg 2006).

By far the most important impact on farmers' well-being has been from changes in agricultural policy on which hill and island agriculture remains heavily dependent (Royal Society of Edinburgh) (RSE) 2008 p52).The main European economic driver came to the fore with entry into the European Economic Community (EEC) in 1973. However, the adoption of the Common Agricultural Policy (CAP) and the subsidies paid to farmers came in for criticism from farmers, customers and conservationists and the subsidies were

53

recognised after 30 years to be an environmentally destructive by-product (Shucksmith 1988; Potter and Lobley 1998). This agricultural productivist consensus which had resulted in agricultural land use being orientated towards increased yields. However, this view was not universally held and subsidies became a sharply contested issue by the 1980s because of the increasing emphasis on the amenity value of land rather than its productive potential (Marsden et al 1993; Courtney et al 2006).

There was increasing evidence that high rates of sheep stocking and changes in stock mix from cattle/sheep to sheep only had led to extensive areas of peatland being damaged (Birnie and Hulme 1990). In addition there was increasing evidence that the numbers of ten breeding bird species, some of international importance had declined (ibid 1990). Crucially there had been a time delay in making environmental assessments of the impact of the CAP. It had taken some time for a connection to be made between the operation of the CAP and the growing evidence of habitat destruction and landscape decline (Potter and Lobley 1998). However, this majority view amongst conservationists about the negative impact on bird species was not supported by every observer of the natural environment. Gauntlett (2003) for example argued that the 'loss' of birds due to agricultural activity was also dependent upon the perspective of the time-frame chosen. He concluded that it was unlikely that bird populations on land used for agricultural purposes could ever be returned to some previously higher artificial level. In addition, determining the level of environmental degradation caused by European integration through the provision of subsidies was complicated by each country having adopted different standards of measurement (Joseph 1997).

The consensus view was however, that major reforms of the CAP were required. The most important of these concerned Agenda 2000 and the Mid-Year Review which allowed the introduction of inter alia, agri-environment schemes linked to the condition of the environment (RSE 2008 p54). Although the reforms were heralded as a new opportunity for rapprochement between agricultural and environmental interests they were considered by many environmentalists as a pale shadow of what was hoped for (Winter 1996 p308). In addition, the number of measures within the revised system designed to be more effective and conservation orientated created the potential for confusion and delay. A total of 40 schemes aimed at achieving agri-environmental objectives were put in place before the introduction of the Scotland Rural Development Programme in 2008, a system whose objective was to rationalise the system of agri-environmental assistance (RSE 2008 p57).

About 80% of Scotland is classified as remote hill and uplands (25% of the UK land area with only 1% of the UK population) with a poorer climate, less fertile soil and a number of locational disadvantages in terms of distance from markets and services (Mowle 1988). These upland areas in the Highlands and Islands became defined as Less Favoured Areas (LFAs) under Article 3(4) of EC Directive 75/268 (RSE 2008). A large proportion of the Less Favoured Areas are located within the Scottish Highlands and Islands. Here because of the structure of the population and low population density, the need for some services is greater although the provision is less. This has resulted in what has been referred to as the Highland Problem (McCleery 1988).

Headage payments for ewes and hill cows became an important element of income in the crofting areas (Winter et al 1998; SEERAD 2005). Mowle (1988) criticised the history of countryside change within LFAs as having been one of dereliction and decline with

centuries of grazing and burning and general mismanagement having led to degenerative changes on the hills and moors. However, evidence from the Institute of Terrestrial Ecology indicated that the impact of this fiscal measure on the environment varied throughout Scotland (Ball et al 1982). The awareness of damage and the willingness to rectify it resulted in modifications to the LFA measures. These modifications put a greater emphasis on multi-functional farming and the environmental controls relating to the landscape and biodiversity and promoted more generally environmental and countryside improvement (Scottish Government 2007; Committee of Inquiry on Crofting (CIC) 2008 p35; RSE 2008 p56). This greater emphasis on agricultural and environmental integration is reflected in EU Regulation 950/97. The stated aims of European Union Regulation 950/97 were to contribute to the viability of rural communities, the maintenance of the countryside and the maintenance and promotion of sustainable farming systems conducive to environmental protection.

3.2.3 SELF-MOTIVATED COLLABORATIVE MANAGEMENT

An attempt by stakeholders to voluntarily integrate agricultural activity and natural environment conservation in a mutually supportive manner was evident in the formation of Farming and Wildlife Advisory Groups (FWAGs), the national FWAG having been established in 1970 after the conference held at Silsoe Agricultural College in 1969. The objective of the FWAG concept was to bring farmers and conservationists together in an attempt to collaboratively manage land in order to promote mutual co-operation and understanding and identify where compatibility between agricultural land uses and conservation was possible (FWAG 2002). By 1984 there were 53 County FWAGs (in Scotland forestry was initially included but later dropped) reflecting the emergence of conservation as an identifiable concern for agriculturalists (Cox et al 1985; FWAG 2002).

An interesting conclusion was reached that those agriculturalists involved in FWAGs did appear to be more influenced by conservation related beliefs and less influenced by farm management orientated beliefs (Beedell and Rehman 2000 p123). However, despite this opportunity to collaborate in managing land for crofting and conservation no FWAGs were established in the Western Isles and no evidence is available to explain why this was the case. This voluntary attempt at collaborative conservation management through the FWAG system in Scotland ceased in early 2009 after 49 years.

3.2.4 CORPORATE INTRINSIC/UTILITY ADAPTIVE MANAGEMENT

State funding can be perceived as the outcome of the greater dominance of the agricultural policy 'community', one that had in the post-war period become closed and corporate over a large and diverse rural conservation community (Cox et al 1985; Lowe et al 1986; Lowe et al 1994). The resources for this approach took the form of government funded agri-environment programmes (AEPs). Support mechanisms for agriculture were largely guided by the EU through the CAP. This was one of the outcomes of the sense of environmental crisis that had prompted moves to recast agricultural policy within a framework of broader environmental and rural development goals (Allanson and Whitby 1996). Subsidiarity was built into the system. This allowed flexibility for Member States to design programmes to meet their own nature conservation needs. For example the Hill Livestock Compensatory Allowance in the UK contains compensation for hill farmers to prevent overgrazing and aid conservation (Winter et al 1998) with the cost of implementing this AEP shared between the UK and the EU.

A more holistic attempt at combining agriculture and the environment took the form of the Environmentally Sensitive Area (ESA). The ESAs aimed to re-shape farming in an

optimising manner rather than through maximising the production from land, in order to ensure that wildlife in an area survived and remained distributed across its traditional range (McLaughlin 1992; Wilson 1997). In addition the ESA system did attempt a collaborative approach to managing land of intrinsic value by bringing together agriculturalists, conservation bodies and Government agencies (Bishop et al 1995). Similarities between the geographical targeting of the ESAs and PAs have been identified. Both have been compared in the context of the post-productivist era as an essentially British concept arising out of a long tradition of designating areas for policy purposes (Bishop et al 1995). Forty-three ESAs were designated in the UK under EC regulation 797/85, although this was considerably fewer than the 100 plus areas originally proposed by the NCC in 1985 (Wilson 1997). UK legislation enabled an area to be designated an ESA to protect its natural beauty, flora and fauna, or historic or archaeological features. Farmers and crofters within an ESA boundary were invited to join the Scheme and obtain compensatory payments. One aspect of the ESA scheme that some have considered an advantage has been that payments were made on the basis of action or inaction rather than as a reward for potentially damaging output (MacFarlane 2000). In the Western Isles one ESA was designated, the machair of North and South Uist. The ESA scheme closed to new applicants in 2000 and was merged in 2001 with the Countryside Premium Scheme to form the nation-wide Rural Stewardship Scheme (RSS) which was available more widely within the Western Isles. MacFarlane (2002) highlighted major weaknesses in the Agriculture and Environment Programme (AEP). Geographical boundaries tended to neglect the large areas of adjacent land not covered by the designation but which were nevertheless, considered important elements of the landscape and important in biodiversity conservation. This is a criticism that echoes that levelled at PAs.

Despite the reference to the traditional British approach to policy implementation through spatial designations (McLaughlin 1992), the AEPs continued on the basis of the voluntary principles. This contrasts with PAs where agriculture and other activities are regulated in a mandatory way. Cynics have argued that AEPs solved the environmental problem politically while simultaneously significant investment continued in the commodity regimes so heavily implicated in creating the environmental problems in the first place (Potter and Lobley 1998). Another harsh assessment of AEPs was that the environment became yet another 'option' for which money could be obtained within a subsidy culture, rather than promoting a 'new direction' for agriculture (Hart and Wilson 1998). Marsden et al (1993) took the cynical view that policies designed to protect the environment succeeded only by placing on pieces of land a politically constructed, commoditized value designed to compensate farmers for the loss of exchange value in commodity markets.

Some scepticism was expressed about the influence of measures such as AEPs in changing agriculturalists' perception of the benefits of agriculture/natural heritage integration in the retention or creation of a high quality natural environment. Research into the motivation of agriculturalists that enrolled into ESAs concluded that conservation was perceived by most as a luxury and by a minority as an unwelcome irrelevance to the business of producing food (MacFarlane 2000). However, another study carried out to analyse the uptake of AEPs by farmers found that there was a more complex relationship between personal, family, business and external contextual factors in determining whether there was a willingness and ability to participate in AEPs (Morris et al 2000). There is also some evidence to suggest that some agriculturalists perceived conservation of the natural heritage as a luxury that could be forgone in order that they could concentrate on agricultural production (Carr and Tate 1991). This viewpoint appears to be supported by

the general public. In a survey carried out by the Scottish Executive, 33% of those surveyed thought farmers did play a part in protecting wildlife and habitats but only 17% thought that they should play a part in protection (Scottish Executive 2002). Morris and Potter (1995) warned that unless attitudes to the environment changed, AEPs would be seen as temporary bribes, shallow in operation and transitory in effect.

3.2.5 CROFTING – A REGULATED LAND USE IN A NATURAL ENVIRONMENT

It is difficult to disengage the unique characteristics of crofting as an agricultural land use from its historical origins and its embeddedness within island communities. By the 18th Century, life in the Highlands and Islands was settled into a pattern of farming that aspired to self-sufficiency (Willis 1991 p 28). However, in the years around 1800 landlords reorganised their estates to accommodate sheep ranching and the consequent evictions of tenants led to the Highland Clearances (Hunter 1976 p19). In the Outer Hebrides the crofting system consisted of scattered strips of arable land holdings which were subsequently created as an adjunct of the kelp industry (ibid p19).

After the Potato Famine in the mid 19th Century high levels of emigration from the Highlands and Islands followed. In addition to the moral argument condemning the oppression by the lairds of the rural agriculturalists in the Highlands and Islands some fundamental demographic, land use and economic reasons have also been put forward to explain why this emigration took place. One was that the crofting system as created by the lairds had shown itself to be hopelessly ill-equipped to feed an enlarged population in hungry times (Willis 1991 p46). In addition Smout (1998) was of the opinion that there was inevitability about these mass emigrations because of the difficulties faced in attracting alternative industries such as textiles due to the economic geography of the

Highlands and Islands. Placing a more contemporary perspective on this conclusion he put forward the view that these factors had "time and time again defeated the good intentions of planners" (ibid p337). The outcome of these socio-economic forces was the creation of two landscapes. One was a grim Highlands characterised by poverty, clearance and social dislocation and the other the escapist version created by Sir Walter Scott (Hunter 1995 p96).

Some evidence existed that there was a strong cultural element to the unrest in the Highlands and Islands between 1881 and 1896 (the Highland Land War). It was the strongholds of the Gaelic culture, including the Outer Hebrides that were most strongly linked to the unrest in the crofting areas (Smout 1997 p65). This unrest and the plight of the crofters became the impetus behind the Napier Commission which published its Report in 1886. The most important outcome from the Report as far as crofting was concerned was the 1886 Crofters Holdings Act. This legislation was crucial to the sustainable future of crofting. It defined the legal status of crofting, gave resident crofters security of tenure, the right to a fair rent, the value of any of their own improvements and the right to bequeath the tenancy to a family successor (Royal Society of Edinburgh 2008 p76). A croft thereafter became a rented smallholding regulated through the Crofting Acts (1886 onwards), associated inbye land and pasture rights in common which was initially limited to 30 acres (Grant and Cheape 1997 p272). However, an important issue in relation to crofting as a type of agriculture in Scotland is that it is geographically confined. The crofting legislation specified that a croft should be located within what were defined as the crofting counties (RSE 2008 p76). Before local government re-organisation, the Western Isles formed part of the crofting counties of Inverness-shire and Ross-shire (RSE 2008 p76).

Unlike larger agricultural units which have the primary aim of operating economically, crofts are rarely viable as farming units. Instead their importance can be viewed more in the context of establishing a foundation for the common interest of a community engaged in a range of ancillary occupations (Turnock 1975). To illustrate this point Mackenzie (2001) highlighted the strong linkages between community and crofting in Harris. These bonds were founded on the rights to land, rights held and worked in common, the sense of collective identity and of belonging and a deep knowledge of and attachment to specific pieces of land, to place (ibid 2001). Therefore the utility value of the land in the context of crofting plays an important role in both the use of land and the economy of the Western Isles. This in turn has an important bearing on the economic aspect of the quality of life (QOL).

The fragmented nature of crofting as a land use is reflected in the statistic that there are more landholdings in crofting than other forms of land tenure although this quantity is qualitatively reduced through absenteeism, neglect and unused croft land (Committee of Inquiry into Crofting (CIC) 2008 p22). However, the scale of the absenteeism problem varies throughout the islands: Barra 16.2% (72 crofts); Harris 15.8 % (89 crofts); Lewis 10.5% (378 crofts); North and South Uist 11.5% (162 crofts) (CIC 2008 p22). Although crofting brings difficult to farm land into agricultural use, trends have shown a gradual decline in agricultural activity. There was a 49% decline in cropped land, the area of oats fell by 83%, barley by 46%, stock feeding crops by 51%, although grassland for grazing increased by 47% and ewe numbers dropped by 18% between 2001 and 2007 (CIC 2008 p32). The number of sheep in the Western Isles declined by 30% between 1999 and 2007 (RSE 2008 p24). Crofting is an agricultural activity which differs from most other

agricultural activities. The crofter is essentially a part-time agriculturalist who resides in the crofting community and has a range of jobs or sources of income (RSE p31). However, the contribution of crofting to household income is limited within the Western Isles. The Islands have the lowest percentage of income from croft-based activities in the Crofting Counties at just 22.8% compared to the average in the Crofting County areas of 30.2% (CIC 2008 p42).

The close link that exists between rural land use and the QOL in the Western Isles is exemplified by the socio-economic and cultural value of the traditional agricultural activities. Crofting plays an important role in determining the economy and Quality of Life of small rural communities in the Western Isles (Comhairle nan Eilean Siar 2010). However, compared to other economic sectors the proportion of the contribution to the local economy more generally is proportionately less. A measure of crofting's economic importance is reflected in the numbers employed as a proportion of total employment in the Highlands and Islands. The percentage of those employed in crofting as a percentage of all employed in 2005 in the Western Isles was 3.7% compared with 1% in the East Highlands and 2.3% in the Highlands overall (Birnie, Sharman and Schwartz 2007; Committee of Inquiry into Crofting 2008). The relatively small contribution crofting makes to the Western Isles economy is highlighted in the statistics for other sectors (the figures in brackets relate to all the Crofting Counties):19% (25.6%) employed in distribution, hotels and restaurants; 43% (34.6%) in public administration, education and health; and a further 34.4% (37.7%) in other sectors. Nevertheless, crofting does offer other benefits to QOL. Mackenzie (2010) identified the role of crofting in bonding communities together. Crofting relies on the everyday working of a strong collective bond

to the land, whether through the management of common grazings or other communal agricultural activities (ibid p331).

The Committee of Inquiry into Crofting (2008 p19) neatly summarised the strengths of crofting. Crofting communities gained these strengths from the ability to adapt to changing opportunities based on occupational pluralism. More specifically crofting has contributed the following to crofting communities overall QOL:

- Custodianship of the land for future generations

- Its associated way of life

- Engendering a strong sense of community

- Allowing the passing down of skills and traditions

- Helping to support the Gaelic language

- Contributing to the Gaelic culture although these links are now considered to be more fragile because of the changes in crofting practices especially the decline in common grazings

- Its benefits to the environment

One of the main aims of the crofting governance structures established by crofting legislation was the aim of ensuring that the common benefits that crofting brings were distributed between individual crofters and the communities within which they live. However, these structures have been a source of confusion and debate among crofters for some time (Committee of Inquiry into Crofting 2008 p16). Despite the drawbacks, the Committee concluded that the regulations had sustained crofting by balancing the interests of the individual with those of the wider community both now and in the future (ibid p57).

The crofting governance structures are also an important means of linking individual crofters with key stakeholders such as national government. However, these governance structures, in effect the governance of crofting land, have been found wanting. A need has been identified for greater transparency and accountability and better co-ordination between the Crofters Commission, the Scottish Government and between the Commission and Grazings Committees (Crofting Commission of Inquiry 2008 p6). Although townships and local Grazings Committees provided an important form of local crofting governance and a mechanism for binding together individual crofters as a community, Brown (2006) discovered that the majority of Grazings Committees were less active and had fewer members now than in the past. Brown (2006) also discovered a decline in the use of common grazings and in the levels of involvement and investment by shareholders due to the financial advantages of off-croft employment. Because of the close links between crofting activity and the environment referred to above this situation cannot be perceived as being independent from issues of environmental quality. Fewer active land managers hinders attempts to respond to policies and to facilitate the multi-functional agriculture considered to be essential to the delivery of environmental goods and services (Scottish Executive 2002).

3.2.6 CROFTING AND LAND OWNERSHIP

Inequalities become evident when it comes to the control of land because of issues concerning the relationship between land tenure and land ownership (Satsangi 2006). One explanation for this is that land performs multiple functions (some private and some public), it is highly heterogeneous, fixed in location and inelastic in supply (Wightman 1996; SNH 2002). Land tenure and property rights are also important because they allow access to land for development and have a role to play in the creation of local elites, the

rural class structure and the unequal distribution of power through the concentration of land in few hands (Wightman 1996). The perpetuation of the feudal system of ownership and the primacy of material wealth and the profit motive have been at the heart of the oligarchic control of the nation's land resources (Darling 1955; Hunter 1976).

In many upland estates the main value of the land has lain in the landowners' field sports entitlements and sporting rights which cannot normally be separated from land by the purchase of the land (Scottish Government Advisory Note 2008). Large, mainly private estates provided the land resource for grouse moors and deer forests and thus this rural activity has been closely associated with issues of land ownership (Scottish Government Advisory Note 2008). Lorimer (2000 p409) has heavily criticised this association by concluding that the sporting 'text' has now replaced the once peopled environment with that of a pristine wilderness environment. However, field sports should be perceived more as an input to an important business rather than the anachronism that more urbanised stakeholders might perceive them to be (Wigan 1998).

The passing of the Land Reform (Scotland) Act 2003 was a radical legislative change. The extent to which it was initially opposed by major landowners reflected their stance on the debate as to whether the rights to land should reside with the community or in the possession of an individual or corporation (Mackenzie 2010 p386). The stance of landowners was strengthened by their perception that their lands would be devalued (Peterkin 2001). However, the new legislative process of land purchase was embedded in the ethos of creating a property owning democracy. The community right to buy under this legislation can be activated once the existing landowner has indicated that the land is to be sold. Part 3 of the 2003 Act has also created circumstances in which a crofting community

may oblige a landowner to sell the land associated with that crofting community (Scottish Executive 2004). Cramb 1996 quoted in Chenevix-Trench 2001) attributed the growing public interest in land reform to an increase in environmental awareness and the political benefit which lay in social and economic development. The land reform legislation has according to McMorren et al (2006), opened the gates to an increased diversity of ownership in Scotland with significant implications for the management of wild landscapes. However, McMorren et al (2006) cautioned that engaging the 'community' in land purchase did not in itself ensure that land would automatically have adequate community involvement in its management, that management expertise might not be readably available and that management for profit would not guarantee management for the environment.

The ramifications of the 2003 Act are still to be felt fully and what has happened or might happen as a result of the legislation is being touched on here in so far as it is relevant to the case study and its time-frame. Community land ownership has been pronounced as sufficient in measuring the success of the land reform movement by those with a sense of righting historical wrongs or achieving contemporary social justice (Mackenzie 2010 p 327). More recent perceived wrongs have also become entangled with the protection of the natural heritage. Mackenzie (2006 p385) accused 'core' conservationists who applied protected area designations under UK and EU legislation as being 'scientific colonialists'. PAs therefore on this reading embodied a concept of wilderness not unlike that attributed to the sporting estates by Lorimer (2002) which had historical underpinnings in the emptying of the land during the Clearances. Some conservation bodies have also been implicated in this relationship with Lorimer (2002) accusing them of attempting to transform an ecologically degraded sporting environment into a treasured cultural

representation of the Scottish landscape. However, the view that all landowners had neglected their estates has been disputed. For example Munton (2009) put forward the contrary view that most landowners were responsible stewards of the countryside and some were amongst the most dynamic of owners. Another dimension to the landownership/conservation debate has been created by community trusts and their links with conservation organisations. This relatively new community landownership/conservation relationship has led to the claim that the Community Trusts would loosen the idea of 'wild' from its moorings in colonial prescription and class interest and privilege crofters' claim to the sustainable stewardship of the land (Hunter 1991; Mackenzie 2010).

Thus the hope has thus been expressed that community land ownership will enable a return to the notion of duthchas and crofters' claim to be the time-honoured custodians of an uncommodified natural heritage (Hunter 1976 p157; Mackenzie 2006 p595). This optimistic scenario is not accepted by everyone however. Warren and McKee (2011 p 32) have put forward a formidable list of potential pitfalls. These included a sobering list of practical challenges: the responsibilities and hazards of ownership; limited income; restricted assets; skill shortages; and geographic isolation. The possibility of community cohesion in the long term was also questioned. Cohesion and enthusiasm were easier to maintain during the buy-out campaigns than during the day-to-day business of practical co-management (ibid p32).

The current level of interest in the community purchase of land under the 2003 Act is in contrast to that shown by individual crofters in the past. The Crofters Commission (CC) have lobbied for the crofting owner-occupation that would allow access to the commercial

loans necessary for diversification led to the 1976 Crofting Reform (Scotland) Act. This Act gave crofters the right to buy the landlord's interests in their crofts although the majority of crofters in the Western Isles chose to remain as tenants (George Street Research 2007 quoted in the CIC 2008). Historical reasons were put forward to explain this. Owner-occupation had been seen by some crofters as being associated with the Clearances and with this legislation the landowners and the government would be perceived as the main beneficiaries (Mackenzie 2001).

3.2.7 CROFTING AND THE NATURAL ENVIRONMENT

The value of the Western Isles in terms of natural heritage can be ascertained from the number of national and international designations. Of the total local authority area of 326,839 ha 36.5% is designated as National Scenic Area (NSA); 21.8% as Ramsar sites; 11.7% as Sites of Special Scientific Interest (SSSI); 18.5% as Special Areas of Conservation (SAC); and 22.7% as Special protection Areas (SPA) (RSE 2008 p32).

Although some agricultural practices may have a negative impact on the intrinsic value of the natural environment the relationship between crofting and the natural environment can generally be considered to be symbiotic. In the context of this symbiosis crofting's low intensity form of land management is an illustration of where humans' exploitation of the natural environment's utility values can have positive impacts on the landscape and biodiversity. This relationship is best represented by the machair habitat. Machair dominates crofting life and landscapes in some parts of the Western Isles (Willis 1991 p12). This habitat has been defined as a system of gently sloping lime-rich coastal dune-plains formed by wind-blown calcareous shell-sand sometimes incorporating a mosaic of dunes to the seaward and a species-rich grassland with nesting waders and rare insect

species such as the Great Yellow Bumblebee, with wetlands and lochs to the landward (Ritchie 1976 quoted in Hansom and MacGlashan 2004). However, the quality of machair is significantly dependent upon management by crofters mainly for cattle rearing and feeding (Angus 2001 p198). The habitat is confined to the Western Isles, North West Ireland and North Scotland, with Western Scotland containing 60% of the world's machair habitat (Angus 2001 p198). This international importance is evidenced by its listing in the European Union (EU) Habitats Directive. The quality of this habitat is therefore very dependent on crofting activities and any change in these activities would probably have repercussions for the machair habitat.

Another example of the importance of low-intensity crofting agriculture for the natural environment is evident in the hay meadow and reed bed habitats which in turn are important for rare breeding species such as the Corncrake and Great Yellow Bumblebee which provide the justification for natural heritage designations (RSPB 1993). However, some of the beneficial interactions between crofting and the natural environment are being jeopardised by the changes in crofting practices that are now occurring (CIC 2008 p25). Some of the fiscal measures and agricultural subsidy schemes referred to in section 3.2.4 have also been taken up by crofters and are thus available to protect the sustainability of crofting activities. Examples include the LFA scheme, the Countryside Premium Scheme, ESA Scheme and the Habitats and Rural Stewardship Scheme (CIC 2008 p34).

The interaction between land use and the extent of woodland has been complex. Tree cover in the Western Isles was once more extensive than at present with scientific evidence gathered from peatlands, pollen and the preserved remains of trees pointing to extensive woodlands of species such as birch and hazel peaking between 9,300 and 7,900 Before

Present (Angus 2001). The role of human activity in the decline of this cover is unclear but there is evidence that more intensive grazing restricted woodland regeneration in the past (Angus 2001). The only significant area of mature broadleaved trees in Lewis and Harris was also the product of human intervention having been planted in the grounds of Lewis Castle in Stornoway in the mid 19th Century. The introduction of the Crofter Forestry (Scotland) Act in 1991 created the opportunity to increase tree cover in the Western Isles because it gave crofters a legal incentive to plant trees and participate in the tree planting schemes (SEERAD 2002). In order to avoid large-scale unsustainable forestry, what has been referred to despairingly as capitalist ecology (Mackenzie 2006 p390), a collaborative management structure was established involving the Western Isles Local Biodiversity Partnership and Forestry Commission Scotland (FCS). As a result of this collaboration a Western Isles Woodland Strategy was prepared with the aim of maximising biodiversity and reducing environmental conflicts in any future tree planting schemes (Comhairle nan Eilean Siar 2004b).

The scale of commercial tree planting in the Western Isles has been very low in comparison to the Highlands and consequently the Western Isles has escaped the most serious ecological consequences of sedimentation, flash flooding and the acidification of streams, the latter being implicated in the decline in the number of salmon in some parts of Scotland (Egglishaw et al 1986; Thompson et al 1988). Most of the Western Isles is classified as not being suitable for forestry with some 18.5% of the Western Isles landmass in category F6 and none in the most suitable categories-classes (1-5) for planting (Towers and Futty 1989; Scottish Executive 1999). The potential for a clash between the intrinsic value of the natural environment and its utility value in relation to land used for forestry is therefore low. However, the recent establishment of Community Trusts has invigorated

tree planting in some parts of the Western Isles. Tree planting has been implicated in discourses of local knowledge which recall a wooded landscape of the past subject to collective rights. This has disrupted discourse narratives centred round a pristine wilderness devoid of people and valued only for blood sports and conservation purposes (Mackenzie 2006 p390; Mackenzie 2010 p337). These counter- discourses of local knowledge conflict with the concept of nature as an external entity and conform more to the post-modern understanding of nature as a political and social construct with its inbuilt power-related struggles discussed in Chapter 2.

Hunter stressed that "any meaningful understanding of our Scottish green consciousness required some investigation of the developing relationship between people and place" (Hunter 1995 p13). This point is emphasised by Dingler (2005 p214) when placing the discursive conceptualisation of nature in the context of social, cultural and historical norms. The importance of links between language and human relations with the natural environment were touched on in Chapter 2. For example Hunter (1995 p79) referred to the early 18th Century Gaelic poet Duncan Ban MacIntyre as one of the most environmentally aware poets. Socially constructed narratives of nature are important in relation to crofting and crofters' claim to be sustainable custodians of their land (Hunter 1991; Mackenzie 2006). However, Mather (1992) qualified this with a more positivist-orientated view. He warned that the definition of nature conservation in cultural terms created the danger of diverting attention from issues of 'economic' or resource conservation and with the resulting reduction of quantifiable data lead to a lesser understanding of the mechanisms involved in the natural environment-agriculture relationship (ibid p107). This warning can be seen as an attempt to address the problems that could arise from a potential data deficit.

This in turn has the potential to lead to the formulation of policies which may not adequately address issues relating to the sustainable use of natural resources.

3.3 QUALITY OF LIFE DISCOURSES

3.3.1 QUALITY OF LIFE – AN ELUSIVE QUALITY

The variety of definitions and conceptualisations of QOL contain inter alia elements of both what has been referred to in this research as the intrinsic and the utility values of the natural environment. Separating out the natural environment values which are included, or absent, from any individual's or community's assessment of their QOL is very problematic. This stems from the fact that the QOL for an individual depended to some extent on personal beliefs and values (Zidansek 2007). This also implies that QOL will be elusive as a unique identifiable quality because of the variability and subjectivity of the individual's evaluation criteria. Any attempt to analyse QOL here should therefore be viewed in this context.

Lexical confusion surrounds any analysis of QOL as a result of what appear to be interchangeable or overlapping concepts. For example the concept of well-being tends to be used interchangeably with QOL with the emphasis in the former on the QOL of the individual as a social being (Disgupta 2001 quoted in Distaso 2005 p2). Costanza et al (2008 p18) attempted to define QOL in the context of fulfilling personal or group human needs. This view was predicated on an integrative and holistic approach which extends well beyond the individual. QOL is therefore a multi-faceted construct which has evolved from an evaluation of multiple needs within a temporal, individual, community, national and global context (Costanza et al 2008 p17). In addition QOL depends upon the

satisfaction of basic needs constructed from social, built, human and natural capital (ibid p17). Well-being also constitutes a multi-faceted concept dependent not only on goods and services bought for consumption but also on the quality of the natural environment, safety in daily life and employment (Distaso 2005 p16; Costanza 2008 p18).

Welfare and welfare economics have been compared to QOL/well-being and have been used to measure the degree of happiness and well-being of both individuals and society. However, it is contended here that whereas welfare is the value that a person attributed to his/her condition, well-being is a wider concept because it included non-welfare characteristics for example the importance of individual human rights (Disgupta 2001 quoted in Distaso 2005 p4). There may also be a danger of conflating standard of living with QOL measurements. However, the concept of standard of living is more connected to the level of human needs whereas QOL also involves the extent to which individuals and groups perceive satisfaction with these needs (Marans 2003; Costanza et al 2008; Kazana and Kazaklis 2009). Theoretically therefore a paradox can arise whereby an individual may have a high standard of living but not necessarily a high level of QOL. However, any such comparisons need to be treated with caution bearing in mind the different methodologies, primarily quantitative for measuring standard of living and largely qualitative for determining QOL, used in making an assessment.

The successes of the attempts that have been made to identify the components of QOL have proven to be debatable largely because QOL is such an elusive concept. The examples quoted here have been compiled from literature and policy documents. Traditionally the term QOL has been associated with four areas of public policy: health;

individual life satisfaction; objective standards of living; and sustainable development (Moser 2009 p352). The World Health Organisation (1997) composed a comprehensive list of subjective criteria that could be used to measure an individual's QOL. The list incorporated aspects of physical health, psychological health, levels of personal independence, social independence, social relationships, and spiritual/religious/personal beliefs and the intrinsic and utility values of the environment. These attempts to define and holistically measure QOL again highlight the potential for a wide variety of personal assessments of QOL. Therein lays the possibility of both consensual and conflicting assessments of QOL by individuals either singly or collectively.

An even more comprehensive list of components was made by the Audit Commission (2005). This comprised a list of 45 key measures of QOL. The suite of indicators was also designed to compliment key policies and initiatives relating to sustainable consumption and production, climate change and energy generated and use in England (Audit Commission 2005 p5). The list further illustrates the complexity and the amorphous character of QOL incorporating as it does community cohesion and involvement, community safety, culture and leisure, economic wellbeing, education and life-long learning, health and social wellbeing, housing, transport and access to the environment.

3.3.2 THE CONTRIBUTION OF THE NATURAL ENVIRONMENT TO QOL

It is clear from these lists of QOL criteria that the quality of the environment is an important consideration. However, Pykh and Pykh (2008) differentiate between the importance of environmental goods for the individual and collectively for society. Examples of beneficial environmental goods are cited as those that have value related to

75

the individual and these include good air quality, low traffic noise and a lack of congestion (Pykh and Pykh 2008). This list does not include preserving natural habitats and mitigating global warming because they do not make the individual better off personally. This differentiation between the individual and society in the context of the definition of QOL is a view that would sit uneasily with the belief that the natural environment and its conservation are important in the context of the QOL for both the individual and society.

Moser (2009 p352) did put an emphasis on the environment within the components making up QOL. QOL/well-being in addition to expressing satisfaction concerning interpersonal relationships, family life, career, health and finances also needed to take into account relations with different aspects of the physical environment (ibid p352). Collados and Duane (1999) also recognised that natural capital was an important contributor to human welfare. The reason given was that natural capital enabled inter alia, recycling nutrients, the germination of soils, the pollination of crops, the maintenance of biodiversity and good quality landscapes and aesthetic and other amenity services. This connects the environmental components of QOL to the intrinsic values of the natural environment issues raised in Chapter 2 and the utility values raised in section 3.2. Nevertheless, QOL/well-being also requires looking beyond the singular effects of environmental features and to consider people's overall relationship with the environment. This is what Fuhrer (1983) refers to as the people-environment congruity.

3.3.3 CAN QOL BE MEASURED?

The notion of a spatial dimension to QOL indicators was put forward by McMahon (2002). Most of the QOL indicators and policies take the top-down approach adopted in PA designation. This is because they tend to be more relevant at a national and global scale

(McMahon 2002; Kazana and Kazaklis 2009). Distaso (2005 p17) considered this to be an unsatisfactory situation, arguing that there needed to be ways of putting phenomena at a local level into a wider context and subsequently to identify the roles of actors and institutions at different levels for implementation of resulting policies (ibid p18). Local QOL indicators are calculated at five different levels to give a more comprehensive QOL measurement. These levels are: European common indicators; national and regional indicators; stakeholder indicators – selected from Agenda 21; local ward; and city wide indicators (ibid p18). This approach enables both a top-down and a community led bottom-up approach. Such an approach, it can be argued, illustrates how problematic it could be to measure QOL using only one non-spatial set of indicators. The accuracy of and the successful implementation of policies based on these indicators could also be queried

Despite these difficulties, QOL indicators have been used to chart progress toward pre-set measurable goals using accessible data (Maro 2007). Two basic approaches have been used to evaluate QOL. One focuses on quantifiable socio-economic indicators and the other on subjective well-being which relies on 'subjective' self-reported assessments to determine people's perceived needs and the extent to which they are being met (Cummins 1997; Costanza and 2008; Kazana and Kazaklis 2009 p211). The 'objective' approach focusing on quantifiable indicators has been criticised because it fails to highlight the importance of personal identity and issues related to psychological security (Kazan and Kazaklis 2009 p211). The more subjective measures have been criticised on the basis that people usually judge their well-being in comparison with others rather than in absolute terms (Kazana and Kazaklis 2009 p211). Evidence of how the multi-faceted nature of QOL has proven to be an almost insurmountable barrier to finding a consensus on indicators is illustrated by the critiques of the options. Gross Domestic Product (GDP) has been widely

used as a measure of well-being. However, this has been criticised because it fails to differentiate between sustainable and unsustainable practices and ignores social and welfare considerations (Maro 2007). The New Economics Foundation (2006) devised an index (the annual Happy Planet Index) to overcome these deficiencies by being orientated more towards measuring the over-exploitation of natural resources thereby revealing how (in)efficiently in ecological terms human well-being is being delivered. Therefore whereas GDP measures the production of goods (with more being good) the HPI measures the consumption of goods (with less being good). Using both subjective and objective analytical techniques this index has been used to measure the achievement of a specific level of wellbeing within the European Union combined with the resulting size of the carbon footprint. Interestingly the findings pointed to only a marginal increase in wellbeing but a substantial increase (75%) in the carbon footprint (Thompson et al 2007 p4).

3.3.4 QOL AND PLACE ATTACHMENT – WHAT IS RURAL?

Place attachment can be regarded as an important factor in determining the value attached to the QOL of a particular location which evolves over time in relation to the social and physical environmental values in which it is situated (Brown and Perkins 1992 cited in Moser 2009 p353). What are the implications of this for those that have chosen to live in a rural environment? What constitutes rural is a complex matter and can only be briefly touched on here in order to give some indication of its complexity and to indicate that there are valid differences between QOL in rural and urban environments.

An example of a qualitative rural typology is supplied by Coppus et al (1997) encompassing four categories: the preserved countryside, the contested countryside, the

paternalistic countryside and the clientelist countryside. The preserved countryside can be perceived as one where environmental interests are expressed strongly in determining land uses, the contested countryside as one shaped by conflict between competing land uses, the paternalistic countryside as one where development processes are shaped by landowners and the clientelist model as one in which farming relies on subsidies. Such qualitative typologies' validity derives from expert knowledge or intuition and is preferred to those based on quantifiable data, for example population density and settlement patterns, as the former create more balanced multi-issue rural typologies (Pahl1996). However, Hoggart (1990) warned that the use of an all embracing term such as rural to include such wide-ranging contexts as the natural beauty of the countryside and the economic decline of some small settlements created dangers for the researcher. He was also of the opinion that the quest for an all-embracing definition of rural was a chimera as the concept had the ability to obfuscate and was often atheoretical (ibid 190). Cloke (1997) on the other hand put forward the view that the main danger in accepting arguments such as Hoggart's for the illegitimacy of conceptualising rurality was that the potential explanatory power that wider bodies of theory_can bring was lost. Definitions of rurality are made even more difficult by the diversity of rural attributes and by the contrasting ways that the countryside as a social construction is interpreted by different groups in an increasingly pluralistic society (Clerk et al 1994). Where does this confusion over the nature of rurality leave the researcher?

It may be possible to identify negative implications for QOL within a rural place attachment. Pacione (1996) concluded that in the context of national and international capital mobility remoter rural areas of Scotland were not well placed to enjoy the socio-economic benefits of large-scale inward investment because of their economic, social and geographical marginality. An empirical study of the Western Isles' economy revealed that

79

the Islands displayed to an extreme degree all of the characteristics that distinguish rural economies from their urban counterparts (Roberts et al 2002). Some of the disadvantages of rural residency noted were access to fewer services and shops, banks, public transport, jobs, training, affordable housing, health and social care (Thomas 1999). Rurality is also perceived to be a handicap in maximising the utility value of the natural environment. This outcome tends to be most problematic for businesses at a micro-scale level (under 5 employees) whose viability is affected by distance from markets and the resultant higher costs (ibid 1999). However, by contrast, rurality has been given a higher status in relation to the intrinsic value of the natural environment having been aligned with a nature - civilisation relationship which elevated the countryside above the city (Woods 2003 p2).

Rurality is a concept that can be given greater analytical refinement by measuring a rural area's geographical proximity to more urbanised areas. Beer, referring to 'remote' island areas of Scotland, concluded that there were successive layers of peripherality, isolation, exclusion and deprivation (Beer 2004 p152). Islands have many characteristics in common with some parts of NW mainland rural Scotland including remoteness, the importance of crofting and fishing with the added dimensions of greater geographical isolation and a distinctive cultural heritage (Scottish Office 1995). A report prepared by Hall Aitken (2007) identified linkages between proximity to services, the environment and demographic changes. In the Western Isles there was very strong evidence from housing demand patterns, planning applications and school roll changes of a shift in population towards the relatively larger settlements in Harris and Lewis, particularly Stornoway (Hall Aitken 2007 p8).

Other migration-environment relationships identified in the Hall Aitken Report (2007) were that the quality of the natural environment was the largest single factor in relation to in-migration to the Western Isles, ahead of the availability of employment (second). This can be compared to returners to the Islands who ranked the natural environment fourth and out-migrants who voted the natural environment fifth in terms of the factors that would motivate them to return. Returning to be close to family, availability of suitable work and a safe environment were quoted as being more important amongst the latter two groups. The migration-environment relationships identified in the Hall Aitken Report for the Western Isles may stem to some degree from the in-migrants' conception of rural including a feeling of an aesthetic and ontological security in addition to any economic security from being located in a rural environment (Gilg 1996). This relationship between the quality of the natural environment and demographic changes needs to be borne in mind when considering conservation issues.

Community cohesiveness is also an important consideration when determining what are sometimes referred to as 'locals' and incomers. In relation to locals the emphasis tends to be on long-term residence, cross-generational connections to a particular district, joint participation in social and church activities, the community hall, the public bar and the sheep fank and sharing a world-view characterised by stoic resistance in the face of adversity (Philo and Parr 2004 p52). Incomers were viewed as any in-migrants without these generational or social qualifications. They may be classified as 'grey settlers' if they have come from areas such as the Central Belt of Scotland, or 'white settlers' if they had come from England or further afield (ibid 2004 p52). These demographic trends have been implicated in the fracturing of rural communities along economic, political, social and cultural lines as a result of the influx of those incomers of whatever category who have

81

been referred to as rural 'others' (Philo 1992; Philo and Parr 2004). The community cohesiveness in rural locations, something that may have been regarded in a positive light by those moving into a rural area, may ironically in some rural areas at least be under threat due to the same process of in-migration.

3.3.5 RURAL - URBAN COMPARISONS

In more urban areas the environmental qualities or lack thereof relating to noise and air pollution, issues relating to security, inadequate facilities and transport are important considerations in determining QOL (Marans 2003). Another perspective of the urban-rural dimension relevant to QOL in Scotland also became evident through the results from the Scottish Household Survey (Scottish Government 2009). Ratings in terms of percentages were calculated inter alia for 'large urban areas' and 'remote rural areas'. The Western Isles falls within the latter category because all of the island settlements except Stornoway have less than 3,000 inhabitants (indeed the 2001 census showed that all were very much smaller than that) and are located more than 30 minutes from a settlement of 10,000 or more, the nearest settlement of this size being on the mainland. Stornoway would come within the remote small town category because of its population size but is still more than 30 minutes from a settlement of 10,000. The relevant percentages in measuring environmental quality for large urban areas and remote rural were: neighbourhood very good – 46% and 76% respectively (Scottish average 52%); pleasant environment – 58% and 65% respectively (Scottish average 58%). There is consequently a measurable difference between urban and rural areas in terms of residents' assessment and appreciation of their living environment. It could also be argued that by definition the remote rural areas are closer in proximity to the natural environment and that consequently this could have some bearing on the individual's perception of what they consider to be a

more pleasant environment. The positive influence of the natural environment on the QOL was revealed in a survey of public attitudes to QOL (DEFRA 2001). Without prompting 10% of respondents considered the environment as one of the three issues most affecting their QOL. However, when prompted 50% thought that wildlife was a very important headline quality of life issue and indicated that they would be very worried over any loss of wildlife or habitats (DEFRA 2001).

3.3.6 INSIDER- OUTSIDER VALUES

A more detailed analysis of rural residents' attitudes to QOL may be achieved by taking into account rural dwellers' geographical origins. In-migrants to the Western Isles have over the past five years tended to move to more rural areas to take advantage of valued landscape and the perceived higher quality of life (Hall Aitken 2007). In-migrants have tended to buy property within landscapes of high value (particularly in National Scenic Areas) (NSAs) with only a minority leaving after a couple of years (ibid 2007). This indicates a high degree of satisfaction with the natural environment and the quality of life experienced within these protected areas. This may be perceived as an example of what Cloke and Goodwin (1992 p330) refer to as being in search of the rural idyll, a cultural and ethnocentric notion of what a desirable rural environment represents.

Those considered 'insiders' are usually those who have lived in a rural community for a relatively long period of time, often for generations, whereas the term 'outsiders' (e.g. those referred to by Hall Aitken 2007) covers those who now reside in a community but have originated from outwith that community (Boyle 1997). Boyle further sub-divides the latter category into those who have moved to the community as return migrants or because they have family or friends in the rural locality and those outsiders who have been

classified as 'counter urbanites' or sometimes more pejoratively classified as 'white settlers'. The latter are less likely to be integrated into the rural community and are often more ready and able to articulate their demands and organise themselves in order to achieve their objectives (House of Lords 1990 p8 quoted in Cloke and Goodwin 1992 p 330). Returners' value of rural QOL appears to differ from outsiders who come to live in a rural environment. As Hall Aitken (2007) showed returners to the Western Isles ranked the natural environment in fourth place as a reason for returning. Motivations for returning that were ranked more highly were to be close to family members, the availability of suitable work and a safe environment as described above.

Stakeholders in the context of rural place attachment can therefore be perceived both within a socio-political as well as a physical space (Marsden et al 1993). Rural space can thus be considered to have natural environmental values 'imposed' upon it from within and without. In-migrants, often middle class, are attracted to remote rural areas by what they perceive as the better quality of life and often bring cultural values which may differ from those of 'insiders' (Boyle 1997). As a consequence the former have a stronger disposition to take an interest in conservation matters and to construct 'rural' in the context of the natural environment or valued landscape (Boyle 1997; Scott 2008). This 'outsider' perspective of what constitutes the essentials of their QOL can be contrasted with the perception of rural that stresses place and community. The latter emphasis provides evidence of an 'insider' view that reflects a perceived set of cultural and historic values and norms (Scott 2008). These differences could be simplistically conceptualised as outsider environmental sustainability and insider social sustainability. Scott (2008) makes an important observation that many rural stakeholders including decision-makers, in

framing contemporary debates about what is rural, invoke memories of past struggles, for example over emigration and land rights, to frame contemporary debates.

Nevertheless, different social groups have different stakes in a place with their interests varying from the material to the cultural and aesthetic, from economic to ontological security (Urry 1990). An illustration of this comes from a study of attitudes to house building in the Scottish countryside (Shucksmith et al 1993). This study examined attitudes to development and discovered that attitudes matched exactly with objective class interests and that different notions of rurality had "captured rurality" in terms of political power.

3.3.7 A SUSTAINABLE QOL

Although biodiversity underpins the provision of a large array of ecosystems which contribute to individuals and society's well-being (Thompson et al 2007) the relationship between local development and QOL requires a view of sustainability which goes wider than mere environmental protection (Distaso 2005 p2). For example natural capital contributes to QOL by providing environmental services, including amenities and therefore a sustainable QOL can only be achieved when people interact with their environment in a respectful manner (Collados and Duane 1999 p442). In addition to providing direct benefits to QOL the flow of environmental services determines the ability of natural capital to regenerate itself (ibid p443). There is an implication here that as well as the natural environment making a contribution to QOL, the consumption of this public good by society also has the potential to degrade the environmental values that make the contribution. This is one important area where the welfare economics approach to the use of natural resources differs from the goal of achieving a sustainable QOL. The former holds the view that each individual is the best judge of their own welfare, that the welfare

of society depends upon individual welfare and if the welfare of one individual increases and the welfare of no one decreases the welfare of society increases (Maler 1985 p6).

However, there is still a close relationship between sustainable QOL measures and welfare economics. The latter holds that from an economic point of view environmental services are regarded as collective or public goods and consequently a change in one environmental service is of concern to all households and producers (Maler 1985 p9). However, there also lies the potential for conflict between the concepts of QOL and sustainability although this is dependent upon the definition and measurement of both concepts. It could be argued for example that in the context of considering the component of freedom that is part of the criteria for measuring QOL the achievement of respectful interaction with the environment referred to above becomes more problematic. Freedom as part of QOL assumes a capability for a person either individually or collectively with others to choose and attain the objectives which give their life satisfaction. However, if sustainability is the goal to aim for some limitation on the actions of a person individually or people collectively may be necessary if the natural capital that contributes to QOL is to be used in a sustainable manner (Thompson et al 2007 p27). This tension is embodied within the Happy Planet Index surveyed earlier where the need for humans to reduce their carbon footprint means that the pursuit of happiness alone cannot be the sole criterion for determining the quality of life of individuals or humanity collectively. A sustainable QOL can therefore only be achieved when people interact with the environment in a respectful manner on the one hand and do not impede or threaten what any individual considers to be their QOL. Fig. 3.1 illustrates where traditional land use, crofting and its relationship with the protected natural environment and the wider environment has the potential to achieve a sustainable QOL. This is what Moser (2009) refers to as person/environment congruency.

3.4 CONCLUSIONS

This chapter has analysed some of the utility values placed by society on the natural environment. In carrying out this analysis cognisance was taken of the impact on the statutorily protected natural heritage and the adjacent areas of natural heritage on which the viability of the protected areas often depends. The focus of the analysis was on the most extensive rural land use, that of agriculture or legislatively regulated crofting in the case of the Western Isles. The analysis revealed that the relationship between crofting as a land use and the natural environment was a symbiotic one largely due to the nature of crofting as a low-intensity part-time activity. This symbiosis was enabled to some extent by the national and international policies and fiscal measures put in place to facilitate sustainability through the adaptive management of agricultural land. However, it was discovered that crofting was not just important for the well-being of the land but also for the cohesion of the local communities and the QOL of community members. This has been one of the main drivers assisting communities in their quest to obtain greater community control of the land.

Figure 3.1 illustrates the symbiotic relationship between crofting and the protected natural environment and the wider natural environment and the close relationship between crofting and QOL. Quality of Life has been shown to be a complex interaction between a wide range of factors including socio-economic circumstances and the natural environment. However, there appears to be important differing perspectives on QOL between some of those already resident in the Western Isles and those who have moved recently to the Islands. These groups have been classified as 'insiders' and 'outsiders' or 'incomers'

respectively. Nevertheless, it has been argued here that the most important factor in maintaining the QOL for both groups is the sustainable use of the resources that contribute to QOL.

FIG. 3.1 A SUSTAINABLE QOL
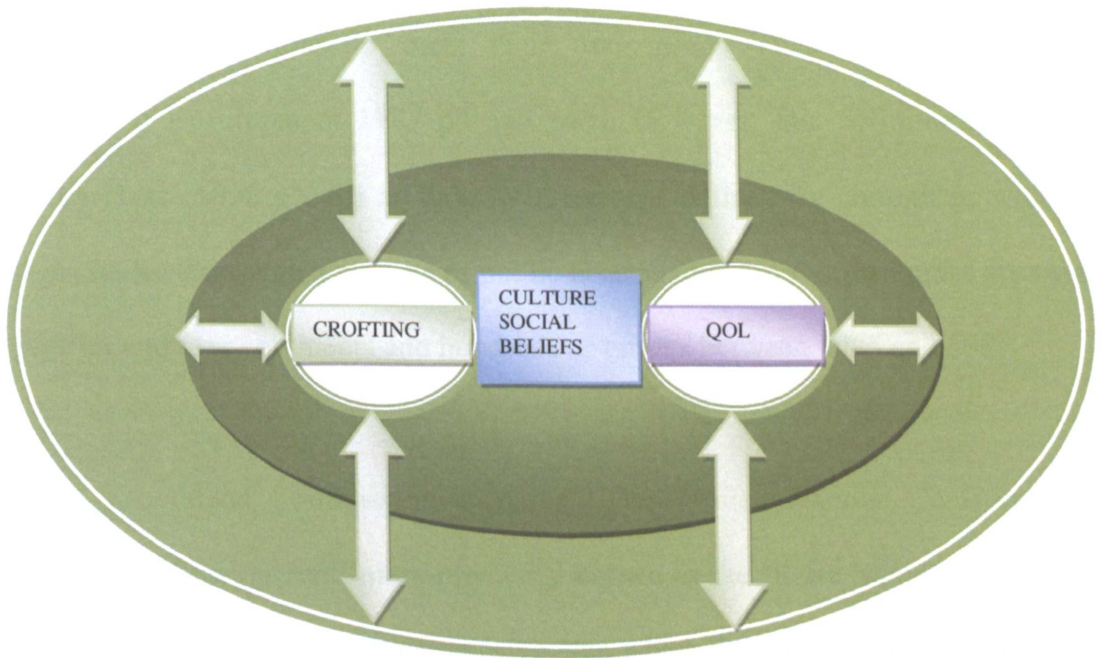
CHAPTER 4 PLANNING AND SUSTAINABILITY – THE MEETING OF DEVELOPMENT AND THE NATURAL ENVIRONMENT

4.1 INTRODUCTION

4.1.1 SUSTAINABILITY TIME-LINE

The Brundtland Commission in 1987 constructed the global framework for what has become an on-going debate about the normative meaning and application of sustainable development. The Brundtland definition stated that sustainable development was 'development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987 p4 and p43). However, this definition has been described by Haas (1996 p 240) as literally a concept defined by committee with the elements crystallised through a process of public hearings held in fourteen cities spanning eight countries and four continents and hundreds of groups between 1985 and 1987.

In 1992 the Brundtland Commission sponsored The 'United Nations Conference on Environment and Development' more popularly known as the 'Earth Summit' which led to the adoption of Agenda 21, a comprehensive plan which aimed to incorporate all levels of governance in attaining sustainable development and the setting up of the 'United Nations Framework on Climate Change. This ultimately led to the Kyoto Protocol in 1997 mandating industrialised countries to reduce their carbon emissions to 5.2% below 1990 levels. These developments illustrated what O'Riordan (1999) identified as the transition from environmentalism to sustainability. A change in language from sustainability to sustainable development put a greater emphasis on social and economic as well as environmental sustainability (Connelly 2007). These relationships are

illustrated in the iconic Venn diagram which is most commonly used to illustrate the interaction between society/culture, technology (economic development) and the natural environment. This is shown in Fig. 4.1. This illustrates how sustainability might be perceived from an environmentalist perspective with the environment having greatest influence and importance.

The Rio Conference in 1992 allowed world leaders to publicly embrace sustainability. The first principle of the 1992 Rio Declaration was that human beings were at the centre of concerns for achieving sustainable development and were entitled to a healthy and productive life in harmony with nature. This brought into play issues of morality, greater equity and the promotion of social and environmental justice in the context of global development. However, Glasby (2002) argued that in a global context the term sustainable development was misleading because we live in a markedly unsustainable world. Furthermore conditions would become even more unsustainable in the 21st Century if steps were not taken now to ameliorate environmental excesses (ibid). This raises the complex issue of what impact there would be on the environment if the current rate of utilization of the planet's resources necessary to support the standard of living enjoyed by the developed world, was equitable and universal (World Commission on Environmental Development 1987). The Brundtland Commission recognised this fundamental problem of equity and stressed that high-income nations possessed a responsibility to reduce their resource consumption at every stage in the development process. If the sustainability paradigm is realistic then this is the challenge now facing the economically developed countries. Therefore the terminology of balance and trade-off competes with that of limits, constraints and demand management. As a result governments and Local Planning Authorities struggle to understand the conceptual and operational implications of sustainable development.

Within the European Union (EU) the concept of sustainability has gradually gained credence and has recently become incorporated into the formulation of economic and social policies. At the Gothenburg Summit in June 2001 for example, the Strategy for Sustainable Development was conceived. This was based on the principle that in the longer term responsibilities for economic growth, social inclusion and environmental protection should be shared between European and national policy makers, the business community and civil society. The growing influence of the EU in the 1990s is evidenced by the Directives on environmental protection (Habitats Directive 92/43/EEC) already referred to in Chapter 2.

FIG 4.1 SUSTAINABILITY – AN ENVIRONMENTALIST PERSPECTIVE
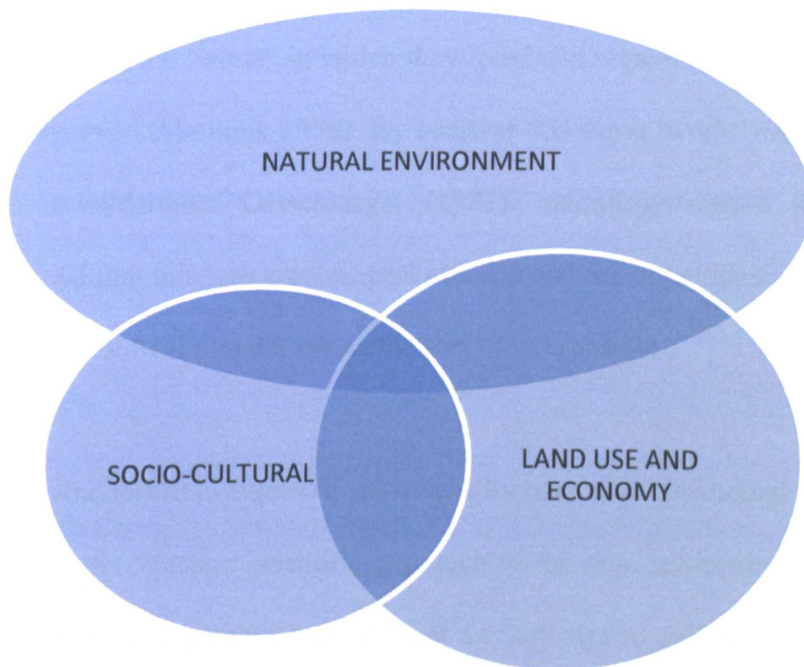
4.1.2 SUSTAINABILITY – A PARADIGM?

The importance of the sustainable utilisation and management of the natural capital that contributes to an individual's and society's quality of life was discussed in Chapter 3. In a

comprehensive review Pearce (2002) traced the origins of the science and management of sustainability back to the 1950s when "Resources for the Future" was published in the US. However, sustainability as a paradigm is not of recent origin and has deep roots within society, culture and religion. The classical writings of Aristotle (384-322 BC) and Cicero (106-43 BC) can be cited as early works that championed the husbanding of natural resources (Glacken 1956; Katz and Kirby 1991). Religious beliefs, for example Christianity, Hinduism, Buddhism and Taoism have also played an important role in determining society's attitude towards respect for the environment (Brennan 1987; Lovelock 2006; Hulme 2009). Culture which can be defined as the shared values and expectations and meanings that are taken for granted, has also played an important role in the emergence of environmentalism and the sustainability paradigm (Meppen 2000 p48). The dominant and exploitative attitudes towards the environment that had evolved in the West are markedly different to that of for example the native Indians in the US who looked for harmony in the 'world' in which they lived and regarded nature as their source of food and sustenance (Crombie 1998). By contrast this same 'world' was perceived by Europeans as a wilderness. Oelschlaeger (1991), operating from a post-modernist perspective, argued that this was a contingent cultural and historical idea and a product of western social and political thought rather than an objective state.

More recent post-modernist critiques of sustainability have also questioned the objectivity of what is seen as the Western scientific approach to the man-environment relationship. Meppen (2000 p48) for example cautioned that any attempt to define sustainability in a positivist/normative sense neglected the complexity that the concept of sustainability implied. Nevertheless, scientific and non-scientific knowledge can both be considered important because they imbue stakeholders with the power to achieve their particular concept of sustainability (Evan-Goldstein 2007). The 2001 Amsterdam Declaration resulted in a global programme of 'sustainability science'. This conceptualised

sustainability as a dynamic interaction between nature and society. However, the paradox lying at the heart of sustainability stems from it seeming to embrace both postmodern pessimism about the domination of nature and Enlightenment optimism about the possibility of reforming human institutions (Dresner 2002; Quental et al 2010).

A fundamental problem in considering sustainability as a paradigm is that interactions between society, cultural diversity, technology and nature lie beyond the reach of disciplinary scientific knowledge with resulting highly complex and non-linear causes and effects (Vob et al 2007). Connelly (2007 p 260) identified three categories of approach relevant to the manner in which current literature has dealt with what he considers to be problematic vagueness and ambiguity of sustainability as a concept. The first simply ignored the complexity in favour of representing sustainability as unproblematic in principle; the second noted its ambiguities and sought to resolve these by selecting the preferred interpretation from a range of possible meanings; while the third more analytical approach set out to make the ambiguities of sustainability more explicit. Connelly (2007) suggested that sustainable development should be seen as an essentially contested concept producing a multiplicity of alternative but equally legitimate interpretations. Therefore whether sustainability could ever be considered a genuine paradigm has been questioned due to the divergent understanding of the concept amongst its protagonists (Vob et al 2007).

Even if credence is given to Connelly's (2007) broad conceptualisation of sustainable development there is still scope for strands of thought that rejects it in its entirety. Treanor (1997) for example arguing from a radical left perspective was highly critical of sustainability by describing it as a 'belief' and a hegemonic discourse that brooked no opposition. He argued that as a belief it must claim a monopoly over knowledge because a 'belief' cannot admit that an opposite belief is equally valid. Consequently in his view

sustainability had become an ideology in a negative sense. Taylor (2002) had a fundamental objection to the concept of sustainability from a free-market libertarian perspective claiming that as an all-embracing governing philosophy it was normatively undesirable and ethically and empirically flawed. This it was argued was because it compromised the welfare of future generations by placing restrictions on the exploitation of natural capital and the subsequent economic growth and prosperity required to enable societies to make environmental improvements. Consequently, even the proponents of the concept have increasingly agreed in the Post-Brundtland world that sustainable development must ensure that economic and social considerations were balanced with environmental concerns and not trumped by them (Taylor 2002). Blowers (1993 quoted in Scott 2001 p275) was sceptical about the concept of sustainability because it was vague, its implications poorly understood and thus concluded that anyone could sign up to the concept so long as it required no specific commitment to do anything that would threaten their material interests.

Goodland (1995 p16) identified three degrees of sustainability which were largely distinguishable by the extent to which natural capital could be substituted by human capital: 'weak' sustainability where human capital could be substituted for natural capital as long as the total amount of capital remained intact; 'strong' sustainability based on the view that separate kinds of capital must be maintained intact as natural and human capital were not perfect substitutes; and finally 'absurdly strong' sustainability where the depletion of anything would not take place and non-renewable resources would not be used at all. As Owens (1994) noted 'strong' sustainability entailed that such a thing as 'critical natural capital' existed, for example the ozone layer and the carbon sinks that are essential to human survival and are irreplaceable. The 'weak' approach to sustainability was criticised strongly by Weiskel (1998) who argued that only by stepping outside of market metaphors used to relate man's activities to the environment would the human

economy be understood as a subset of ecosystems and not the other way around, the planet over people approach. Nevertheless, Ayres et al (2001 p245) conceded that the concept of weak sustainability had come to dominate discussions of natural resource and environmental policy. Sustainability can therefore be perceived as either weak or strong depending on how it is applied to the husbanding of natural resources (Goodland 1995; Ayers and al 2001; Neumayer 2010).

4.1.3 SUSTAINABILITY AND GOVERNANCE – THE STEERING LOGIC

Sustainability and governance do not always sit comfortably together. Vob et al (2007 p185) argued that the conceptual struggle with interpreting and applying the principles underpinning sustainable development indicated a challenge not only for practical politics but for social and political sciences as well. Haas (1996 p245) went further when concluding that the project of sustainable development had exhausted its political utility by running the risk of creating excessively ambitious and potentially flawed agendas. Nevertheless, sustainability has made its way, however hesitantly and confusingly, from declaration to practice. Formal structures were consequently necessary to put forward options to guide decision-making by public authorities at all levels, including local government. This has created the 'steering logic' for governance (Vob et al 2007; Goldstein 2007 p 303).

Sustainability policies are directed within several top-down geographical and political dimensions. For example the UN Conference in Rio de Janeiro in 1992 produced the UN programme Agenda 21, which was ratified by 178 countries. This incorporated sustainability as a blueprint for action in a wide range of activities at global, national and local level. However, it has been argued that the UK government had been using the language of sustainability in the run-up to the Rio Earth Summit but had failed to take on board its international commitments to environmental protection (McIntosh 2002 p152).

In Scotland the Scottish government has adopted an approach to the formulation of policies which promote sustainable development largely focussed on and shaped by, weak versions of sustainability (Scottish Executive 2006).

4.1.4 PUBLIC AWARENESS

However, to what extent do the electorate possess the knowledge to enable them to grasp or evaluate the implications of policies aimed at promoting sustainability? There is evidence that indicates a problem of understanding when it comes to the public appreciating the implications of the concept. A survey of public attitudes towards the environment in Scotland carried out in 2005 (although now somewhat out of date but contemporaneous with the case study chosen) revealed that 27% of those surveyed had a general awareness of the term 'sustainable development' but of these only a third could provide a definition that showed a fuller understanding of the concept. These statistics show that a very small proportion of the Scottish population had a reasonable understanding of the concept with a large majority of the population never having heard of the term (Scottish Executive 2005a). These statistics have some relevance when considering stakeholders' attitudes towards the concept of sustainability, sustainability policies and what has been claimed to be 'sustainable' development. For the sustainability paradigm to be acknowledged by the general and particular publics it cannot simply be imposed in a top-down manner but has to be understood as continuously contested in a struggle about its meaning, interpretation and implementation (Hajer and Versteeg 2005 p176; Grist 2008).

4.1.5 SUSTAINABILITY AND THE GLOBAL WARMING DISCOURSE

Global warming or climate change is used as shorthand for dangerous global warming caused by human emissions of greenhouse gasses, particularly carbon dioxide, being pumped into the atmosphere as a result of the combustion of fossil fuels, deforestation

and other land use changes. This human modification of the global climate would result in increased average global temperatures over medium and long term time frames (Carter 2008 p177). The consequences would then be a positive climate forcing i.e. more of the sun's energy being trapped within the Earth's atmosphere as a result of the increased concentration of greenhouses gasses leading to a warming of the Earth's surface and lower atmosphere. The climate change debate entered the development arena as part of the environmental considerations of the wider agenda of sustainable development following the Brundtland Report in 1987 and the 1992 Rio Earth Summit (Grist 2008 p783).

Some of the means of generating electricity, a source of energy vital to the modern economy, are examples of what some perceive as an economic activity that is unsustainable. This it was argued was because of the scale of the utilisation of finite capital, fossil fuels, and the environmental damage caused to the global ecosystem as a result (Goodland 1995; Jepma and Munasinghe 1998 p57). Ball (2002 p83) claimed that the Gaia system was breaking down as a consequence of the erosion of the biosphere (including the atmosphere) and the decreasing strength of the earth's regulatory system. However, development and climate change (or global warming) are historically based on different philosophies of science and continue to inhabit largely separate epistemic communities. Development theories emphasise the relativity of knowledge and views development as a continually negotiated concept whereas the climate change debate largely stems from the natural sciences conducted within a positivist framework of analysis in which social sciences are regarded as subsidiary to the natural sciences (Grist 2008; Weart 2008). Climate change narratives have had a chequered history. Predictions by some climatologists in the 1970s of an ice age followed the so-called 'little cooling' from the 1950s to the mid 1970s when global temperatures dropped from those of previous decades. The scientific discovery that the Earth's Ozone layer was being

damaged by rising emissions of chlorofluorocarbons (CFCs) led to the phasing out of CFCs just two years later (Weart 2008).

In the late 1980s the debate which continues currently over the sensitivity of the global climate to increased concentrations of greenhouse gasses in the atmosphere had become lodged in the public consciousness through the impact of the media. The emergent scientific consensus that global warming was a serious environmental problem was reached in the late 1980s and led to the establishment of the Intergovernmental Panel on Climate Change (IPPC) which produced its First Assessment Report in 1991 (Weart 2008). The IPCC has since produced further reports which have successively emphasised their increasing certainty of the threat posed by anthropogenic climate change. IPCC reports have been widely disseminated to the media and key policy makers thus provoking increasing public concern over the potential rise in sea level, flooding, drought etc. The scale of public concern and the protest and campaigning for action against the threat was gauged by Grist (2008 p789) to have become increasingly evident in many developed countries.

Happer's (2010) conclusion that policy should be based on experiment and observation and not on political consensus is complicated by the fact that some scientists are unconvinced that the global climate is warming. Those scientists that do not follow the scientific consensus have been referred to pejoratively as 'denialists' or 'contrarians' by much of the political community. Nevertheless, palaeoclimatologists such as Carter (2008) have argued that a 'ridiculously short' time frame (the past thousand years) had been used for making climatic comparisons. Using long-term trends and data (extrapolated over a 6 million year time frame) he concluded that a warmer planet than that of today was far from unusual. The difficulties posed by the complexities of climatic science were acknowledged by the IPCC in 2000. In its Third Assessment Report while

stressing that most of the global warming over the past 50 years was attributable to human activities it conceded that it was dealing with 'a coupled non-linear chaotic system and consequently the prediction of a specific climate state was not possible' (IPCC 2001 quoted in Etherington 2009 p177).

Jessup (2010) claimed that there was almost unanimous belief among environmentalists about anthropogenic radiative forcings rather than natural factors having been responsible for much of the observed recent climate change. There was also a general recognition that climate change could and should be mitigated by embracing renewable energy technologies (ibid). The argument used here implied that there was a misfit between the developmentalist paradigm and its ability to address the threat posed by climate change (Brooks et al 2009) reinforcing the point made by Grist (2008). Brooks and Grist criticised current development models and adaptation approaches as being clearly inadequate for addressing climate change because of the focus on growth and consumption and the treatment of the environment as an externality. A contrary view to the anthropogenic forcings argument for climate change posits the belief that carbon dioxide generated by man's activities is not implicated sufficiently in climate change for radical mitigation strategies to reduce emissions of greenhouse gasses to be required. For example Happer (2010) although accepting that there was a consensus that an increase of carbon dioxide would cause some warming of the climate, argued that the temperature increase would be small compared to the natural fluctuations in the earth's temperature.

The absence of jointly accepted scientific knowledge not only makes it impossible for both sides of the climate change debate to resolve ambivalence but it reinforces divisions which seem unable to be resolved within a positivist framework (Evan-Goldstein 2007). It could be argued that Treanor's (1997) misgivings about the concept of sustainability could equally apply to the hypothesis of anthropogenic climate change. Both the

supporters and deniers of anthropogenic climate change and the human activities implicated in its emergence as a scientific problem are convinced of their own logic and right and convinced that through whatever means they are entitled to impose it on others.

The positivist and the post-positivist climate change discourses have resulted in policy responses to climate change being 'chased' by scientific findings. The 'chase' has been influenced by patterns of power and ideological bias lying far outwith the realm of climate change politics (Jordan and O'Riordan 1977). An important manifestation of science influencing policy formulation is evidenced by the influence of the IPCC. The evidence put forward to prove anthropogenic influences on climate change has been used internationally, nationally and locally to formulate policies and legislation aimed at sharply reducing greenhouse gas emissions. Based on 'consensual' scientific evidence the Scottish Government passed the Climate Change (Scotland) Act in 2009 and produced a number of key policy documents aimed at the reduction of greenhouse gasses such as carbon dioxide. These policies were targeted at formulating domestic and commercial energy conservation measures and the development of a renewable energy industry, mainly wind power. The introduction of targets is one of the key policy responses to concerns over climate change (Jessup 2010). As noted in Chapter 1 he Scottish Government has set a target of generating the equivalent of 100% of electricity in Scotland from renewables by 2020 after achieving its interim target of 31% renewable generation by 2011. These targets have been the prime driver for the current growth of interest in wind energy and projects resulting in its current booming state in the UK (Mitchell and Connor 2004). The scale of the financial support and subsidies (incentives such as the Renewables Obligation) made available to the renewables industry as a result of Government policies has been estimated at £1 billion in 2010 (Secretary of State for Trade and Industry 2005 quoted in Etherington 2009 p150).

Breukers and Wolsink (2007) made the controversial claim that corporate responses to climate change focussed on economic and industrial development and paid little attention to social capital. Linkages have also been made between societal values and equity and the relationship between these and the success of climate change policies. For example investment in social capital is considered to be important in addressing climate change and contributing to a sustainable level of development in which equity and fairness are important dimensions (Jepma and Munasinghe 1998).

Referring to the risks posed by a post- modern condition that provided no guideposts for behaviour outside the relative values of local communities Kuhtz (2008) expressed a concern about the collapse of the moral virtue of personal responsibility which he saw as necessary to respond to the challenge posed by climate change. Where does the search for personal responsibility lead? One destination lies in the transition from personal responsibility to democratic action. If this entails supporting the democratically elected bodies which support wind energy as a means of tackling climate change then that is one means of taking personal responsibility. The individual who has elected the representative to the democratic body becomes responsible for the consequences of that representative as if they had carried out the action themselves (Pitkin 1967 p39). The corporate response to tackling climate change may take the form of incentivising wind farm construction as is currently the situation in Scotland. However, the incentives available for the construction and management of wind generated energy mark the point where the developmental 'externality' referred to earlier becomes a major catalyst for development. This catalyst creates the meeting place (or battle ground) for the developmentalist paradigm and the sustainability paradigm

4.2 SUSTAINABILITY IN PLANNING AND PLANNING IN SUSTAINABILITY

4.2.1 SUSTAINABILITY IN PLANNING

Section 4.1.1 illustrated that sustainable development is a notoriously difficult, slippery and elusive concept to pin down with a minimum of eighty identifiable, competing and sometimes contradictory definitions (Fowke and Prasad 1996; Williams and Millington 2004). The characteristics of sustainability and sustainable development pose major problems for incorporating them meaningfully into planning theory and practice. There is a very large literature relating to planning theory and practice. However, Healey (2005 p5-6) concisely encapsulates the ethos of modern planning when stating "the core of a planning focus is the interconnection of people and place, of activities and territories. Places are as much social nodes as physical sites and it is impossible to avoid the intense and deep conflicts that routinely surface when planning interventions are initiated". The actors taking part in these conflicts in the rural setting have been identified by Marsden et al (1993) as farmers, financial institutions, builders, planners, councillors and residents. However, planning is not a neutral, value-free technical exercise but is shaped by the economic and cultural milieu in which it operates with each individual actor reaching their own interpretation of issues through a unique interpretation of language (Gilby et al 1997 p23)

Neither the public sector that promoted and responded to certain agendas, nor politicians nor planners, who interpreted these agendas, have an overwhelmingly shared sense of where sustainability problems originated or how they should be resolved (Holden 2008 p 476). Words such as sustainability which it is hoped will convey to others the desired actions to be undertaken should be understandable in terms of a meaning shared by academics, practitioners and citizens (Campbell 1996). However, if there is no agreed understanding of meaning in the planning lexicon then any actions taken on the basis of terms that are not well understood will be perceived to be hollow in meaning (ibid).

Therefore one of the main focuses in the context of planning is the on-going debate about the meaning of sustainability and the problematic nature of translating theory into policy and practice (Owens 1994).

The lexical and conceptual difficulties created by the incorporation of sustainability into the planning system are made even more problematic by the past ethos of planning. In the UK, the post-war history of the planning system witnessed the dominance of economic over environmental considerations (Healey and Shaw 1994 p434). In the policy discourse of the 1980s and into the 1990s British public policy has been formulated around considerations of instrumental rationality with the moral value of nature, environmental stewardship and preserving an inheritance for future generations pushed to the margins within the planning debate (ibid). Owens (1994) argued that the principles of sustainability challenged the presumption in favour of development and sat uneasily with the utilitarian notion of 'balance' or trade-offs that had characterised environmentalist discourse in the 1980s. She goes on to point out that far from effecting reconciliation between development and the natural environment defining what was critical natural capital, which elements were of intrinsic or utility value and what activities were sustainable exposed conflict more starkly and at an earlier stage in the planning process (ibid 1994). The realities for the planning system of the current quest for sustainability within a tripartite agenda were summed up by Steele (2011 p295). Neoliberalism, globalization and climate change all posed profound challenges to planning practice because of complexity, cumulative impacts and embeddedness in production and consumption patterns.

That the incorporation of the concept of sustainability into planning may be more challenging to planning theory than it first appeared is emphasized by Dyck (1998). This view was reached as a consequence of planning having emerged primarily from a

modernist social paradigm which had associated development with increased resource use, trickle-down economics, and the expert-oriented greening of planning. The latter point seems to be paralleled by the fear that the 'professionalisation' of environmental discourse was serving to divide the new environmental agenda from the popular support it had in the 1980s and thus from the political base needed to mobilise support (Healey and Shaw 1994).

The most widely used definition of sustainability in the context of planning is that contained in the Brundtland Report (Counsell 1998 p179). This report was followed by the Rio Earth Summit in 1992 which as noted at the beginning of this chapter, endorsed Agenda 21 a manifesto outlining a strategy for global action on sustainable development and the maintenance of the ecological conditions necessary to support human life at a specific level of well-being (Baker 1997). Subsequently a major shift in environmental policy occurred in the UK in 1990 with the publication of 'This Common Inheritance' (DOE 1990; Baker 1997). The growth of environmental consciousness referred to in Chapter 2 had therefore become, in theory at least, a foundation for government policy. However, translating the 'global' statement of intent into more specific and more geographically localized policies faced major problems. For example Robinson (2004) put forward the argument that the failure of sustainability to guide a new approach to policy making was the major difference between problems of sustainability and other policy issues.

During the 1980s the value of what had become classified as environmental capital was increasingly appreciated and late in the decade the debate over environmental sustainability began (Healey and Shaw 1994). Healey and Shaw (1994) highlighted this time delay and the consequential time lag in the emerging environmental agenda being incorporated into development plans until the early 1990s. This delay was the result of the

constraining attitude of central government and the slow percolation of the new agenda into the planning profession (ibid). Therefore the environmental discourse expressed in government guidance and development plans of the early 1990s had moved decisively away from the narrow utilitarianism of the 1980s. This had set development and the environment in opposition to each other, privileged economic over environmental considerations and set the scene for the 'strong' or 'weak' sustainability debate (ibid p433).

Despite the chronological delays and the ontological and epistemological milieu within which sustainability is located some merit for its inclusion in planning has been recognized. Jacobs (1992) identified an incremental approach by authorities to the formulation of environmental policies. First of all environmental issues were dealt with in isolation within specific policy areas. There then followed a more holistic approach seeking to develop integrated policies and actions. The final phase involved a movement towards the adoption of sustainable development principles which oscillated between a weak or balancing version and a strong or constraint-orientated version of sustainability. Sustainability has been adopted across a wide range of planning and policy arenas in order to determine how humans should organize and relate to the environment (Evan-Goldstein 2007 p227; Walker and Shove 2007). Translated into development plan preparation sustainability basically provides an opportunity for different and possibly conflicting environmental factors to be taken into account and for environmental matters to be considered along with economic and social factors in order to form policies to secure the best outcome (DoE 1993; Hales 2000 p104). It has been concluded by some planners that the inclusion of the sustainability paradigm into planning has therefore been largely beneficial when considering land use planning decisions (Evan-Goldstein 2007).

An important concept linking planning decision-making with sustainability is the precautionary principle. The Rio Declaration on the Environment and Development in 1992 formulated the precautionary principle: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". However, the European Commission (2000) concluded that there was no generally accepted version of the principle and declining to define it preferred that its meaning was fleshed out through the decision-making process. Although widely promoted through the 1992 Convention on Biological Diversity and the 1992 Framework on Climate Change the principle, because it is value-laden in relation to nature, society and social equity, has been a bone of contention (Cameron and Aboucher 1996; Van den Belt and Gremmen 2002 p103). Nevertheless, the Scottish Government has incorporated the precautionary principle in some of its planning guidelines (e.g. NPPG14 par80). As a consequence the precautionary principle has relevance for the planning decision-making process. However, the interlinkages between science and policy and opinion stressed by Hajer and Versteeg (2005 p176) indicated that the principle like sustainability cannot be imposed in a top-down manner but as continually contested in relation to its meaning, interpretation and implementation. This reflects the stance taken by the European Commission (2000).

The precautionary principle is a philosophical foundation enabling policy or regulatory action to take place in the face of scientific uncertainty (Cameron 1994 quoted in Sampson and Chambers Eds. 1994 p242). The principle has like the concept of sustainability, been criticised as being elusive in terms of meaning and application with a questionable status in international law (Gundling 1990). In addition Pederson (2010) has identified an incompatibility between the principle and environmental justice. This has arisen because of the emphasis on risk assessment and management conflicting with the central ideas of environmental justice – public participation and social justice (ibid p35). Nevertheless, the

principle has been promoted widely. It has been internationally incorporated into policy documents and treaties (the 1992 Rio Declaration and the UN Framework on Climate Change) all with relevance to the protection of the natural environment (Cameron and Aboucher 1996).

The precautionary principle is not purely a scientific concept but a value-laden concept. The value which the community has placed on different aspects of the environment was therefore crucial knowledge in knowledge accumulation and the study of environmental capacity (Counsell 2002 p13). Debate about 'clarity' is common where the view is taken that there is a substantial 'knowledge deficit' relating to the risk to the natural environment by a proposed development (Healey and Shaw 1994; Counsell 2002). In this context the Environmental Statement (ES) submitted with a planning application has an important role in informing the planning authority of the applicant's evidence that there would be no damage to valued and protected environments. The relevance of the precautionary principle to environmental protection is actively promoted by environmental groups (such as Friends of the Earth, Greenpeace and the RSPB) who placed environmental protection above development needs and despite the concept's ambiguities used it as a staple argument of their campaigns (Van Den Belt and Gremmen 2001 p105; Counsell 2002). However, in planning the precautionary principle sits uncomfortably with the presumption in favour of development and the development industry is more predisposed to supporting the present role of the planning system in securing a balance between development needs and environmental protection (Counsell 2002 p7)

4.2.2 PLANNING IN SUSTAINABILITY

The inability to understand that many everyday activities have a significant negative impact on the natural environment seems to imply that sustainability has less meaning in

terms of a personal responsibility for the environment. More positively however, Newman (2002) judged that one of the strengths of the sustainability concept was that it was a set of not overly definitive principles that could be examined by local communities in order to see how these principles could be applied to create better long-term futures for its members (ibid).

Are there any characteristics that are specific to sustainability from a rural perspective? Thompson (1999) concluded that in a rural context, development was not necessarily synonymous with growth and that instead sustainability might necessitate a decrease in the intensity of economic activity. Thompson's idealised concept of rural sustainability was characterised by: the ecological dimension which required that environmental systems remained in a state of equilibrium; the economic dimension which required that development be compatible with future employment opportunities and an adequate standard of living; a cultural dimension which implied the maintenance of a distinctive way of life along with the cultural heritage of a particular community, the built environment and landscape; and a political and administrative system that was democratic and transparent and incorporated a high participatory element (ibid, p298).

A case study which illustrates many of the issues surrounding a community's assessment of the sustainability of a major development proposal in a rural area was the Lingarabay Superquarry planned for the Island of Harris in the Western Isles of Scotland. Harris is geographically part of the Island of Lewis and Harris but is often referred to separately. The Lingarabay Superquarry illustrated and highlighted many of the differences between the contrasting concepts of development and stewardship in relation to the natural environment within the context of an island community (Harris). Both concepts are bound up in the process of 'othering' whereby the island becomes an object of exploitation (development) or idealization (stewardship) (Mackenzie 2002 p220). McIntosh (2004

p151) making reference to the Lingarabay development distinguished between the industrial society which made things "over and over again" - the sustained development - and the natural world that is only made once and therefore requires development which is sustainable. However, such is the authority of the sustainability paradigm that all parties - the developers, the conservationists and the local inhabitants appropriate it for their own ends (Warren 2002 p120). Consequently within the superquarry debate the language of sustainability lent legitimacy to the cause of corporate capitalism, becoming the means through which a massive venture of corporate capital and the interests of private property could proceed (Mackenzie 2002 p225).

A central concern of those objecting to the Lingarabay development was the perceived impact it would have on the important elements of QOL discussed in Chapter 3. This concern focused particularly on crofting with its reliance on part-time employment and its contribution to local culture and the island way of life and their inseparability from the natural environment (Mackenzie 2002 p222). In addition an important factor in determining the attitude towards the development was the strong religious convictions of most of the population of Harris (ibid p222). In this context the combination of religion and spirituality can be seen as having an essential role to play in sustainable planning. Both environmentalists and theologians had linked the absence of sustainability to the absence of spirituality (Senbel 2006 p 96). The superquarry may therefore have been perceived by the objectors as unsustainable because it represented the values of corporate development rather than those which embodied their sense of spiritual environmentalism. However, another issue highlighted by this development was the stark ontological contrast between the positivist and post-positivist attitudes towards the evaluation of the natural environment.

Within the Lingarabay debate there was an attempt at a demonstration of power through (selective) knowledge cloaked by positivism. The 'subjective' judgments of the objectors, for example those relating to culture and spirituality, were challenged strongly by the quarry supporters as not being of comparable value to their 'objective' facts (Warren 2002 p121). Knowledge and power are closely related and there is no knowledge that does not presuppose and constitute power relations at the same time (Foucault 1979 p27). When some discourses become dominant they can exclude alternative views and understandings by mechanisms of cognitive closure (Sandkjaer and Sagile 2010 p500). This appeared to be the strategy of both sides in the Lingarabay debate with the supporters strengthening their case through appeal to what they considered to be a superior 'objective' knowledge.

4.2.3 ENVIRONMENTAL JUSTICE

Environmental justice is an important corollary of the concept of sustainability (Slater and Pedersen 2009 p808). Essentially environmental justice aims to ensure that everyone lives in a healthy environment with enough environmental resources to lead a healthy life with the environmental costs and benefits of economic development distributed equitably (ibid p780). One omission from the reform of planning legislation in the Scotland Planning etc. (Scotland) Act 2006 was an explicit reference to social and environment justice. In the private sector land ownership also has an important role to play in environmental justice. The importance of landowners' stewardship of natural assets was reflected in the debates on land reform which led up to the Land Reform (Scotland) Act 2003. Formal consultations on proposals for land reform resulted in a call for stewardship obligations to be imposed on community land owning bodies and private landowners (Wightman 2000 quoted in Scottish Executive 2006 p37).

The Scottish Government's approach to policy formulation contained a strong commitment to social and environmental justice, as well as intergenerational equity and respect for the carrying capacity of the planet (Scottish Executive 2006). Owens (2008) has argued that environmental justice is based on providing opportunities for all those affected by environmental decision-making to be heard. Social justice in policy documents has been defined as justice constituting a fair share of natural resources and the right not to suffer disproportionately from policies, regulations and laws (Scottish Executive 2006 p113). These definitions can be seen to relate to two important constituents of sustainability, fairness and empowerment. However, Treanor (1997) took a radically different point of view of the relationship between sustainability and public participation by claiming they were essentially incompatible. In effect he argued that sustainability was an ideology fashioned out of radical conservatism, understood in its traditionalist rather than neoliberal sense, which resulted in the state monopolising power. Sustainability should therefore be judged by its hidden agenda one he considered to be politically, morally and ethically wrong (ibid).

4.3 PLACE ATTACHMENT AND ENVIRONMENTAL CITIZENSHIP

4.3.1 PLACE ATTACHMENT

Place and place attachment have potentially an important role to play in formulating the environmental values that enable an individual to make a cognitive assessment of the sustainability of a particular development proposal. Place exerts its influence on the relationship between an individual and the natural environment through the existence of physical features and symbolic meanings, the former being a cue to the latter (Lewicka 2008 p211). The potential therefore exists for the spatial dimension of place to range from the home and local community at one end of the spectrum to the regional and national at the other. The word community is used in this research to refer to a social unit larger than a household but smaller than regional and national. The most powerful relationships exist

between space and community to the extent that it is difficult to separate them in conceptual terms (Bow and Buys 2003 p3). This point is emphasised by Giuiani and Feldman (1993) when finding that there exists a reciprocal relationship whereby communities are defined by place but communities also help to define that place.

An individual's relationships with a place are not static. Consequently when an attachment stimulates an interest in the places past this should result in a richer personal historic knowledge (Lewicka 2008 p214). At an individual level the individual's memories also tend to be social memories (both contemporary and historical) transmitted by written, cultural and oral traditions (Lewicka 2008 p213). Therefore the environment when conceived of as space is more than just a backdrop to personal phenomena but a distinct way of seeing the world that plays up self-environment relations (Devine-Wright and Clayton 2010 p268).

Place attachment refers to the bonds that people establish with the surroundings possibly without awareness, in which they carry out their daily activities and go about their personal lives (Hernandez et al 2010 p281). The bonds developed with places give people the sense of identity with place over time and at different stages of their lives in an ever-changing world (Hay 1998; Lewicka 2008; Hernandez et al 2010). Place attachment is therefore an on-going relationship with a place and is most strongly evidenced by residency. Longer residency creates stronger bonds and these in turn provide a greater incentive to protect and preserve places (Livingston et al 2008; Hernandez et al 2010). What is not clear from the literature however, is the influence that personal geographical mobility has on place attachment. That is the extent to which each 'place' exerts an influence or dominance over the other places or where relevant, what factor(s) help to determine the dominance of one place attachment over another.

There are distinct social and physical dimensions to place attachments associated with the natural environment (Raymond et al 2010). Some studies have illustrated that in the context of place attachment social attachment had a greater influence than the physical dimension (Hidalgo and Hernandez 2001). Although the conclusions arrived at in these studies may have geographical limitations it is clear that the social dimension of place attachment need to be taken into account when considering place attachment issues. Other research has illustrated that place attachment can incorporate generational, social and cultural ties to the land and community (Kyle et al 2004 p214). References to past action and experience consequently play an important role in maintaining individual and group identity (Raymond et al 2010 p424). However, visitors to a location with limited residency were less inclined to report strong emotional and spiritual ties (Kyle et al 2004 p214).

The importance attached to the social dimension has tended to overshadow the importance of the physical dimension (Carmen et al 2001). As was touched on in Chapter 3 it was clear that human connections to nature and the impact of nature on human well-being were strongly influenced by the relationship with the surrounding natural environment. Consequently place attachment can rest on physical features including the natural environment thereby aiding the inclusion of nature into individual self-concept and group identity (Scannell and Gifford 2010 p290; Raymond et al 2010 p424). Kyle et al (2004 p215) identified the concept of ego-values in relation to a particular place where the values held were presumed to be aspects of self that were especially important and enduring. Kyle et al (2004 p213) concluded that the physical and textual characteristics of a geographical setting when combined with the dynamic contexts of social interaction and memory provided an insight into the individual stakeholder's divergent meanings and value systems in the context of the natural environment. There is therefore congruity between the physical and psychological resources of the environment in the emotional, friends and

family bonds and bonds relating to personal experiences (Shumaker and Taylor 1983; Lewicka 2008 p212).

4.3.2 ENVIRONMENTAL CITIZENSHIP

In the context of the regulation of environmental behaviour Kerpola (1989 p244) stressed the importance of the natural environment in itself for the individual citizen and not merely for its functional requirements. Interpretations of environmental threats are therefore filtered through a perspective based on the perceivers' identity, a factor that has become more salient with the increasing importance of the natural environment in public discourse (Devine-Wright and Clayton 2010 p267). The sense of connectedness to the natural environment of a 'place' may therefore have increased relevance to pro-environmental behaviour because hazards that threaten the quality of the natural environment threaten the individuals' attachment (Scannell and Gifford 2010 p290). For example despite any general public acceptance of renewable developments place attachment and its disruption play an important role in the lack of support for specific renewable projects (Devine-Wright 2011). This is because place disruption may affect the social and symbolic dimensions of place thereby creating negative emotions such as anxiety, grief or loss and the disruption of social networks (Devine-Wright 2011 p337). The NIMBY (Not in My Back Yard) concept has been critiqued for not taking into account the issues relating to place attachment, particularly issues relating to the disruption of emotional bonds and threats to place-related identity processes (Devine-Wright 2005; Wolsink 2007; Devine-Wright 2009; Devine-Wright 2011).

Scannell and Gifford (2010 p290) concluded that because of the dearth of evidence relating to the relationship between the physical environmental dimension of place attachment and pro-environmental behaviour definitive conclusions can be difficult to draw. In addition the multi-faceted relationships between self, environment and behaviour were made more

complex by the affect measures (e.g. anger, frustration and shock) relevant in the perception of threats from proposed technological developments (Devine-Wright and Clayton 2010 p269). Nevertheless, some research has shown that individuals who were strongly attached to their place referred to it with positive emotions such as pride and love and expressed this through proximity-maintaining behaviours (Scannell and Gifford p289). These individuals also showed a greater willingness to advocate protective measures and showed stronger opposition to development that was perceived to be detrimental to their community (Scannell and Gifford 2010 p290).

The 'discursive community' (which may be in the context of the public sphere) was proposed as a forum for considering participatory involvement in the sustainable development planning debate opening it to a much wider array of environmental concerns (Meppen 2000 p50). Thus any individual member of the discursive community participating in this debate may be considered to be an environmental citizen. One definition of the term environmental citizen incorporates both individuals and communities and their consideration of environmental (including quality of life) rights and responsibilities. These are rights that we all have as residents of the planet and responsibilities that we have in caring for the earth (Macgregor and Szerszynski 2003 p8). Bell took a radical step by re-defining and extending the meaning of 'community' to include the non-human elements. This gave citizens duties towards the non-human members of the environment and the protection of their intrinsic and utility values (Ball 2002; Bell 2004). Ball's concept of the non-human element of the political community encapsulates a deep ecological perspective where non-human nature was privileged regardless of human development outcomes (Naess 1984 cited in Holden 2008 p477).

Environmental citizenship can thus be seen as being relevant to the fostering of attitudes and concerns that go beyond self-interest. Bell (2004) cautioned however, that the

citizen's conception of his or her connection to the environment, like their conception of the environment itself, was just that - a conception. Smith (1998) attempted to explain how the concept of the environmental citizenship emerged. This explanation revolved around it being a consequence of the evolution of the sense of ecological responsibility which had led the human species into a fundamental reassessment of its capacities for acting to protect the environment (ibid). Smith concluded that the relations of entitlement and obligation (rights and duties) broke through the species barrier and beyond (ibid p99). Bell (2004) also referred to humans in this context as environmental citizens differing from the 'average citizen' in their attitude to the natural environment.

Marshall (1950) has identified three phases of liberal citizenship which run counter to the concept of environmental citizenship. Firstly, civil citizenship which introduced property rights and conceptualized the environment as property to be owned. The second phase, political citizenship included a commitment to universal suffrage, but the conception of the environment as property remained unchanged. The third phase, social citizenship, introduced inter alia, social and welfare rights but with the environment still conceived of as property. These three phases may illustrate the unrealistic nature of the expectations of environmental citizenship within both free market and egalitarian theories of liberalism. This is because these theories do not incorporate adequately a concern for the environment. The liberal citizen inhabits a world of property where there is no attachment to the physical environment. A contrast to Marshall's three stages of liberal citizenship can be found in Bell's (2004) proposition that the principles of sustainability should take priority over the principle of ownership.

4.3.3 COMMUNICATIVE PLANNING AND GOVERNANCE

An illustration of the 'top-down' approach in the planning system is the Scottish Government's influence and guidance on the content of development plans through the

issuing of national planning policy guidelines (NPPGs). The most relevant of these to this research are NPPG 14 on the Natural Heritage, NPPG 15 on Rural Development and NPPG 6 on Renewable Energy. These explicitly or implicitly necessitate that the principles of sustainability be incorporated into LPA's local planning policies and planning development control/management decision taking. Another example of the top-down approach is the Scottish Government's involvement in the decision-making process for approving major wind farms such as the LWF.

The perception of governance in regulatory planning as being top-down potentially undermines the foundation of what has been referred to as the communicative paradigm in planning. Communicative planning has its roots in Habermas's paradigm of communicative action based on consensual discourses of critical rationality played out by equal actors (Richardson 1995). Foucault (1979) however, had a more realistic view of actor/stakeholder communications. He was concerned with an oppositional struggle against power, a struggle aimed at revealing power when it was most invisible and insidious (ibid). For Foucault therefore communication through discourse had an important role to play in power relationships between planners and citizens as pursued through state bureaucracies (Richards 1995). However, although widely used in planning analysis and research Harris (2011) cautioned that Foucault's work may be seen as circumscribed by contrary interpretations, spatial limitations and insufficient attention to the role of the state. Thus while the Habermasian communicative approach to planning with the role of sharing values (such as those relating to the natural environment) taking place in consensual decision-making settings it failed to take into account adequately the repercussions of planner-citizen power relationships (Tewdwr-Jones and Allmendinger 1998).

The public impression that government power enables it to do what it wants to do anyway may give rise to public apathy and alienation leading to a passive expression of cynicism towards governance (Scottish Executive 2002). The extent to which the public engages in the planning process is in reality low due to a perceived lack of opportunity for involvement (ibid). Despite the freely available statutory opportunities for involvement, formal participation in government processes generally has tended to be dominated by professionals, politicians, statutory consultees and organised groups of special interests (Davies 2001). Non-organised 'publics' consistently form a large constituency of non-participants prompting some commentators to argue that there was a crisis of participation and democratic legitimacy in local government (King and Stoker 1996). The view that public involvement only followed after the basic plan framework had already been established created the perception that it was impossible for the public to influence the direction that planning should take (Davies 2001).

Specific reasons for public non-involvement in governance issues can be highlighted. These included the negative views held about local governance; a lack of awareness concerning opportunities to participate combined with a lack of specialist or technical expertise; issues of self and social exclusion; personal, social and cultural factors; and citizens' perception or experience of a lack of response to consultation from local government (Scottish Executive 2002). However, several factors have contributed to stakeholders' willingness to communicate environmental values through participation in local governance. These are the nature of the issue; the greater relevance to their own or their community's interests than general issues; the nature of social activism with those participating tending to be members of other community groups; and the costs and benefits of involvement which in the context of environmental issues means that costs are concentrated whereas the benefits are spread widely (Scottish Executive 2002).

When the decision-making process was perceived to be more transparent the likelihood of accountability in relation to both civil society and government bodies was increased (Tippett et al 2007 p18). An important public perception identified in the Scottish Executive's research (Scottish Executive 2002) was that of planning being perceived as a predominantly technical discipline. In addition cultural barriers have existed between the laity and professionals whose external knowledge may be perceived to lack the local insight borne out of long-term local experience (Selman 2001 p25). Another factor may be that the providers of the knowledge are not personally known to the recipient of the knowledge thereby removing any bonds of trust (ibid p25). These factors have the potential to lead stakeholders to be suspicious of the 'knowledge' made publically available during the decision-making process.

In addition to the continued prevalence of the technical language used by 'experts' the sometimes conflicting economic and social issues that elected members consider on behalf of their constituents also play an important part in the knowledge used in the decision making process. Therefore democracy and the value judgements of the decision makers in the decision-making process may result in the decisions taken within PAs not being necessarily the most environmentally orientated decisions (Van den Bergh 1996; Wissenburg 1998 p3). Greater public involvement would take planning away from its public perception as a decide – announce and defend process where the decision is taken then announced to the public and defended. This process is placed on the lower rungs of Arnstein's (1969) ladder of participation and can be contrasted with any planning system perceived to be genuinely open and participatory (Wissenburg 1998 p13).

4.3.4 ENVIRONMENTAL CITIZENSHIP AND COLLECTIVE ACTION

Some individual (environmental) citizens may wish to carry out what they perceive to be their environmental duties through participation in planning-related issues in a group of

119

like-minded citizens. The energising of this type of collective action depends upon a number of factors such as the co-ordination of actions, mechanisms of conflict resolution and information sharing (Ostrom 1990). Given these needs the possession of organisational skills is fundamental to enabling collective action. The creation of a leadership (both individual and collective) is an important asset in most collective action groups (Futemma et al 2002 p518). Personal circumstances or demographic factors may either inhibit or promote motivation to become collectively or individually involved in environmental issues. Selman (2001) highlighted the importance of the personal circumstances of for example older people, middle-aged people with fewer family responsibilities and observed that the representation of young people in environmentally related activities was very low. Previous participation in, for example, an environmental organisation and the resulting beneficial collective outputs were more likely to motivate individuals to participate in collective action (White 1996). In addition to the above, perceptions such as the perception that the natural environment was under threat directly influenced individual choices towards engaging in collaborative behaviour (Futemma et al 2002 p504).

A mutual interest does not in itself presuppose that self-interested individuals will always find sufficient grounds to form a group. However, Olson (1965) postulated that although self-interested individuals were unlikely to co-operate voluntarily to campaign for public goods there was an argument that a group of individuals with common interests tended to further these common interests through group formation. However, Libecap (1989) cited the practical difficulties that could be faced in creating worthwhile cooperative outcomes due to free riding, fear of future defection and the high transaction costs associated with organizing a group. In addition Hardin (1968) put forward what might be considered a controversial and pessimist view, that free and rational individuals made decisions which were beneficial in the short term but were detrimental of everyone else in the long term.

Despite these potential difficulties there have been many instances involving the creation of groupings within the more recent waves of voluntary collaboration in environmental issues. Examples include civic environmentalism, grassroots ecosystem management and collaborative watershed management (Leigh 2006).

Already formed groups may campaign to attract members. These campaigns attempt to attract the environmental citizen and stimulate activity through initiatives based on lifestyle changes (Selman 2001 p14). This can be seen as tapping into some of the assets that stakeholders perceive to be important in contributing to their QOL. There does not appear to be strong evidence therefore to point conclusively to any single dominant explanation for the motivating forces behind environmental group actions (Hornstein 1998 p70). However, place identity has been claimed to be an important factor. Feared possibilities can be the catalyst for generating a place identity incorporating personal roles and attributes, membership of social groups or categories and connectedness with geographical locations (Devine-Wright and Clayton 2010 p267).

Duverger (1972) referred to the informal organised groupings of stakeholders as pressure groups. These groups sought to influence decision-making while at the same time remaining apart from it (ibid). The actions of pressure groups may be overt or covert and Duverger (1972) differentiated between groups which could be considered exclusive and those that could be considered partial. The main characteristic of exclusive groups was that their sole purpose was to take action in the political domain by bringing pressure to bear on institutionalised power whereas partial pressure groups regarded the exercise of pressure as only one facet of their activities (ibid p104). Manifestations of partial pressure groups may be found in the long-established and highly organized conservation groups in the UK. These include the Royal Society for the Protection of Birds (RSPB), Friends of the Earth (FoE), the Scottish Wildlife Trust (SWT) (the voluntary body dealing with the

overall conservation of the natural environment in Scotland) and the National Trust for Scotland (NTS).

4.4 CONCLUSIONS

The planning system has an important role to play in protecting the intrinsic and utility values of the natural environment and embedding these values in decision-making to ensure that land use and development can be carried out sustainably. The challenge for the planning system is how to incorporate such a diffuse 'paradigm' as sustainability into an already paradigmatic laden decision-making process. In arriving at a decision the complexity of the interactions between the natural environment and society, cultural diversity and technological advances, planning legislation and public accountability poses significant challenges for all the stakeholders within the planning process. In addition there is evidence that public understanding of the concept of sustainability is not high. This may in turn influence how the planning process and any 'sustainable' outcome will be perceived.

The Scottish Government has incorporated a weaker interpretation of sustainability and the precautionary principle into its planning policy guidelines. Because of the top-down nature of the planning system in Scotland LPA's development plans and planning decision-making are also likely to include the weaker interpretations. The decisions may as a consequence be perceived by some stakeholders as giving less attention to safeguarding the natural environment than they considered desirable. One of the most important contemporary debates on sustainability is that relating to global warming or climate change. The Scottish Government has promoted the generation of electricity in what it considers to be a more sustainable manner through the development of on-shore wind farms. These wind farms are also seen as a means of mitigating anthropogenic influences on climate change. This poses major new challenges for the planning process.

Development that is considered to be in the best interests of reducing greenhouse gas emissions must also be assessed to be capable of being sustainably integrated into an intrinsically valued natural environment.

Environmental citizens consider that they have an important role to play in achieving the development-sustainability balance. The environmental citizen acting within the public sphere will in any conflict situation tend to place the values attached to the natural environment and social capital above corporatist values. However the capacity and capability for public participation in planning is dependent upon a number of factors. One of the most important of these is the relevant 'expert' knowledge. The Foucauldian insight that knowledge and power are closely interlinked makes the possession of the relevant knowledge an important asset. Therefore personal judgement is crucial in determining which knowledge and how to use it has the greatest potency in relation to maximising stakeholder influence in the resolution of sustainability conflicts within the planning process.

CHAPTER 5 THE METHODOLOGICAL APPROACH – THEMATIC DISCOURSE ANALYSIS

5.1 INTRODUCTION

Methodology can be defined as the way in which research material has been gathered and the techniques used in the subsequent analysis / interpretation of that information in the research design (Philip 1998 p262). This chapter examines alternative methodologies and describes the methodology selected to answer the research question posed in Chapter 1. An exploratory hypothesis was formulated to assist in answering the research question and tackling theories of logic which can convey a false impression that a pattern derived from observations may just be a matter of chance (Pierce 1940; Popper 1959). This hypothesis is treated here as a provisional working means of advancing this research to discover other critical facts and like all hypotheses it should be in the form of statements of expectations (Dewey 1938; Shields and Tajalli 2006). It should therefore be possible to collect evidence that either supports or fails to support such a hypothesis and although the hypothesis is never proven it can be supported or refuted by empirical evidence.

As an aid to answering the research question, the exploratory hypothesis states:

Stakeholders' intrinsic and utility valuations of the natural environment play an important role in their motivation to participate in the wind farm planning process and in the composition of the discourses contained within the submissions made.

5.2 EPISTEMOLOGICAL AND ONTOLOGICAL FOUNDATIONS

Sharp and Howard (1996 p7) defined research as "seeking through methodological processes to add to one's own body of knowledge and hopefully that of others, by the

discovery of non-trivial facts and insights". In this endeavour the characteristics of the research participants and the position and the environment relevant to the researchers themselves are important considerations (Snape and Spencer 2003). These considerations include the ontological viewpoint of the researcher concerning beliefs about the nature of the social world and what can be known about it and the epistemological nature of data and how it can be acquired. The researcher's assumptions concerning both of these branches of philosophy are important if the aims and objectives of the research are to be met.

One philosophical approach considered here is positivism which regards the world as capable of being viewed objectively and divorced from subjective human interpretations of the physical or social world. Positivists argue that the world is made up of discrete and observable events that have objective reality (Stainton-Rogers, 2002 p78). This ontological stance posits an external reality which exists independently of our beliefs and understanding with a clear distinction between beliefs about the real world and the way the world actually is (Snape and Spencer 2003). Although from a positivist perspective knowledge can only be gained through the gathering of 'facts' and objective data, Chalmers (1999) warned that human perception and understanding are fallible and that there will always be selective and biased perceptions of what constitutes 'truth'. An alternative approach lies in the anti-positivist philosophical stance. Those adopting this perspective posit the view that there is no external reality independent of our beliefs and consequently the mind works to mould the individual's conception of the world and constructs this world through thought, imagination and perception (Blackburn 1999 p 265; Snape and Spencer 2003 p16; Cardinal et al 2004 p106). The approach taken in this research is predominantly anti-positivist enabling the researcher to see into the stakeholder's 'world'. This is essentially a world created by the stakeholder's thought, imagination and perception constructed either individually or as a result of communicative action with others.

The data utilised in this research involves texts, a semantic unit containing specific textual components making it internally cohesive and functioning as a whole - for example a letter or newspaper article tells us that we have textual unities which facilitate cognition and representation of the world (Halliday 1978; Ifversen 2003; Smith 2006). The texts relevant to this research are contained in stakeholder authored documents submitted formally for consideration in the planning process. Stakeholders' language has been described as a dynamic medium through which reality is constructed and can be a means of labelling existing realities. There may therefore be no direct relation between words and the things they stand for as the word symbolises the 'thought' which in turn refers to the feature or event that is being talked about (Ullmann 1962 p56; Ifversen 2003).

5.3 THE RESEARCHER'S POSITIONALITY

The post-modern approach to qualitative research has encouraged a growing reflexivity in considerations about the conduct of social research and consequently researchers should be reflective about the implications of their methods, values and biases (Bryman 2004 p351). In addition the practicalities of social research cannot be isolated from the intellectual allegiances of the researcher and this view is at least partly arrived at for the reason that the methodologies and issues chosen are closely related to the researcher's vision of social reality (Bryman 2001). The epistemological complexities involved in determining what is relevant 'knowledge' makes the task of the researcher in gaining 'knowledge' about the stakeholder's 'knowledge' that much more difficult. Although in this research the researcher is not in direct contact with the author of the discourse the researcher may nevertheless, be viewed as implicated in the interpretation process through the stance assumed and through the ways in which an account is transmitted in the form of text (Mason 2002; Bryman 2004).

126

Epistemological factors may be more of a 'problem' in qualitative research than they are in research activity carried out within the positivist tradition, where research material is perceived as being largely independent of the researcher. It is unlikely therefore that this qualitatively-orientated research can be carried out in an entirely value-free environment. Indeed it is the analyst's conceptual skills that will be needed to read, sift, order, synthesise and interpret the data and choose the relevant analytical 'tool' (Spencer et al 2003). It is therefore important for the researcher to declare at the outset any relevant personal issues that may have a bearing upon the research activity when the choice of issues is not in itself value free. One such issue is this researcher's background as a professional planner responsible for the Planning and Development service with the Western Isles Council (Comhairle nan Eilean Siar). The case study chosen is located within the Western Isles. However, the chosen case study post-dated this researcher's tenure as a professional planner. The researcher's professional background, involvement with a number of conservation organisations and residency in the Western Isles (at the time of writing this thesis), have provided the opportunity to obtain a better insight into the geographical, environmental, economic, social and political power relations within the Islands. Antaki et al 2002) reassuringly confirm that technically sophisticated work can include being committed and institutionally located.

5.4 A QUANTITATIVE OR QUALITATIVE APPROACH?

A critique of the less than 'pure' nature of quantitative methodology in the social sciences is that it is in itself neither a ready-made philosophy nor a value-free method of research (Bennett 1985 p223). Durkheim (1897) although proposing that scientific methodologies were required to underpin the validity of the analysis of society (sociology), identified the limitations of using positivism in social research. Furthermore positivism has been criticised for turning man into an object in an objectivised world and the quantitative approach assailed as the juggernaut of spatial science that abolished human intentionality,

culture and man himself (Kockelmans 1966; Ley 1981 p250). Flyvbjerg (2004) went further arguing that today many planning researchers consider positivism as a long-dead phenomenon of the 1960s and 1970s and that rational planning paradigms should be given up and that problems that matter to groups in local, national and global communities should be addressed in the context of power relations. This is a point of view in keeping with Foucault's conceptualisation of discourse as being rooted in social networks of power (Foucault 1969). The argument for the complete abandonment of the rational planning paradigm may be an extreme view however, as the use of statistical methods can in many situations (for example in the analysis of development control decisions) help to clarify the nature of the argument which is being analysed. However, it would appear that there is now less scope and acceptance for an all embracing positivist ontology in modern social and planning research. Hoch (2006) supported the view that qualitative methodologies situated the observer in the real world and stressed that the attention, perception and reflection used in planning judgements relied upon emotional dispositions and sensitivity to texts rather than the objective detachment characteristic of the role of planners in the positivist paradigm.

5.5 THE CHOICE OF METHODOLOGY

Fig. 5.1 is a simplified diagrammatic representation of how the methodology for the current research was chosen from these options. The researcher examined different variants of Content Analysis and Discourse Analysis. These are important textual analytical methodologies that allow data to be analysed in a manner sympathetic to stakeholders' personal views of the world while embodying their values, truth claims and frames of reference. These methodologies are also considered suitable because they are both orientated towards identifying commonly understood meanings and knowledge, for example meanings and knowledge relevant to the themes of intrinsic and utility valuation of the natural environment.

FIG 5.1 CHOICE OF METHODOLOGY


```
                    ┌─────────────────────────┐
                    │   RESEARCH QUESTION      │
                    └─────────────────────────┘
                                │
                    ┌─────────────────────────┐
                    │  EXPLORATORY HYPOTHESIS  │
                    └─────────────────────────┘
                         │              │
              ┌──────────────────┐  ┌──────────────────┐
              │   QUALITATIVE     │  │   QUANTITATIVE   │
              └──────────────────┘  └──────────────────┘
                 │         │
          ┌──────────┐  ┌──────────┐
          │  CA/TCA  │  │    DA    │
          └──────────┘  └──────────┘
                              │
              ┌─────────────────────┐      ┌──────────────┐
              │  SCOPING OF         │◄────►│  LWF  CASE   │
              │  SUBMISSIONS        │      │              │
              │  TO IDENTIFY        │      │  STUDY       │
              │  THEMES             │      └──────────────┘
              └─────────────────────┘
                        │
              ┌─────────────────────┐
              │  THEMATIC           │
              │  DISCOURSE          │
              │  ANALYSIS           │
              └─────────────────────┘
                        │
              ┌─────────────────────┐
              │  TDA      OF        │
              │  SUBMISSIONS        │
              └─────────────────────┘
                        │
              ┌─────────────────────┐
              │  CRITICAL           │
              │  ASSESSMENT         │
              │  OF RESULTS         │
              └─────────────────────┘
                        │
              ┌─────────────────────┐
              │  CONCLUSIONS        │
              └─────────────────────┘
```
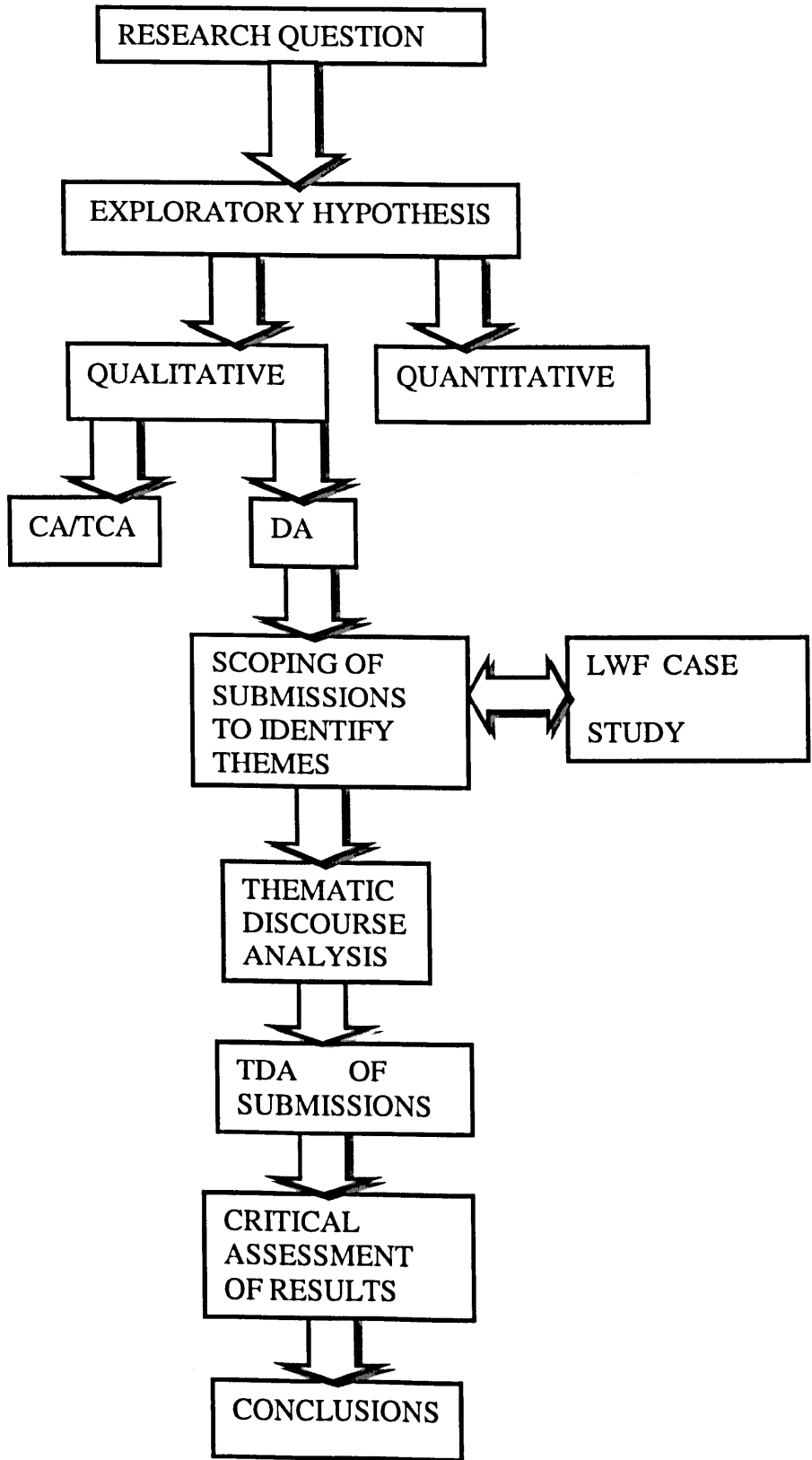
5.6 DISCOURSE ANALYSIS AND CONTENT ANALYSIS COMPARISONS

5.6.1 CONTENT ANALYSIS (CA) OPTION

Content Analysis (CA) is essentially any technique for making inferences and capturing meanings by objectively and systematically identifying specific characteristics of messages in the frequency with which words, phrases, idioms or ideas occur within the text (Holsti 1969; Truex 1996). Advantages claimed for this methodology are that it looks directly at communication via texts and hence captures the central aspect of social interaction; it can allow for both qualitative and quantitative analyses; it provides valuable historical/cultural insights over time; it allows a closeness to texts which can alternate between specific categories and relationships; it is an unobtrusive means of analysing interactions; and it provides insights into complex models of human thought and language use (Busch et al 2005). A variation of CA, Thematic Content Analysis (TCA) involves the identification of specified themes, quantification of meanings in what can otherwise be a 'messy' open-ended discourse and also the use of reliability co-efficient and other positivist tools (Willbraham 1995). Categories can then be generated, reliably coded and imposed on data for hypothesis testing units e.g. a word, phrase, sentence or paragraph based upon decisions about themes of 'meaning' (Holsti 1969).

TCA has potential for use in this research as it can provide a more focussed analysis of the stakeholders' submissions. In addition the representation of issues (cloaked in positivism) enters the realm of 'common sense' by the categorisation of themes, something that we all do every day (Wilbraham 1995). Researching a topic very close to this one, Aitken et al (2008) investigated the power wielded by local opposition groups within the planning process associated with one major wind power development, through the application of TCA to objection letters. Although their research began with a qualitative thematic analysis to identify key issues, the analysis progressed in a more quantitative manner with the identification of categories and codes. Codes were used to classify a specific recurring

objection, before the quantification of these coded references was undertaken. Both CA and TCA are inherently reductive, reducing texts to semantic categories. This is too simplistic when dealing with the complex texts that partially reveal stakeholders' ontological 'reality' and for exploring the stakeholder relationships that have evolved within the planning process. An assumption is built into CA/TCA that the words and phrases mentioned most often are those that reflect important concerns in every communication (Busch et al 2005). In addition CA/TCA tends too often to be simply a word count, often disregarding the context that produces the texts and creating difficulties with automation or computerisation (Busch et al 2005). This quantitative aspect, including the use of codebooks and the dependence on the reliability of coders, may not allow this researcher the flexibility to analyse satisfactorily the complexity of some of the textual data collected.

5.6.2 THE DISCOURSE ANALYSIS (DA) OPTION

DA emerged as a new trans-disciplinary field of study between the mid-1960s and mid-1970s in the humanities and social sciences as a systematic study of text and talk (van Dijk 2002 p108). DA has the advantage over CA/TCA in that it opens up theoretical discussion in a way that focuses on the social understanding of the material world. DA in relation to both spoken and written texts using case studies is also a valuable means of obtaining research material (Phillip 1998; Jacobs 1999). DA in the context of the analysis of interpersonal communication is, unlike linguistics in which discourse is treated as linguistic analysis, concerned with the study of a particular unit of language above the sentence or studying how language is used socially (Tracy 2003; Feindt and Oels 2005). Fundamentally DA offers the search for a postmodern *insight* into the assumptions underpinning the texts and an analysis of language in use (Wetherall et al 2001; Tracy 2003). Consequently from a postmodernist perspective there is no definitive interpretation of an individual's expressed views and objective knowledge in this context appears to be a

chimera. It could however, be further argued that the TCA methodology also follows a postmodern path to some extent (see reference to Aitken et al 2008 above) and also aims at a deconstruction of texts to focus on meanings; however, it does so in a more structured and reductive manner. DA by contrast enables the analyses of the values and perceptions contained within the discourses in the planning submissions to be carried out in a less reductive manner. DA is essentially concerned with the way knowledge is produced within a particular discourse through the use of distinctive language (e.g. legal and planning discourse) or through the adoption of implicit theories in order to make sense of social action such as the view that knowledge and 'truth' need to be understood as wrapped up in power relations (Spencer et al 2003). Consequently DA unlike the quasi-evaluation approach adopted by CA is an approach to textual analysis which enables a deconstructive reading and interpretation of a text and the creation of an understanding of the values and conditions and assumptions behind the text.

Although DA has considerable methodological benefits in relation to the current research there can however, be some potential pitfalls in its use. Antaki et al (2003) identified these as offering a summary or descriptive account of the text as a substitute for an analysis; the danger of under-analysis by over-quotation or isolated quotation and by 'spotting'; and a form of non-analysis whereby the researcher's opinion or political commitments substituted for analysis leading to the sort of simplification that was the antithesis of analysis. The researcher in this instance might select quotations for the rhetorical effect of appealing to the readers as co-sympathisers. DA can also suffer from the tendency to fragment because it is interested in the meaning of words but not their selection. Thus words are subject to an analysis which risks degenerating into a confusing series of episodic narratives that cannot be put together (Goodchild and Cole 2001 p105). The ontological and epistemological grounding of DA in the social constructionist tradition which regards knowledge as contingent has also been a source of controversy. Its

scepticism of any notion of an objective pre-existing material reality lying behind a discourse has proved to be too indeterminate for some researchers (Burman 2003; Bryman 2004). This argument leads to the conclusion that positivism cannot be rejected altogether. Planning legislation, protocols and development plan frameworks create an external ontological 'reality' which may have a significant bearing on the communication of stakeholders' created 'reality'.

Recent advocates of DA claim that it suits contemporary styles of planning and carries no implication of false consciousness or false assumptions. Applications of DA methodology to planning issues demonstrate the utility and also the suitability of DA for the current planning-related research. For example Scott (2008) used DA as a methodology for exploring planning policy conflicts. The benefits perceived were that DA allowed the analyst to understand different actors' perspectives, the communicative engagement of actors and the link between actors and broader societal discourses (Scott 2008 p15). Goodchild and Cole (2001) used DA as a means of identifying the varied meanings of the term 'social balance' in relation to urban housing policy to capture the pluralism and diversity that existed in cities. Mander (2008 p 584) used DA to identify the existence of two strong competing discourse coalitions within the wind energy development arena in the North West of England. Similar research was carried out by Jessup (2010) who also used DA to reveal the divergent motivations and values of competing discourse coalitions as a means of analysing controversies surrounding wind energy projects in Australia and the UK. Hajer and Versteeg (2005) assessed the strengths of DA in relation to the study of environmental politics and provided a conceptual overview of its contribution to the study of environmental debates over the course of a decade. Matthews and Satsangi (2007) provided an overview of who had what power in the nexus between planning officers, developers and the public at large in undertaking the redevelopment of Leith docks.

DA has also been utilised in planning research outwith the UK. For example Portugali and Alfasi (2008) used DA to analyse the dynamics of discourses involved in planning decision-making within a planning team in Israel. Searle (2004) used DA to identify the underlying ideology and assumptions underpinning Sydney's urban strategies in the 1990s. The appropriateness of DA in these situations was based on the premise that the critical analysis of planning data required the adoption of postmodern discourse theory because of the conception of planning as an arena of constant struggle over meanings and values in a Foucaultian sense. Foster (2010) employed DA to demonstrate the need to read space socially and to understand the co-production of nature and power in landscape continuity in Toronto, Canada. Smith (2006) employed DA in a case study involving controversies surrounding the introduction of conservation legislation in New South Wales to provide a process for identifying and framing knowledge, conflicting belief systems, social identities and social relations in environmental disputes. Hermelin (2009) used DA as a method for textual analysis in relation to a strategic development plan in order to uncover the dominant discourses and power relations in planning. Hermelin's case study in Stockholm illustrated the potential of the methodology in the analysis of the document textual data relevant to this current research.

These case studies demonstrate that DA methodology is flexible and has the potential analytical strengths to be a useful conceptual tool for the analysis of planning submission discourses. It enables the analysis of stakeholder values and motivations, allows for an understanding of planning as an arena for confrontations over meanings and values and helps to capture the power struggles taking place within the planning process.

5.7 THE APPLICATION OF THE DA METHODOLOGY

5.7.1 PRACTICAL ISSUES

DA was chosen for this research because one of its major strengths is that it allowed the deconstruction of the chosen texts in order to provide an insight into the stakeholder's motivation to create the texts in the first place. In addition DA allows researchers, as Smith (2006) pointed out, the opportunity to identify and frame the knowledge and belief systems, social identities and the social relationships that are inherent within environmental disputes. Although DA shares with CA the same preference for locating textual understanding in terms of situational specifics, it resists the idea of reductivist coding thereby creating the role of a narrative analysis with a focus directed at the relationship between stakeholders in making something happen (Bryman 2004 and Ifversen 2003).

Discourse analysis attaches a particular importance to the role of language in the formation of discourses which are based on the common assumptions that underpin knowledge and beliefs, social relations and social identities (Harre et al 1999 cited in Smith 2006 p83). It is important to note at the outset that there are two important yet potentially conflicting perspectives on the nature of discourse relevant to everyday communication. The first perspective is a normative and prescriptive approach to discourse associated with Habermas (1984). Habermas's primary concern was with the quality of discourse assessed by the extent to which it served to guarantee the impartiality and rationality of any discursive process (Habermas 1984). Foucauldian discourse analysis on the other hand was in contrast to Habermas not concerned with the normative quality of discussion but with how actors utilised discourse(s) to articulate their beliefs and values (Hajer and Versteeg 2005). Foucault (1969) therefore claimed that discourse revealed itself in the prominence given to its relational aspect – the combinations, series and networks that were formed through discourse. Hajer and Versteeg (2005 p175) operating from a Foucauldian perspective defined discourse, which they distinguished from discussion, as an ensemble of

ideas, concepts and categories through which meaning was given to social and physical phenomena. Discourses in this context enable stakeholders to describe and conceptualise their 'world' and intercommunication opens up the prospect of what Hajer has called 'discourse coalitions' locating actors at the heart of the production of discourses. (Hajer1995). However, for stakeholders to communicate with the planning decision-makers their discourses may need reformulation so as to comply with the protocols embedded in planning governance.

Foucault's argument that the production and communication of knowledge are penetrated by unequal and omnipresent power relations is also relevant to the composition of public and planning discourses (Foucault 1979). In this context discourses can become the framework to justify power and indeed can be manifestations of power. This is exemplified by the key decision-making stakeholders' and professional planners' discourses and the coded ways available, especially to the latter, to talk about and represent the world (Harvey 1996 cited in Gottlieb 2001 p5; Ifversen 2003; Bryman 2004 p370). Social groups are also able to legitimise and perpetuate certain power structures and relationships through their own texts and discourses (Fairclough 1989).

5.7.2 STAKEHOLDERS' SUBMISSIONS

Careful reviewing of publicly available documents representing the stakeholders' own words, and thus avoiding interviewer bias, allows the understanding of intangible and difficult concepts relating to motivation and interaction over a period of time (Gwartney et al 2002). Their textual properties make them extraordinarily sensitive indicators of socio-cultural processes, relations and change (Fairclough 1995 p4). In this research the data consisted of the publicly available submissions generated by those individuals motivated to participate in the planning process in what Habermas (1962) referred to as the public sphere. These submissions transferred through discourse personally and socially

constructed arguments, viewpoints and values. The submissions received by the Scottish Executive by the 13th December 2004 and copied to Comhairle nan Eilean Siar (the Western Isles Council) were numbered 1 - 1563 in the filed documents. These submissions ranged from less than one page to five pages in length and were made available for members and officers of the Comhairle to consult. Having requested the Council officers for access to the documents they were made available at the public library in Stornoway. The data enabled two typologies to be created enabling a more systematic analysis of the data to disclose any discursive patterns. One typology was designed to reveal if there were any characteristics that stakeholder had in common and the other typology was designed to reveal if there was a geographical pattern discernible in stakeholder distribution.

The study of discourses has increasingly come to include the study of the conditions of the production of discourse. Consequently it is frequently just as useful to talk about the discourse analysis of interactions as it is to talk about the interactional analysis of discourse (Heller 2003). Heller observed that discourse can be seen not as a product of the conditions of interaction, but as dialectally embedded within them (2003 p250). The planning process creates opportunities for members of the public to become involved formally in the determination of a development proposal. After any relevant consultations with the public through exhibitions and other public forums these opportunities begin with the submission of the planning application and end when the final decision is made after the relevant legal procedures have been exhausted. The process is thus temporally circumscribed.

A distinctive feature of interactive discourse is its recognition, even embracing, of the value of multiple perspectives and issues (Tracy 2003). Communication discourse also determines that at least on some occasions, people communicate to affect others – to affect control over the understandings others form of the communicator, the situation, their interpersonal relationships, and the task at hand, thereby making different actions and

137

reactions more or less likely (Sanders 1987). Communicators are thus choice-making planning actors confronting uncertain situations and seeking to shape what happens in ways that advance their concerns (Tracy 2003).

An important part of this research was to analyse the discourses contained within submissions in order to identify patterns of communicative action. An interesting manifestation of stakeholder communication identified in the data was what has been classified as the multi-stakeholder discourse submission (MSD). This consisted of a standardised letter which was then distributed to and then signed and submitted by individual stakeholders whose own views were sufficiently and/or pragmatically aligned with those expressed in the standardised letter. Some stakeholders indicated that they wished their submission to remain confidential and this was respected in the analysis.

5.7.3 THE THEMATIC DISCOURSE ANALYSIS OF STAKEHOLDERS' SUBMISSIONS

In the planning arena contested meanings abound and Richardson (2002 p353) concluded that the critical analysis of planning processes required the adoption of a Foucauldian discourse theory which viewed planning as an arena of constant struggle over meanings and values. It was important therefore to understand how the discourses were contested and how particular discourses prevailed in planning and others were excluded (Searle 2004). In accordance with this theoretical discourse perspective an analysis of the submissions drew on the central tenets of qualitative research with an emphasis on the point of view of the author and sensitivity to the contexts in which the texts were formed (Bryman 2004).

Pedantic lexical units were avoided as the basis for analysis. Consequently, stakeholders' discourses as a whole were analysed and deconstructed to identify patterns of meaning that

revealed their value systems. Themes have been used in this DA in the context of bringing together recurrent meanings or storylines and revealing any linkages with outside variables. The objective in the application of this approach was to avoid the reductiveness associated with CA methodologies. Themes are grounded in the data (Ritchie et al 2003) and therefore the deconstruction of discourses allowed an insight into the stakeholders' thematic 'world of values'.

The first stage of the TDA methodological approach involved the creation of the basic framework designed to provide the visible stages of a systematic analytical process involving themes (Lacey and Duff 2001 p9). Meta discourses have been described as having an enormous relevance to the study of discourse in different fields and the technique plays a crucial role in revealing explicitly or implicitly the relationships between different justifications and criticisms and the contexts in which they are embedded (Guillem 2009). In this research the meta discourse is encapsulated in the sustainability paradigm. The themes emerging from this discourse have been labelled Meta Discourse Themes (MDTs) and these have created the foundation for building the thematic framework.

The next stage of the methodological approach involved a scoping of the submissions in order to identify the most frequently occurring themes to a point where no new themes could be identified. These themes have been labelled Discourse Induced Themes (DITs) because they have been induced from the stakeholders' discourses. The DITs formed the supporting structure within the analytical framework and each was slotted into the relevant MDT. The framework of MDTs along with the DITs identified were: **Intrinsic Value of the Environment**– landscape, habitats and species, ornithology, QOL; **Socio-Cultural** – historical environment, cultural heritage, demographics; **Governance** - stakeholder empowerment, accountability; **Utility Value of the Environment/Exogenous**

Development (LWF) – traditional land uses, tourism and renewable energy. This iterative process created a framework for the analysis of the whole data set.

FIG. 5.2 THEMATIC DISCOURSE ANALYSIS IN A RURAL SUSTAINABILITY PARADIGM

ENVIRONMENT

ECONOMY

SOCIETY

META DISCOURSE THEMES: INTRINSIC VALUE; SOCIO - CULTURAL; GOVERNANCE; UTILITY VALUE/ EXOGENOUS DEVELOPMENT (LEWIS WIND FARM)

DISCOURSE INDUCED THEMES
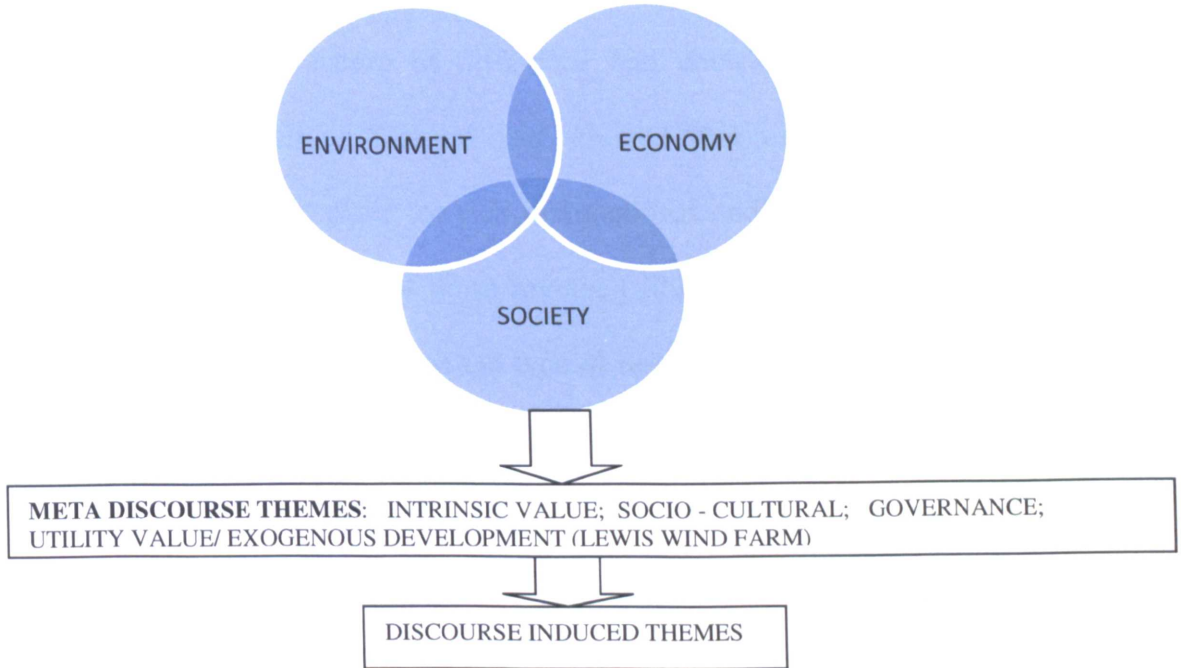
Another aim of the analytical framework was to enable a more fine-grained analysis of stakeholders' discourses to be carried out. This would be done by analysing the discourses to identify stakeholders' valuation of each DIT, an indication of any knowledge of protection measures (e.g. PAs) and the identification of any threat(s) posed by the proposed development. This approach was tested by re-scoping the first 30 submissions, the point reached in Stage 2 of the TDA framework building process. The development of this hierarchical thematic approach created the overall framework for the deconstruction of all of the stakeholders' submissions. This was enriched by choosing quotations to illustrate the stakeholders' values and perceived threats and to act as a validity check between the data and the researcher's analysis of the data. The quotations also allowed the stakeholder to have a 'voice' within the TDA process.

5.8 THE CASE STUDY APPROACH

This research methodology uses a case study approach. Case studies involve research which concentrates on special cases and generalisations from these must be handled with care (Blaxter et al 2001). However, Watson (2003) concluded that there was a need for planning research to return to its empirical roots with case study research being a way of better understanding the nature of difference and devising ideas which could more adequately inform practice. Watson also stressed that case writing needed to be contextualised in time and place, be rich in situational understanding and be transparent about the identities and values of those involved (ibid). The term case study can entail different approaches depending upon the type of research being carried out. Lewis (2003) asked what was it that made case studies so distinctive? The question was answered by stating that the primary defining features of a case study were the multiplicity of perspectives rooted in a specific context adding that the term case study was strongly associated with qualitative research (Lewis 2003). Thus it is sometimes only by taking a practical instance that a full picture of discursive interactions can be obtained (Nisbet and Watt 1980 cited in Bell 1993). This point was echoed by Flyvbjerg (2004 p297) who adopted a phronetic approach to planning research in which the role of values, interests and power relations were uncovered. He argued that by adopting a narrative approach which focused on in-depth case studies one could see how planning rationality and judgement evolved in practice.

Despite the merits of the case study approach referred to above, Bell (1993) cautioned that it was the researcher that selected the area for study and decided which material to present in the final report. While this is true and may be considered a subjective weakness it is apposite for the researcher to be responsible for the choice of a case study that will best assist in attempting to answer the set research question. It is accepted that it may not be possible to generalise from a chosen case study. However, case study planning research

can include narratives about planning issues and activities that describe the emotions and feelings of individuals and groups of individuals (Hoch 2006). Narrative accounts do more than articulate the emotions and feelings of the individuals involved in the action. They also anticipate and evoke an emotional response from the readers (Cole 1990 cited in Hoch 2006 p375). It is also appreciated that the choice of case study has a direct influence on the nature of the research results (Knight (1993 p180). Islands have been recognised as valuable 'natural laboratories' in both natural and social sciences (Quiroga 2009). They are perceived as precise and sharply defined physical entities which are, in planning terms, viewed as systematically integrated qualities that makes a piecemeal approach to analysing their problems impossible (Stratford 2009 p 799).

The island of Lewis and Harris in the Western Isles, or the Outer Hebrides as they are also known, provided a geographically compact island setting enabling the issues raised to be examined cohesively. Within this geographical unit the focus of this research has been on the planning application to construct the major wind farm on Lewis (the Lewis Wind Farm (LWF)) detailed in Chapter 6. This development would have been the largest wind farm development in Europe (and one of the largest in the world) at the time the application was submitted for its approval. Fisher and Brown (2009) have also analysed the nature of support for and opposition to the LWF proposal. They also argue that the 'discursive turn' in the wind energy literature has shown the need for more qualitative and explanatory approaches which explore the divergent value-systems and rationalities which different stakeholders possess when engaging in disputes over wind energy development proposals. However, their methodology differs from the one utilised in this research in two key respects. Firstly, they employ Q methodology which combined both qualitative and quantitative techniques to help uncover the key supporting and opposing discourses employed. By contrast the thematic discourse analysis used in this research is qualitative in its approach. Secondly, in order to undertake their analysis they consulted a number of

organisations and analysed their statements using secondary material from newspaper articles. This contrast with the methodology used here which concentrates on private individual stakeholder and their submission discourses giving a more detailed insight into how environmental citizens both individually and collectively view the LWF development.

CHAPTER 6 THE LEWIS WINDFARM CASE STUDY

6.1 INTRODUCTION

The desire amongst planning theorists such as Watson to return planning research to an empirical and case study approach was referred to in Chapter 5 (Watson 2003). The aims and objectives of this research are contextualised within the case study chosen, the proposed major wind farm on the Isle of Lewis (the Lewis Wind Farm (LWF)) located off the North West coast of Scotland. This case study is rich in the situational understanding and provides an antidote to the planning theory based on social theorists which leads to the loss of diversity and conflict inherent in planning Watson (2003). The scale and complexity of the LWF was evidenced by the 627 page report that went before the local authority's (Comhairle nan Eilean Siar (CnES) Environmental Services Committee on 28th June 2005.

6.2 THE WESTERN ISLES – A GEOGRAPHICAL AND SOCIO-ECONOMIC PROFILE

6.2.1 THE GEOGRAPHICAL BACKGROUND

The Western Isles (or Outer Hebrides) also known as the Long Island, lie some 30 miles off the North West coast of Scotland and comprise 119 islands. Lewis and Harris are geographically one island and the largest in the chain (213,753 hectares or 225.3 sq. miles). The length of the island chain is 130 miles (209kms). To put this in perspective and to give some indication of the distances involved in communication between the islands, this is

greater than the distance between Inverness and Edinburgh. The land area (excluding freshwater and intertidal areas) extends to 2,898 sq. kms. (CnES 2006) and although this is not large in the context of mainland Scotland the length of the coastline (2687 kms or 1669 miles at the high water mark) accounts for 18% of the Scottish total (Angus 1997). This adds another geographical dimension to the natural heritage and the logistics of governance. The local, national and international importance of the natural heritage and scenery of the Islands is evident from Appendix 1 with the Western Isles containing 16 out of Scotland's 147 Special Protected Areas (SPAs) and 14 out of Scotland's 240 Special Areas of Conservation (SACs) (Joint Nature Conservation Committee 2008).

The islands are separated from the mainland to the east by stretches of sea known as the Minch and Little Minch. The direct distance between Stornoway (the main settlement on the Islands and located on Lewis) and Inverness is 94 miles (151 kms), Glasgow 183 miles (294 kms) and Edinburgh 197 miles (316 kms). Air communications lessen to some extent any perceptions of remoteness. Stornoway has in the summer months (as of 2011), 5 flights per day to Inverness (flight time 30 minutes), 4 flights per day to Glasgow (flight time 60 minutes), 2 flights per day to Edinburgh (flight time 60 minutes) and 1 flight per day to Aberdeen (flight time 55 minutes) (Scottish Transport Statistics No 24, 2005). There are also regular internal flights from Stornoway to the islands of Benbecula and Barra. Stornoway is the ferry terminal for Lewis with sailings to Ullapool on the mainland (2 hours 45 minutes sailing) and the option of onward overland transport to Inverness (57 miles (92 kms)). Tarbert is the ferry terminal for Harris (the southern part of the island of Lewis and Harris) with sailings to Uig on Skye (1.5 hours sailing) allowing onward overland travel to the main Scottish settlements. An inter-island ferry connection is provided by a ferry service which operates between Leverburgh in Harris and North Uist.

The increasing interaction between the islands and the mainland can be gauged by ferry passenger numbers. The number of passengers using the Stornoway-Ullapool ferry increased from 150,000 in 1995 to 183,000 in 2005 and the number of passengers using the Tarbert – Uig ferry increased from 114,000 in 1995 to 159,000 in 2005 (Scottish Transport Statistics No. 25, 2006).

6.2.2 THE SOCIO-ECONOMIC PROFILE

There was a significant reduction in the population of the Western Isles between 1991 and 2001, when the last full census was taken. The population declined from 29,600 in 1991 to 26,502 in 2001, indicating a significant change of -3,098 in a period of 10 years (General Register Office Scotland 2005b). The population density of the Western Isles is relatively low at 9 persons per square kilometre (22 persons per square mile) and only the Highlands with 8 persons per square kilometre (21 persons per square mile) is less densely populated. The population of the Western Isles is scattered with thirteen of the islands inhabited and the majority of the population, 20,609 (80%) living on Lewis and Harris. These statistics show that population decline is a serious problem in the Western Isles. For example the population of Harris fell by 35% from 3,284 in 1961 to 2,120 in 2001. The town of Stornoway is the largest settlement in the Western Isles with a population of 5,602 in 2001 (General Register Office Scotland 2005b). Population assessments for the Western Isles prepared by the General Register Office Scotland (2005b) showed a continuing decline in population to 26,370 in 2005 with Lewis having 18,565 inhabitants and Harris 1,994.

The closeness of the socio-economic/cultural/agricultural relationship with the environment was discussed in Chapter 3. In the Western Isles crofting is the principal form of agriculture with 3,600 registered crofts in Lewis and 510 in Harris. The number of absentee crofters (reflecting the crofts that are unoccupied and/or unused) total 378 (10.5%) in Lewis and in Harris 89 (15.8%) (Committee of Inquiry into Crofting 2008). This indicates that this resource is underutilised and because of the low rate of amalgamation, crofting contains more landholdings and potentially greater fragmentation than other forms of land tenure. Nevertheless, crofting is important to the economy of the Western Isles and in 2006, agriculture (mainly crofting) employed 308 full-time and 3,987 part-time and 83 casual workers (Agricultural Census 2006). The habitats and species dependent upon the linkages between crofting and the natural heritage have already been analysed in Chapter 3. The Western Isles economy is classified as economically 'fragile' with a trade deficit of £163M (CnES 2010). The Islands' economy is also relatively reliant on primary industries and the public sector with fishing and fish farming vulnerable to environmental impacts, market pressures and European legislation (CnES 2010). The Western Isles displays to an extreme degree all of the characteristics that distinguish rural economies from their urban counterparts (Roberts and Thomson 2003). However, there was increasing optimism about the growth of renewable energy and tourism developments (CnES 2010) which was both heavily dependent on the natural heritage. The Western Isles economy has a strong dependence on non-market tourist and cultural goods and a study has shown that tourism already plays an important role in the Western Isles economy (Roberts and Thomson 2003; Macpherson 2003).

Visitors to the Western Isles were widely distributed with 70% spending at least some time on Lewis, 56% on Harris, 35% on North Uist and Benbecula, 29% on South Uist and 19%

on Barra (Macpherson 2003). The total visitor numbers to the Islands in 2002 was 179,000, with 70% visiting for holiday purposes or to visit friends and relatives (Macpherson 2003). Holidaymakers spent £222 per person and the direct, indirect and induced income was calculated at £39.3M, 15% of the total generated in the Western Isles in 2002 (Macpherson 2003). There has also been an upward trend in the economic benefits of tourism with an increase of 8.8% in visitor numbers and an increase of 19.7% in its value (£6.5M of expenditure) (Macpherson 2003). Overall the reasons why tourists came to the Western Isles vary. In 2003 the percentage of visitors' activities when visiting the Western Isles were 87.3% sightseeing, 77.2% attending beaches/seashore, 61.9% visiting museums and visitor attractions, 60.6% visiting historic sites, 54% hill walking, 54.3% photography, 45.1% bird watching, 44% flora/fauna, 18.9% cycling, 8.9% fishing, 5% golf and 4.4% sailing (Macpherson 2003). Overall the natural environment features very prominently in these statistics and about 40% of visitors referred to the outdoor environment, especially the scenery, landscape, atmosphere, coast, nature and weather as an attraction (Macpherson 2003). Visit Scotland (which now incorporates the former Western Isles Tourist Board) have an important role to play in promoting tourism in the Islands and organisations such as SNH and the RSPB have an important role to play in protecting the intrinsic value of the natural environment. The value of the natural environment in the Western Isles, if it is carefully managed or utilised for the purposes of conservation, production or outdoor activities begins to take on a higher economic profile and enhanced utility value (Dickinson 1988; Crabtree et all 1994). A survey was carried out by the Western Isles Tourist Board (now merged with Visit Scotland) seeking the views of its members about the LWF and the results were mixed. The respondent percentages were 74% in favour of renewable energy development, 59% not at all supportive of the LWF, 14% were not very supportive, 14% were quite supportive and only 12% were very supportive. This illustrated

that within the Western Isles tourist industry there was only minority support for major wind farm development (Western Isles Tourist Board 2005).

The Western Isles plays an important role in conserving the Gaelic Culture by having the largest number of fluent Gaelic speakers in Scotland (Mac an Tailleir 2004). The percentage of the population in the Western Isles that had 'some Gaelic language ability' was 72% (compared with 1.9% in Scotland as a whole) with 49% able to speak, read and write Gaelic (General Register Office Scotland 2005a). However, this ability varies throughout the Western Isles. The highest proportion of Gaelic speakers lived on the island of South Uist (71%) and on the island of Harris (69%), with Lewis being significantly lower at 56% and Stornoway, the only urbanised part of the Western Isles, having the lowest percentage of speakers at 44% (General Register Office Scotland 2005a). Because the language is used in songs, poetry and storytelling the Western Isles plays an important role in Scotland's Gaelic heritage.

6.3 THE LEWIS WIND FARM PROPOSAL

It was against this natural environment/socio-economic/cultural background that the Lewis Wind Farm (LWF) application was submitted to the Scottish Executive on 4th November 2004 under Section 36 and Section 37 of the Electricity Act, 1989. It was at the time the application was made the largest proposed wind farm development in Europe. Under the Electricity legislation the decision on the LWF rested with the Scottish Executive with the Comhairle acting as Principal Consultee. The details of the proposed development are

contained in Fig. 6.1. The LWF would, if approved, have had a limited life span of 25 years after which it would be decommissioned with the roads left in situ.

Fig. 6.1

PROPOSED LEWIS WIND FARM
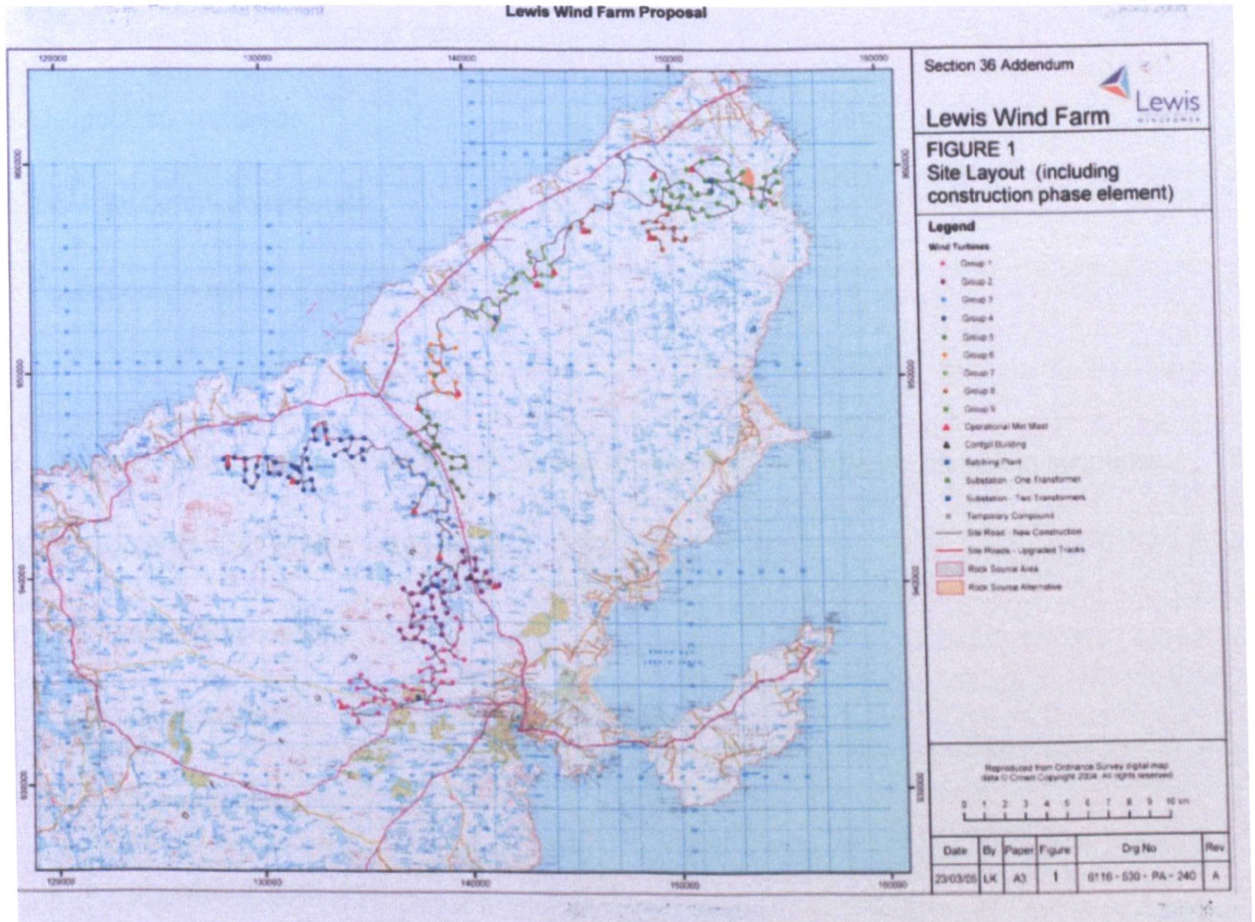
It is proposed to construct 234 turbines in an area extending from the western outskirts of Stornoway, across the centre of Barvas Moor and then west from Barvas to the eastern edge of Shawbost; and north east from Barvas to Ness.

1. The wind farm would have an installed capacity of 702 MW. It would consist of:

· 234 wind turbines, each with a foundation and crane hardstanding.

· 167 km (104 miles) of access roads.

· Nine electrical substations.

· A control building.

· Nine wind monitoring masts.

· 32.5 kilometres of overhead lines on 141 pylon towers, each 27 m high.

· 28.4 kilometres of underground cables.

· Five rock source areas.

· Eight temporary compounds.

· Four concrete batching plants.

2. The proposed wind farm would be divided into nine groups, which would be built in sequence.

Each proposed wind turbine would have:

· 3 MW generation capacity.

· Three glass fibre and/or carbon fibre reinforced blades.

· 100 m diameter rotor.

· 90 m high, conical steel tower.

· 140 m tip height.

· An off-white colour.

3. Each wind turbine would require a buried, reinforced-concrete foundation, typically 22 m x 22 m, 1 - 2 m, with a 2 m high column in the middle for the tower. Each foundation would have an adjacent hardstanding for the cranes to use for installation, maintenance and later decommissioning. The total area taken by each base and hardstanding would be 50m x 40m.

This translates, over the whole site to:

· 22m x 22m x 234 turbines = 113256 m2

· 50m x 40m x 234 turbines = 468000 m2

4. To monitor the performance of the wind farm, each wind turbine group would have a 90 m wind monitoring mast.

5. Eight temporary compounds are proposed within the site boundary. During construction temporary compounds, typically of 50 m x 50 m, would be used as secure storage for construction materials. They would also contain around five temporary accommodation units to give personnel an area in which to eat and have shelter. There would also be on-site welfare facilities which would be maintained on a regular basis by contractors. *"Diesel fuel for the site equipment would be securely contained within a bunded area, as will any other potentially polluting substances."* As the project progresses, further temporary compounds may be required at other locations on the site.

6. Access tracks /roads, with a typical width of 5 m would run between the wind turbine bases for a total of 167 km (104 miles) and be constructed from locally sourced rock.

7. Large quantities of rock would be required for the construction of the roads, hardstandings and foundations. Five rock source areas have been identified within the wind farm site boundary and concrete for the foundations and buildings would be mixed at four locations in temporary batching plants. There would be temporary compounds to act as construction bases.

8. Construction of site roads, hardstandings, bridges, foundations and compounds would require approximately 4,000,000 m3 of rock. Most of the rock would be sourced from rock source areas within the wind farm site.

6.3.1 POTENTIAL IMPACTS – LANDSCAPE

As illustrated in Fig. 6.1 the 234 turbines would have covered an area extending from the western outskirts of Stornoway north westward across the Barvas Moor towards Barvas and then westward from Barvas to the eastern periphery of Shawbost and from Barvas in a north easterly direction towards Ness. There is no National Scenic Area (NSA) designation for this area. However, the impact of the LWF on the landscape would have been at least partially a consequence of its location on the landscape type classified as Boggy Moorland (Chapter 2), a simple and undulating landform of moorland, bog and heather containing rare archaeological sites and derelict sheilings (Richards 1998). The traditional land uses associated with this landscape are peat cutting covering 8.7% of the area (Lewis Wind Power (LWP) 2004 p14) and a limited amount of crofting.

6.3.2 POTENTIAL IMPACTS – HABITATS AND SPECIES

The local, national and international value placed on the natural heritage had the potential to influence stakeholder' perceived impact of the LWF on the natural heritage of the location. International valuations of the LWF site include the Lewis Peatlands Special Area of Conservation (SAC) and Special Protected Area (SPA), and a Ramsar Site (Ramsar Convention on Wetlands of International Importance) with 81% of the LWF turbines located within the SPA (LWP 2004). The Loch Scarrasdale valley Bog SSSI is also located within the site. The Ramsar site qualifies under Criterion 1b of the Ramsar Convention as it supports one of the largest and most intact known areas of blanket bog in the world. In addition to the diversity of habitats necessary to support a wide range of wetland and moorland plant species the site qualifies under Criterion 2a by supporting a number of rare

species of wetland birds and under 3c by supporting an internationally important breeding population of dunlin of the race *schinzii* (LWP 2004).

The qualifying interest of the Lewis Peatlands SPA as stipulated in Article 4.1 of the Council Directive (79/49/EEC) is that it supports nationally important populations of 5 bird species listed on Annex 1 of the Directive (red-throated-diver, black-throated diver, golden eagle, merlin and golden plover). Furthermore it also qualifies under Article 4.2 of the Directive by supporting populations of European importance of 2 species: 3,400 pairs of Dunlin (representing 37% of the UK breeding population); and 140 pairs of greenshank (representing 10% of the UK breeding population). The citation also includes conservation objectives such as the avoidance of deterioration of the habitats and significant disturbance to the species. The LWF is also located within the Ness and Barvas SPA (649.2 ha) whose citation states that it is designated for breeding corncrakes (3% of the British breeding population) under Article 4.1 of the Birds Directive. Government advice set out in Planning Advice Note (PAN) 45 stresses that bird species protected by SPA, SAC and SSSI designations could present potential constraints to wind farm development. The Western Isles Structure Plan policies relevant to ornithology were RM 8, protecting the Natura network, RM 9, protecting SSSIs and RM 11, protecting habitats and species listed under Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora more commonly known as the EC Habitats Directive (Annex 1,2 and 4), Council Directive 79/49/EEC (the Wild Birds Directive) (Annex1) and the Wildlife and Countryside Act 1981 (as amended) (Schedules 1,5 and 8). However, the policies contain the proviso that where there are opportunities for development which offer social and economic benefits these might outweigh the desirability of protecting the natural environment. The potential for the LWF to impact on fresh water fisheries can be gauged

from the 28 river catchments affected ranging from reasonably large salmonid rivers through to single unbranched streams flowing directly to the sea (LWP 2004 p18). Eurasian Otters depend upon these water courses and measures passed to protect the Otter include Council Directive EC/92/43 (the Habitats Directive), the Wildlife and Countryside Act 1981, the Conservation Regulations 1994 and the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention).

6.3.3 POTENTIAL IMPACTS - THE ECONOMY

It was claimed by LWP that the LWF if approved it would have potentially significant benefits for the fragile local economy. The following statistics were taken from the Planning Officer's Report (CnES 2004). The total output during the 4 year construction phase was calculated at £120.4M with the creation of 133 Full Time Equivalent (FTE) jobs. The number of permanent jobs created was calculated at 33 FTE. In addition LWP proposed the establishment of a Community Fund to enable the investment of a proportion of the income generated by the LWF, estimated at approximately £702,000 (LWP 2004a p11). In 2004 the Western Isles Development Trust (WIDT) was established to disburse this funding throughout the Western Isles. It was also claimed that the economic viability of the three rural estates within which the LWF would have been sited, the Barvas Estate, the Galson Estate and the land owned by the Stornoway Trust, would have been enhanced (LWP 2004 p10). A total £4M (50% of the rental income) would have been available to be disbursed - 21% for the Galson Estate, 13% for the Barvas Estate and 16% for the Stornoway Trust. It was also calculated by LWP (2004 p10) that 50% of the rental income received would go to the shareholders and the common grazings on the three estates.

The proposed LWF may be viewed as an example of what Cloke and Goodwin (1992) refer to as the changing patterns of rural structured coherences and what Mackenzie (2004) referred to as the re-imagining of rural Scotland. From the socio-economic profile outlined above the Western Isles can be perceived as a rural structured coherence based on the central position of crofting, the associated rural society, culture and natural heritage and a history of land-owning hegemony. In the Western Isles, what Cloke and Goodwin (1992) have identified as national influences, for example regulation, mass consumption, economic re-structuring/industrialisation and the attractiveness of the area to capital accumulation, have the potential to create new structured coherences. There have been other attempts at industrialisation within the Western Isles which have had varying degrees of success. The superquarry proposed by Redland Aggregates at Lingarabay in Harris was refused planning consent. The establishment of a pre-fabrication yard at Arnish in Lewis has had more success although its economic viability has depended upon the acquisition of suitable orders, not always forthcoming. The LWF can be perceived as another attempt at industrialisation through the exploitation of the Islands' natural resources with LWP as the progenitor.

6.4 KEY STAKEHOLDERS – A COALITION OF LWF SUPPORTERS

The LWF supporters can be identified as part of what Maarten Hajer (1993 p 47) calls a discourse coalition – a set of story lines; the actors who utter these story lines; and the practices in which the discourse activity is based. The key stakeholders in the context of this research can be identified as those stakeholders with the greatest power over deciding the outcome of an application (Johnson and Scholes 2002). The LWF key stakeholders are in this wind energy dispute part of what Mander (2008 p585) refers to as the 'wind energy

supporters coalition'. However, one of the key stakeholders that must be perceived to be neutral is the decision-making authority which in this case is the Scottish Executive which held 2 meetings, one in Stornoway and one in Ness, to explain to the community the planning process involved.

6.4.1 THE DEVELOPER

Wind energy developers are natural members of the wind farm discourse coalition (Mander 2008 p 586). The applicant for the proposed development was Lewis Wind Power (LWP), a company registered in Scotland (Company No. SC225262) and with AMEC Project Investments Limited and the British Energy plc's subsidiary company, British Energy Renewables as shareholders. The applicant's self-description: "Lewis Wind Power Limited" was established especially to develop a wind farm on the Isle of Lewis. The combined strengths and expertise of AMEC and British Energy (Scotland's largest electricity generator and now part of EDF Energy) have been brought together on this venture. AMEC plc is a focussed supplier of high-value consultancy, engineering and project management services to the world's energy, power and process industries. AMEC's Natural Resources, Power and Process and Earth and Environment businesses employ approximately 20,000 people in more than 30 countries globally. EDF Energy was formed in 2002 and is the UK's largest electricity generator and is wholly owned by EDF SA which in turn is owned by the French state. With the acquisition of British Energy in 2009, EDF Energy now generates electricity for a quarter of the UK's population, provides gas and electricity for 5.5 million businesses and residential customers and employs nearly 20,000 people across the UK (EDF 2007)". This description and statistics illustrate that

LWP is clearly a major player in the electricity generating industry with the resources and expertise available to enable it to proceed with the construction of the LWF.

The evidence points to a considerable level of resources being utilised by LWP to inform the general public about the LWF. For example detailed information about the application and the accompanying Environmental Impact Statement (EIS) was made available on the company's website, several presentations were made to audiences consisting of Community Councils (CC), area partnerships and other local groups and in November 2003 and March 2004 LWP enabled 14 public meetings and presentations. Drop-in days were held in Stornoway and the final part of the 'consultation' process in June/July 2004 involved 8 public exhibitions in Stornoway, Bragar (2), Ness, Airidhantuim, Tolsta, Barvas and Carloway. In addition paper and CD copies of the LWF and a non-technical summary were sent to CCs and placed in 'remote' council offices in the areas most affected by the development (defined as those areas from which the wind farm was visible), a number of local Post Offices and the Stornoway Library.

6.4.2 THE LAND OWNERS

Another group of stakeholders that would have been key to enabling the LWF to succeed were the landowners on whose land the proposal would have been located. Land ownership in the Western Isles is embedded in the history and culture of the Islands. However, the Land Reform (Scotland) Act 2003 was the catalyst for radical changes in the distribution of land ownership in favour of community buy-outs, the first example being the purchase by the North Harris Trust of the 55,000 acre North Harris Estate from a private landowner. At

the time the LWF was being considered the full implications of the new legislation were not evident. The land on which the LWF was to have been located was owned by three estates: Galson Estate Ltd (56,000 acres) in the north, Barvas Estate Ltd (34,000 acres) to the south and west and the Stornoway Trust (64,000 acres) to the south and east.

Barvas Estate parish is noted for having the largest percentage of Gaelic speakers in Scotland with 75% in 2001 (General Register Office Scotland 2005a) illustrating its very strong roots in the Gaelic culture. The estate was originally offered to the community by Lord Leverhulme in 1923 but the community did not take up the offer and it remained in private ownership (Barvas Estate Ltd) at the time of the LWF application. Therefore the views expressed by the landowner in favour of the LWF were those expressed by Barvas Estate Ltd on behalf of its shareholders.

The Stornoway Trust, one of Scotland's oldest and largest community owned estates, was formed in 1923. The background to the formation of the Trust is an illustration of the past complex relationship between Islanders, landowners and the land. Lord Leverhulme bought the island of Lewis in 1918 and Harris in 1919 and in three years had invested £2M in industrialisation schemes. However, when the men who had fought in the First World War returned expecting 'a land fit for heroes', they discovered that the land that they had been promised by the Government for crofting was to be used by Lord Leverhulme to change their traditional crofting/fishing way of life and position them in a wage-earning capitalist economy (Macdonald 2004). The strength of some of the local opposition to Lord Leverhulme's proposals was illustrated by the land raids. These were carried out by returning servicemen/crofters and as a result of this opposition the proposed economic development and 'industrialisation' of the Island was abandoned (Hunter 1976; Macdonald

2004). The strength of the attachment to the land and the inability to win the trust and respect of the population were the reasons for Lord Leverhulme's and some other proposed development schemes in the Highlands and Islands being unsuccessful (Hunter 1976). In 1923 Leverhulme gifted the land consisting of 64,000 acres (including Lews Castle) to the people of Stornoway Parish. The Stornoway Trust was established to manage the estate (all of which was under crofting tenure) on behalf of the community. The Trust is now run by a democratically elected board of Trustees.

At the time the LWF application was being processed another part of the development site, the Galson Estate (Galson Estate Ltd), was still in the private ownership of the Graham family who had owned the estate for the previous 80 years. The Galson Estate comprised a community of 3,000 people and 20 crofting townships (Mackenzie 2010). In September 2004 the Galson Trust (Urras Oighreachd) was established as a limited company to purchase the land under the Land Reform (Scotland) Act 2003. A local ballot to proceed with the purchase resulted in a 72% turnout with an 85% majority voting for the buy-out and in October 2005 the owners of the estate decided to sell the land to the community. This purchase achieved what the 'Crofters War' of the 1880s had failed to achieve, the regaining of the land that had been taken from their forebears.

When the LWF was being considered the Galson Estate location was still private and under crofting tenure. However, over 700 crofters signed a petition indicating that they would object to a 'resumption' procedure to take the land out of crofting (Mointeach gun Mhuileann 2004). Mackenzie (2006 p385) identified the Galson Estate and the proposal to purchase the estate by Urras Oighreachd Ghabhsainn as dramatic evidence of the extent to

which the struggle for land was bound up with the struggle for who works the wind. However, the previous private owner had drawn up a legally binding lease with LWP, before the buy-out was completed. Nevertheless, a re-negotiation of the lease would mean that the Trust would share 82.5% of the profits if the development went ahead giving it an influence in the decision-making process and enabling it to secure the best deal for the community (Mackenzie 2010). However, due to the hostility within the community towards the LWF (83% were against the wind farm in a poll taken in North Lewis) the Trust agreed at the time that the application was being processed to have nothing further to do with LWP. After the LWF was rejected by the Scottish Government the Galson Trust proposed a small community owned wind power project which was accepted in 2009. This was evidence supporting Mackenzie's (2006 p386) assertion that wind is no longer connected with the politics of capital (the commodification of wind) and the politics of space (the Galson Estate) but becomes 'captured' by the local communities.

6.5 GOVERNANCE AGENCIES

When the LWF application was submitted the then MP for the Western Isles UK Parliamentary Constituency, Calum Macdonald and the then MSP for the Western Isles Scottish Parliament Constituency, Alasdair Morrison asserted on many occasions in public and in the media that they supported the LWF. Calum Macdonald (who had been the Western Isles MP since 1987) and Alasdair Morrison both lost their seats in the 2005 UK and 2007 Scottish parliamentary elections respectively. The local authority for the Western Isles, the Comhairle, is a unitary authority established in 1975 and is based in Stornoway. It took on its Gaelic name in 1997 (under the Local Government (Gaelic Names) (Scotland) Act 1997) in recognition of the Islands' Gaelic cultural heritage. The 31

members (24 Independent, 4 Labour and 3 SNP) elected in 2003 at the time the LWF was being considered were elected by the first past the post system with one councillor representing each ward. The Comhairle and the politicians representing the Western Isles at the UK Parliament and the Scottish Government are publicly accountable to their electorate. Bovens (2003) wryly comments that accountability is one of those golden concepts that no one can be against as it conveys an image of trustworthiness in political discourse and the obligation to explain and justify conduct. This implied that a relationship exists between an actor, the accountor and a forum Bovens 2003). More specifically, accountability can be perceived as a term for any mechanism that makes a decision-making institution (such as CnES as planning authority) responsive to their potential publics (Mulgan 2003). Bearing in mind that in the case study 31 council members represented an authority with a population of 26,502 (giving an average ratio of 1 council member per 855 head of population) the level of accountability could be rated as very high.

Some surveys have shown that satisfaction with political bodies is closely linked with the opportunities available for participation and the degree to which constituents feel that they can influence local decisions and this in turn has been linked to the issue of trust (Best User Satisfaction Survey 2007). Trust is a complex and multi-dimensional concept connected to risk, power and modernity leaving its connections with democratic governance riddled with paradoxes and the possibility of both trust and distrust fostering public participation in decision-making (Laurian 2009 p370). One paradox is that trust necessitates that representative democracy requires citizens to trust government officials while at the same time owing its legitimacy to institutions where people can express their distrust in the power vested in public authorities (Laurian 2009 p379). The final challenge for national and local government to address is the low level of trust among the public, an

issue that makes it more difficult to reconcile conflicting views within the local community while retaining public support (Lyons 2007). However, because of the paradoxes referred to by Laurian (2009) trust in politicians and the decisions they make may at best result in trust in some politicians by some of the electorate some of the time.

A large number of LWF issues remained fundamentally local issues because of their limited geographical scope, their focus on local interest, and local support or opposition (Lyons 2007). The Comhairle adopted a concept of rural governance that involved acting directly through Western Isles' communities to achieve a social and economic consensus about the 'problem' of the LWF (Thompson 2005). To achieve this objective the Comhairle engaged with communities through a series of consultation exercises. For example meetings took place with the applicant, public bodies, Community Councils (CCs), private organisations, individual stakeholders and stakeholder common interest groups. The aim of these meetings was to create a formal consultation process which allowed stakeholders not only to be informed of the key issues, but to communicate their own discourses (Western Isles Council 2004a). However, the choice of what constituted a key issue lay with the Comhairle. Significantly, local ad hoc 'fringe' groups such as 'Moorlands Without Turbines' were not included in this part of the consultation process.

Prior to submitting the LWF application, LWP carried out an opinion-scoping exercise. Detailed information about the application and the accompanying Environmental Statement (ES) was disseminated and a full copy of the ES was made available on the company's website. In addition paper copies of the plans and a non-technical summary of the proposed development were placed in 'remote' council offices in, or close to, those

areas affected by the development, a number of local Post Offices and in Stornoway Library. An electronic version of the LWF application details was also sent to Community Councils (CCs) in the 'affected areas'. These areas were defined as those from which the wind farm was visible. A number of presentations were made by LWP to an audience consisting of CCs and area partnerships. Between November 2003 and March 2004 LWP enabled 14 public meetings and presentations with the addition of drop-in days held in Stornoway.

The general public were also invited to participate through their respective CCs. The CCs that participated were Airdhantuim CC, Laxdale CC, Sandwick CC, Ness CC, Shawbost CC and Barvas and Brue CC. A major weakness of this part of the consultation process was that some communities, for example Stornoway, the largest settlement in Lewis, did not have an established CC to formally participate in the process. The CCs were invited to present their views and to use whatever method they thought appropriate to obtain the views of the communities they represented.

An objective analysis and assessment of the Comhairle's consultation process was carried out as part of the Spatial North Project and the findings are summarised below (Fagan, et al 2006). These findings represented the views of the authors themselves after the research was completed and not the people consulted. The main findings were mixed:

1. It (the consultation process) created a much wider debate than the statutory process would have commanded;

2. It fostered discussion between a wide array of stakeholders which led to a greater awareness of the community and the Council;

3. Some members of the community were involved alongside a number of professional organisations resulting in the residents in the affected areas being given the opportunity to influence outcomes, although to what degree was not agreed amongst the community;

4. Although innovative in many respects the process relied on the more traditional methods of consultation, including meetings and written representations;

5. More meetings should have taken place in rural communities rather than being focussed on Stornoway thereby making the debate more accessible to more people;

6. Some stakeholders thought that professionals were better equipped to express themselves as a result of their professional experience and had a better understanding of the process, language and complexity of the subject matter and that the consultation mechanisms were less conducive to representative participation instead tending to attract the more articulate and favour professionals over community members;

7. The representativeness of the opinions received was questioned;

8. Attempts were made to ensure that the decision making process was open and transparent but some stakeholders felt strongly that this was not the case;

9. Some stakeholders felt that they had been given insufficient time and resources to undertake research during the consultation process partly as a result of the scale of the proposal not being revealed until a later date;

10. Some stakeholders felt that the information disseminated to the community was not accurate and that there had been changes to the proposal from the time of the initial meetings which had not stemmed from the consultation process;

11. This situation had led to a sense of scepticism towards both the developer and the Council and this had a negative impact on the consultation process;

12. A number of people living in the wind farm areas did not feel that their views had been adequately expressed and that this had led to negative feelings in the communities;

13. There were disagreements over both who should be included and the areas which should be included in the consultation process. Some people thought that the consultation process should be limited to those in affected areas or working for specific organisations. Others thought that it should be extended to include people from other parts of the island or Scotland and/ or young people under the age of 16;

14. A number of organisations felt that the consultation process had led to 'self-analysis' of their organisation and that this had brought members closer together;

15. A number of dissenters or oppositional groups set themselves up as a result of the consultation process;

16. Some people felt that because the topic was so divisive the consultation process had created a divide within the community;

17. Communities that felt threatened will defend themselves as best they could.

The role and perceived weaknesses of the Community Councils referred to above may have had a bearing on some of the views expressed. For example, the references to the negative feelings expressed in point 12 may be due in part to the perception that some of

the Community Councils were not operating effectively. The reference in point 15 to the establishing of oppositional groups may reflect a feeling of exclusion from the consultation process because of the emphasis in this regard on Community Councils.

6.6 CONCLUSIONS

The Lewis Wind Farm (LWF) would have been the largest wind farm in Europe at the time the application for the development was being processed. The applicant (Lewis Wind Power (LWP)) considered that the LWF was fully compatible with the broad environmental and socio-economic ethos of the Western Isles Structure Plan (LWP 2004). It was also of the opinion that the LWF would have a beneficial impact on an area with limited economic potential and a declining population (LWP 2004). In addition LWP stated that it had the ideal of sustainability at the heart of its vision, brand and principles.

The potential impact of large industrial developments on a relatively small and conservative traditional rural coherence, in this case the Western Isles, has had several historical precedents (for example Lord Leverhulme's proposals for the economic transformation of Lewis in the 1920s) and in these instances the concomitant economic re-structuring failed to materialise and/or had been rejected by the community. Cultural and religious traditions and their associated values are deeply embedded in the communities of the Western Isles. For example MacIntosh (2004) used the Lingerbay Superquarry in Harris to illustrate this point and commented on the Hebraic interconnectedness between culture and the environment. He concluded that cultural values and the conservation paradigm were closely interlinked. In an impact study of on-shore wind farms in Scotland,

Warren and Birnie (2009) concluded that it was clear that debates over renewable energy were complex, multifaceted and passionate, tapping into deeply held beliefs and value systems. The success of the Comhairle's attempts to involve the public in the planning process were seen to be dependent upon inclusiveness, a minimising of the distortion of communication by powerful interests and a reduction of disparities that inhibit power sharing (Fagan et al 2006; Laurian 2009 p370). In this respect the Comhairle may be perceived to be at least making an attempt at communicative planning. The increasing ability of communities in the Western Isles to take control of land resources has given them a greater degree of empowerment in the determination of the outcome of value conflicts concerning the natural environment (Mackenzie 2006). The TDA analysis of stakeholders' discourses used here is designed to reveal to what extent individual stakeholders, local communities and non-local stakeholders were motivated to become involved in the resolution of the development/ natural environment value conflicts that arose in this case study.

CHAPTER 7 LEWIS WIND FARM DISCOURSES – THE MACROCOSM

7.1 INTRODUCTION: THIRD PARTY SUBMISSIONS – THE CONTEXT

Fig. 7.1 is a summary of the stages in the planning decision-making process and the opportunities available for public participation in this process and the generation of the stakeholders' discourses analysed in this research. In reality a wide range of personal and external influences may be at work in determining a stakeholder's involvement as an environmental citizen (Smith 1998; Meppen 2000; Selman 2001; Macgregor and Szerszynski 2003; Bell 2004). Once a member of the public had taken the decision to become actively involved in the Lewis Wind Farm (LWF) decision-making process they in effect became a stakeholder in this process. There are a number of possible routes which enable the public to then engage with the planning process. The route taken is often dictated by whatever works best to achieve stated aims with "the raw exercise of power tending to be more effective than appeals to objectivity, facts, knowledge, rationality, or 'better argument' (Flyvbjerg 1998 p141 quoted in Hillier 2000 p40). Thus in the context of planning decision-making the idealised Habermasian appeal to objectivity and rationality in the public sphere appears to have been thwarted by a Foucauldian strategic rationality which may take the form of "pulling strings, overt politicisation, undocumented assertions, manipulation of facts, outright lying, the use of the media and letter writing to key actors" (Flyvbjerg 1998 p193).

The course of planning action will depend upon the acceptance or otherwise of the proposed LWF. A course open to both supporters and objectors might lobbying the relevant key stakeholders although the success of this action cannot be determined. Generally speaking it has been claimed that environmental protectionists and their sympathisers were less well organised to lobby because of their heterogeneous interests (Seidl et al 2002). In addition to the steps referred to by Flyvbjerg (1998), direct actions such as arranging public demonstrations were available to both objectors and supporters of the LWF although there was no evidence to indicate that this was an issue. There is evidence from the data however, that petitions were organised and used to motivate the public to act against the LWF.

In addition to the local and national media's indirect influence it is the statutory planning system that dictates that stakeholders can initially involve themselves directly in the decision-making process through the submission of letters and/or petitions to the Scottish Executive. These were copied to the Comhairle for consideration as principle consultee and it is these submissions that have provided the data for this research. Stakeholders had the options of submissions containing their own personal discourse (an individual stakeholder discourse) or engage with other stakeholders through communication to reach a consensual discourse, what has been referred to here as a multi-stakeholder discourse (MSD). However, these two methods of representing the individual stakeholder's views were not necessarily mutually exclusive and as well as authoring their own discourse the opportunity was available to subscribe to a multi-stakeholder discourse. For example one of the MSDs analysed here (MSD1) gave stakeholders the option of adding their own personal views to that submission.

What were the relevant issues that helped to determine whether an individual became an active stakeholder in the LWF planning process? The Public Notification of the proposed development under the 1989 Electricity Act (Stornoway Gazette 2.12.04) offered the alternative options of submitting "objections or representations to the application" by the closing date of 13th December 2004. Although 'representations' were invited the Notification did not specifically include the word 'support'. However, because the word 'objection' had been specifically referred to in the Notification this created the potential to impact on the nature and number of the submissions made. In addition the history of mistrust between the public and any bureaucracy making regulatory decisions has been implicated in the level of objection to a development (Kemp 1990; Ellis 2004). The issues of trust and accountability and their impact on stakeholders' views and behaviour will be analysed in more detail in Chapter 8.

A member of the public's decision to object to a proposed development has been referred to as the transformative moment when a change in knowledge and/or perception influences their path to action (Hards 2010). An individual stakeholder's awareness of the details in the LWF planning application and their analysis of the information contained in the accompanying Environmental Statement may have been potentially significant enough to lead to this transformative moment. The temporal dimension, namely the 21 day period, places a time constraint on knowledge gathering, comprehension, perception, the modification of attitudes and the motivation to become involved in the planning process as third parties.

FIG.7.1 THE LEWIS WIND FARM APPLICATION IN THE PUBLIC SPHERE – PUBLIC DISCOURSE CHOICES
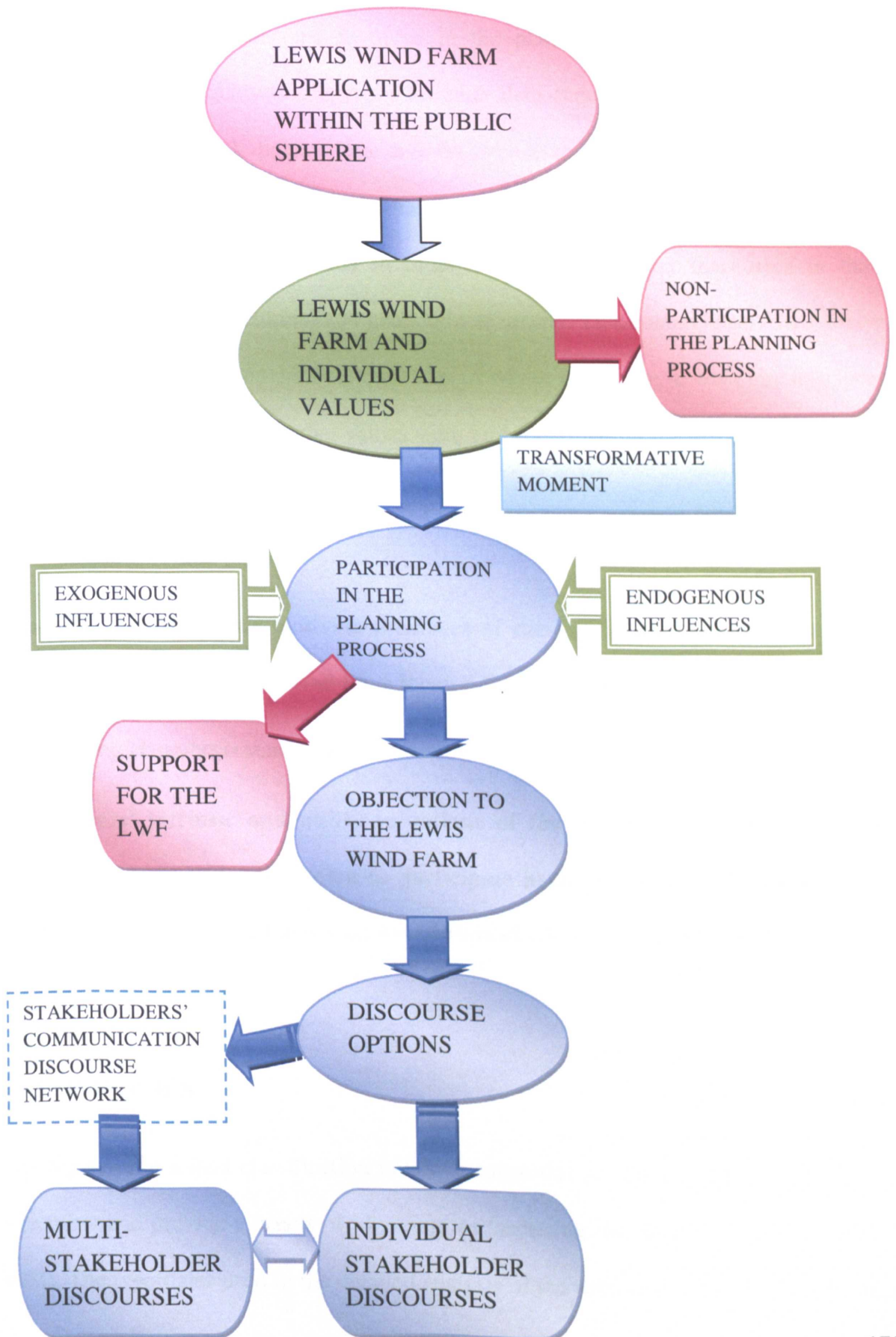
7.2 THE RESEARCH QUESTION

This part of the research examines the discourses of those members of the public who were sufficiently motivated to become involved in the planning process. The Foucauldian approach to discourse analysis suggests that rather than enquiring about the 'truth' of an argument we should ask how, when and by whom truth is attributed to particular arguments and not others (Sharp and Richardson 2001). In addition to these questions the time and location have been added in order to place third party discourses in their individually unique socio-cultural and geographical setting. This comprehensive discursive enquiry is therefore engaged with the questions of whose discourse; in what circumstances was this discourse composed; what values were embedded within the discourse; and what were the temporal dimensions of the discourse?

The Research Question posed is:

What are the values that motivate members of the public acting within the public sphere, to object to a major wind farm located in a protected area?

The Working Hypothesis states that:

Stakeholders' intrinsic and utility valuations of the natural environment play an important role in their motivation to participate in the wind farm planning process and in the composition of the discourses contained within the submissions made.

7.3 TYPOLOGIES

Typologies offer a data classification in which categories are discrete and independent of each other and provide a means of 'dividing' or 'sectoring' the social world (Ritchie et al 2003). The typologies used in the detailed analysis of the submission discourses have been

173

inductively created through a comprehensive examination of all the data (submissions). The first typology allows each submission discourse to be allocated to a category of stakeholder (s). The individual's participation in the planning process and the potential to become an individual stakeholder or to engage in the process through networks of communication discourse was illustrated in Figure 7.1.

7.3.1 STAKEHOLDER TYPOLOGY

The first classification concerns the 'who'. Outwith the Key Stakeholder LWF supporter coalition already analysed in Chapter 6 the stakeholders opposed to the LWF and their submission discourses are categorised as follows:

Individual Stakeholder Submissions – a single submission containing a discourse composed by a single stakeholder;

Multi-Stakeholder Submissions (MSDs) – a single submission discourse to which stakeholders have subscribed as individuals. Six MSDs have been identified based on the texts submitted. The transcripts of these texts are contained in the Appendices 2 to 7;

Commercial Submissions (COMs) – a single submission made by an individual on behalf of a commercial enterprise.

7.3.2 GEOGRAPHICAL TYPOLOGY

The second classification concerns the 'where'? This relates to the geographical origin of the submissions. Discourses are contained in the story lines of belonging, expressions that suggest a unity of understanding about environmental issues, politics, phenomena, or events (Hajer and Versteeg 2005; Stratford 2009). The concept of place attachment plays

an important role in the analysis of an individual's values in relation to their 'place'. As discussed in Chapter 4 place can have several geographical dimensions. In this research it is placed on 'community'. Rural communities within the Western Isles have been aggregated to form what the Western Isles Community Planning Partnership (CPP) has defined as Community Planning Units (CPUs) (CnES 2004b). The CPU is the smallest unit for which statistical information is available. CPUs have been used by the CPP to formulate policies (Comhairle nan Eilean Siar 2004b p1) been used here to analyse the data. The geographical location of the submissions has been determined by the postal address of the submissions' author(s) and these locate the stakeholder within the relevant CPU. Submissions have come from residents within the Western Isles, mainland Scotland, the remainder of the UK, Europe, and other continents – America, Asia, Australia and Africa were all represented. It is within this local, national and international framework that the geographical typology has been devised.

Details of the geographical categories chosen are shown in Fig.7.2 and are based on the following criteria. Three categories are located within Lewis. Although an island has been chosen as a case study because it is a precise and sharply defined physical entity islands are also characterised by subtle internal divisions between inhabitants (Stratford 2009 p799). The subtle (or in some instances the less subtle) divisions within Lewis in relation to the LWF are based broadly on the following categories: those living in communities closest to the LWF (L1), those living in communities in other parts of rural Lewis more distant from the wind farm (L2) and Stornoway (L3) which although located relatively close to the southern section of the LWF, is analysed separately because it is the only urbanised part of Lewis (referred to in section 6.2.2).

The vast majority (95%) of the population live on Lewis, Harris, North Uist, Benbecula, South Uist and Barra. Lewis and Harris are geographically part of the same island but physical and cultural characteristics have historically resulted in them being treated separately. Until the reorganisation of local government in 1975, there was a political and administrative boundary separating Harris (administered as part of Inverness-shire) and Lewis (administered as part of Ross-shire). Discourse story lines are inherent in the sense of belonging, the feelings attached to place(s) that affixes how someone is in 'place' and belongs there (Stratford 2009 p796; Devine-Wright 2009). Because it has been argued that island status magnifies these characteristics (Hajer and Versteeg 2005; Stratford 2009) a separate typological unit based on the CPUs has been identified for each of the main islands within the Western Isles archipelago. These CPUs will assist in analysing LWF issues relating to place attachment within the context of the Western Isles.

Locality is not restricted to the spatial, but embraces imagined and manufactured communities across multiple scales (Stratford 2009 p798). Outwith the Western Isles motivational imperatives are analysed separately in four geographical categories on mainland Scotland. During 2005 a total of 166 people migrated to Highland (S1) and 194 to the Central Belt (S2) (General Register Office for Scotland 2005b). Any ties linking the Hebridean mainland Diaspora, those people with a common Islands' ethnic identity, are possibly maintained and strengthened by organised social groups, for example, the Gaelic Business Club in the context of commerce and development, the Royal National Mod in the context of culture and clan societies such as the Clan MacLeod Society in the context of genealogy. Highland Region is geographically and culturally closest to the Islands. The very strong cultural links are through its Gaelic heritage, with Highland having almost as many Gaelic speakers as the Western Isles (18,360 compared to 18,420 in the Western Isles) (General Register of Scotland 2005b). Consequently, residents in Highland Region

or the Central Belt 'experiencing' the Western Isles may do so culturally through a common interest in the Gaelic language or in reality through visiting friends or relatives (VFR) as tourists or passively through the media.

In order to make comparisons with S1 and S2 other parts of mainland Scotland have been identified. These are Southern Scotland (S3) and the region between Highland and the Central Belt, Eastern Scotland (S4). The initial scoping of the submissions originating from residents in the remainder of the UK, England, Wales and Northern Ireland, points to their authors being mainly motivated to become involved in the planning process because of their relationship with the Western Isles as tourists. To enable comparisons to be made between the discourses originating in the different parts of the UK the data originating from England (E), Wales (W) and Northern Ireland (NI) has been analysed separately. The submission scoping also indicates that the internationally motivated submissions come predominantly from those with an interest in the Islands *per se* and not as visitors. The submissions from the continents of Europe, North America (the US and Canada), Asia, Australia and Africa are analysed separately so that they can be compared both with each other and with the submissions from the geographical areas identified within the UK.

Fig. 7.2 STAKEHOLDER RESIDENTIAL REFERENCES (WITH 2001 POPULATIONS)

L1 STAKEHOLDERS RESIDENT IN LEWIS CLOSEST TO THE NORTHERN PART OF THE LWF:-

SETTLEMENTS WITHIN SUSTAINABLE COMMUNITIES OF NESS; AND WEST SIDE AND CARLOWAY (4,071)

(A857: Ness to Barvas; Europie; Five Penny Ness; Port of Ness; Habost; Swainbost; Cross; Dell; North and South Galson; Five Penny Borve; Shader; Barvas.

A858 Barvas to Shawbost; Barvas; Brue; Arnol; Bragar; North Shawbost; South Shawbost and Carloway).

L2 STAKEHOLDERS RESIDENT IN THE REMAINDER OF RURAL LEWIS:-

SETTLEMENTS WITHIN SUSTAINABLE COMMUNITIES OF UIG AND GREAT BERNARA; BROADBAY; POINT; NORTH LOCHS; AND SOUTH LOCHS (6,176)

L3 STAKEHOLDERS RESIDENT IN THE SUSTAINABLE COMMUNITY OF

GREATER STORNOWAY (7,653):-

(Newmarket, Laxdale, Sandwick, Newvalley and Marybank).

STAKEHOLDERS RESIDENT WITHIN OTHER SUSTAINABLE

COMMUNITIES WITHIN THE WESTERN ISLES:-

H	HARRIS AND SCALPAY (1,984)
NU	NORTH UIST AND BERNERAY 1,657)
BEN	BENBECULA (1,249)
SU	SOUTH UIST AND ERISKAY (1,951)
BAR	BARRA AND VATERSAY (1,172)

STAKEHOLDERS RESIDENT WITHIN MAINLAND SCOTLAND:

S 1   SCOTTISH HIGHLANDS

S 2   CENTRAL BELT OF SCOTLAND

S3   SOUTHERN SCOTLAND

S4   EASTERN SCOTLAND

STAKEHOLDERS RESIDENT WITHIN THE UK:

E   ENGLAND

W   WALES

NI   NORTHERN IRELAND

STAKEHOLDERS RESIDENT OUTWITH THE UK:

E   EUROPE

AM   NORTH AMERICA

AS   ASIA

AFR   AFRICA

AUS   AUSTRALIA

Sustainable Community Areas - Western Isles
Coimhearsnachan Seasmhach - Na h-Eileanan an Iar

Sustainable Communities
in The Western Isles

Ness

West Side
& Carloway

Broadbay

Point

Greater Stornoway

North Lochs

Uig &
Gt. Bernera

South Lochs

Harris &
Scalpay

North Uist
& Berneray

Benbecula

South Uist
& Eriskay

Barra &
Vatersay
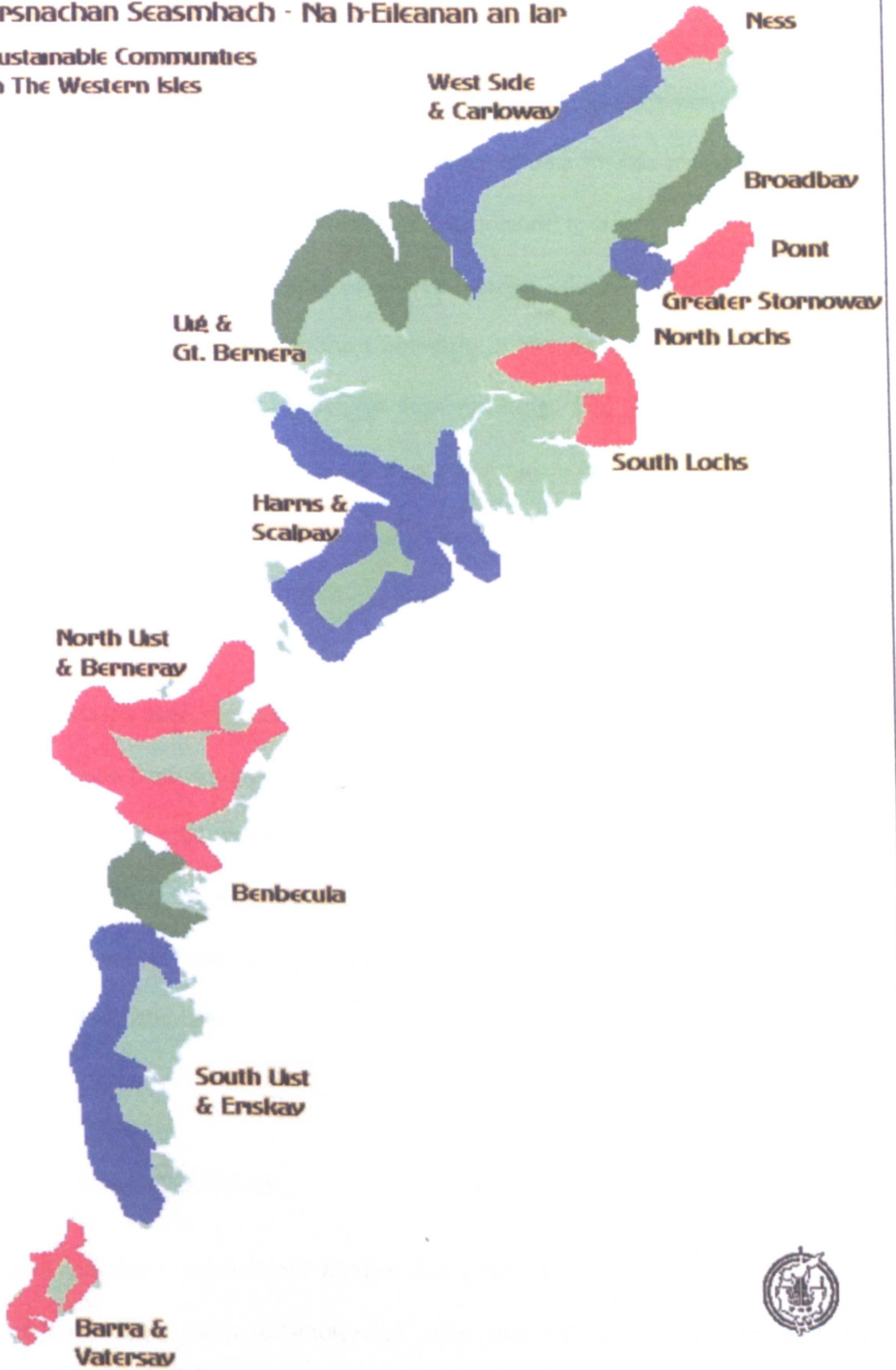
7.4 THE TYPOLOGICAL ANALYSIS OF THIRD PARTY SUBMISSIONS

A total of 1159 submissions were received by the Scottish Executive by the 13th December deadline and subsequently copied to the Comhairle. These submissions represented the discourses of 2007 stakeholders and provide a rich source of data for this research. All the submissions were made available for members of the Comhairle to consult before reaching a decision on how to respond to the Scottish Executive. For administrative and archival purposes the submissions were filed by the Comhairle in five separate files making the actual process of analysis process somewhat less daunting. Fig. 7.3 summarises the analysis of all stakeholder submission discourses by stakeholder category.

7.4.1 SUPPORT FOR THE LWF

Only three submissions gave support to the proposed LWF. One submission originated in rural Lewis (L2), one from Stornoway (L3) and one from Southern Scotland (S3). This represents 0.15 % of the total number of submissions but it is difficult to find within the data an explanation for this very low level of support. There was no evidence in the supporters' discourses that these stakeholders had been motivated by any value attached by them to the natural environment.

7.4.2 INDIVIDUAL DISCOURSES

The number of individual submissions totalled 428 (35% of all submissions). This is an indication of how willing those self-motivated stakeholders were to join what has been described in the literature as an anti-wind farm discourse coalition (Hajer 1995; Ellis 2004). Individuals, when submitting objections may have been self-motivated. However, a

181

number of organisations campaigned locally, for example Moorlands Without Turbines (MWT), or campaigned nationally, for example the RSPB or campaigned internationally, for example Proact (an international internet environmental campaigning organisation), to motivate stakeholder support for the anti-LWF discourse coalition. These organisations distributed information packs and/or sent emails to members of the public, and members of their own organisations encouraging them to object. It is not possible from the data available to determine with confidence what, if any, outside agency or stakeholder collaboration was involved in motivating individuals to submit an objection or to what extent they influenced the text used. However, in some of the individuals' submissions there are some paragraphs that contain the same wording as that promoted by the campaigning agents. For example several of the individual submissions contained the same wording when referring to the perceived inadequacy of analysis in the Environmental Statement (ES) of the impact of the LWF on the traditional land uses. In some submissions a reference was made specifically to the RSPB as the campaigning agent that had alerted the stakeholder to the negative impact of the LWF on bird habitats and birds. In a number of submissions, the threat posed by the LWF to Golden Eagles was expressed with reference to the high number of Golden Eagle casualties at the site of the Altamont Wind Farm in California. All of the international submissions making reference to Golden Eagle strikes contain the same or very similar wording to that used in the Proact campaigning discourse. All of the international submissions were received by email thereby emphasising the importance of the internet to the success of the creation of an international dimension to the anti-wind farm coalition.

7.4.3 MULTI-STAKEHOLDER DISCOURSES

The multi-stakeholder discourse (MSD) is composed of an output from the collective action of a group of like-minded individual environmental citizens (Hardin 1968; Duverger

1972 Libecap 1989; Ostrom 1990; White 1990; Hornstein 1998; Selman 2001; Leigh 2006). The MSDs are analysed in detail in Chapter 9 but are touched on here so that comparisons can be made with other categories of stakeholder. As can be seen from the analysis of submissions summarised in Fig. 7.3 there is considerable variation in the number of stakeholders subscribing to each MSD. MSD 1 generated the largest number of submissions - 406 (35.0% of the total submissions), with MSD 2 generating 94 submissions (8.1% of the total), MSD 3- 106 submissions (9% of the total), MSD 4- 51 submissions (4.4% of the total), MSD 5- 30 submissions (2.6% of the total) and MSD 6- 34 submissions (3% of the total). These statistics imply that the campaigning agent or agents motivating MSD 1 were considerably more successful in the generation of submissions than all of the other MSD motivating agents combined.

The analysis of the submissions made to the Scottish Executive reveals that there are several important determinants in the discrepancy between the number of submissions (1159) and the number of stakeholders (2007). In all but one of the stakeholder submission categories the difference in numbers was due to more than one stakeholder within a household subscribing to a single discourse. This was evidenced for example by more than one signature on the submission. Within the individual submission category some 30 – two- member households and 2 – three- member households were identified as having subscribed to the same submission discourse. The statistics for the other categories of stakeholder discourses revealed that there were 5 – two- member households in MSD 1, no household submissions in MSD 2, 2 – two- member households in MSD 3, no household submissions in MSD 4 and none in MSD 5. Even where only one signature appeared on a submission there was evidence that more than one person in the household shared or contributed to a discourse. This is evidenced by the use of phrases such as "my wife and I" and "we". However, it was in the case of MSD 6 that the largest discrepancy existed

between the number of submissions and the number of stakeholders represented. The discrepancy was due to the large number of signatures from individuals subscribing to the MSD 6 discourse. Consequently the 35 submissions allocated to MSD 6 (3% of the total) represented 847 (42.2% of the total) submission discourses. This analysis reveals that at the household level within MSDs 1 and 3 there is evidence of stakeholder micro-interactional dynamics at work within the households. However, in MSDs 2, 4, 5 and 6 the evidence points to only stakeholder macro interactional dynamics operating, i.e. at a scale larger than the household. In MSD 6 this macro-interactional dynamics is operating at an international level.

7.4.4 A DEMOCRATIC DEFICIT?

Do the values and the views expressed by the large number of stakeholders objecting reflect those who have not made representations? The vast difference between the number of submissions objecting to a proposal (in this instance the LWF) and the number of supporters may be the outcome of what has been hypothesised as the democratic deficit. One interpretation of the democratic deficit is that it refers to a situation where although the majority are in favour of a development, the minority have sufficient power (and vocal clout) to prevent the development being approved (Bell et al 2005). Olson argued that privileged minority groups tended to prevail over the 'latent' majority groups who although desiring the public good being objected to by the more vociferous minority were not sufficiently motivated to argue in its favour (Olson 1965 p 48-51 quoted in Toke 2002 p88). To what extent there is a democratic deficit in the case of the LWF in which a silent majority was overridden by an unrepresentative number of objectors remains open to question for reasons that will be expanded on later in the chapter. However, the LWF application was eventually refused planning permission by the democratically elected Scottish Executive.

FIG 7.3 TOTAL NUMBER OF SUBMISSIONS AND STAKEHOLDERS BY DISCOURSE CATEGORY
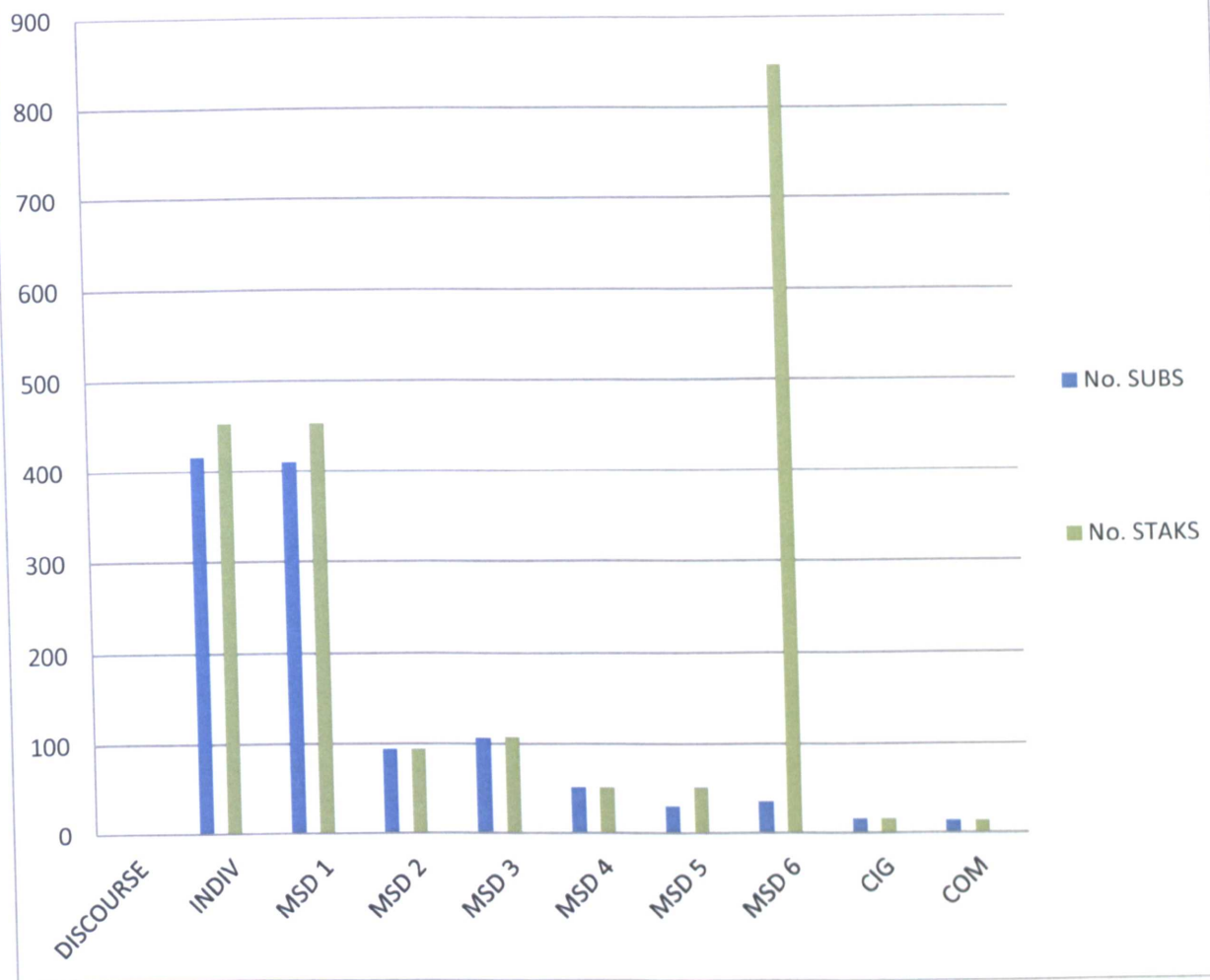
7.4.5 THE NIMBY HYPOTHESIS

Objectors to the LWF could be pejoratively classified as NIMBYs (Not in My Back Yard) because they are considered to be the stakeholders promoting their own self-interests at the expense of societal goals within the planning process. The NIMBY syndrome was discussed in Chapters 4 and 6 and its logic dictates that local residents (in the Western Isles) who oppose a wind farm project do so to maximise their own individual utility (Wolsink 2000 p52). The outcome of the NIMBY syndrome in this context may therefore be perceived as a selfish parochialism that generates locational conflict and inhibits society from solving pressing environmental problems (Bosley and Bosley 1998 p87). NIMBYs

might be compared in Olson's rational choice theory of collective action to the 'privileged' group whose gain from objecting (e.g. to the LWF) outweighs the costs incurred in making the objection (Toke 2002 p88). The commonly held view is that the NIMBY syndrome of behaviour-motivation links a positive attitude to wind power in general with resistance to a particular project (Wolsink 2000 p53).

Wolsink (2000) is however a strong critic of the NIMBY hypothesis and has proposed a more broadly based 'resistance' typology founded on four general sub-categories of behaviour-motivation to explain opposition to wind energy developments. Resistance type A refers to those stakeholders who support wind power but want wind farms located anywhere but in their neighbourhood (NIMBYs). Resistance type B opposes wind farms because they reject the technology (Not in anyone's back yard or (NIAMBY) which Woolskin refers to as Resistance type B. Resistance Type C denotes a category of objector which holds a positive view about wind farms which then becomes negative after considering the changes brought about by a particular project. Finally Resistance Type D categorises those stakeholders that support the generation of wind power but only under certain conditions, a group classed as 'qualified supporters'. The data referred to in section 7.3 which highlights the difference between the number of submissions objecting and the number supporting, clearly shows those that might be classified as NIMBYs in the case of the LWF vastly outnumbering those supporting the development.

7.5 STAKEHOLDERS' GEOGRAPHICAL DISTRIBUTION

7.5.1 WESTERN ISLES RESIDENTS

The analysis of the geographical distribution of the members of the public (16 did not give an address and therefore are not considered here) within the Western Isles motivated to

186

become stakeholders in the LWF decision-making process is shown in Fig. 7.4. The geographical typology referred to in section 7.2 has been used to illustrate this distribution. This analysis shows that despite being located within the same local authority area the number of stakeholders varies significantly between geographical areas. The three Lewis categories have generated the largest number of stakeholder discourses with all but two stakeholders objecting to the proposed development. The largest number of objections comes from L1 and L3 the areas geographically closest to the proposed LWF reflecting the greater concerns of residents within these areas. The number of objections decreases very rapidly as distance from the proposed development increases with the number of submissions from the more southerly islands becoming negligible. This result would appear to contradict some of the other surveys of objections to wind farms which showed that the opposition to wind farms decreased closer to the proposed location a finding which has been labelled the 'inverse NIMBY' syndrome (Warren 2005 p858).

In order to make some assessment as to what extent these statistics represent the views of the total population within the delimited geographical categories the number of submissions has been calculated as a proportion of the total population within the areas concerned (Comhairle nan Eilean Siar 2004b). Within L1 (338 stakeholders) the ratio is 1 stakeholder per 12 of the population (8.4% of the area's population; within L2 (232 stakeholders) the ratio is 1 stakeholder per 26 of the population (3.8% of the area's population) and within L3 (221 stakeholders) the ratio is 1 stakeholder per 35 of the population (2.1% of the area's population). The equivalent statistics for other parts of the Western Isles were Harris (22 stakeholders) 1 per 90 (1.1% of the Harris population); North Uist (3 stakeholders) 1 per 552 (0.18% of the North Uist population); Benbecula (4 stakeholders) 1 per 303 (0.32% of Benbecula's population) South Uist (3 stakeholders) 1 per 650 (0.11% of the population of South Uist) and Barra 0. These figures highlight the

intensity of interest of the residents of Lewis, especially the residents of the most northerly settlements (L1) concerning the perceived negative impact of the LWF. They also show starkly the differences in public interest in the LWF, as represented by the number of submissions between Lewis and the southern islands in the Western Isles chain of islands.

7.5.2 RESIDENTS OUTWITH THE WESTERN ISLES

On mainland Scotland the largest number of objections (there was one submission of support) came from Highland (58). This may reflect the cultural and genealogical ties between the Western Isles and Highland Region referred to in section 7.3.2. However, all of the objections from Highland came from the mainland rural areas in the north-west, the areas geographically closest to the Western Isles. No objections came from the islands within Highland Region. Taking into account the cultural affinities between the Western Isles and the island communities in Highland Region it is not clear why this is so. There were also no representations from the other island authorities in the north of Scotland, Orkney and Shetland. There were no submissions from Inverness the largest urbanised area in Highland Region. The objections from the remainder of Scotland varied with the second largest number of objections coming from Eastern Scotland (42). This appears to contradict the argument outlined in section 7.2 about the importance of the links between the Western Isles and the Western Isles Diaspora. Objections originating from other parts of the UK show that the number from England (74) was the largest, followed by those originating from Wales (45). The analysis of the English and Welsh stakeholders' discourses reveals the dominance of discourses which contain a high regard for the quality of the natural environment. Outwith the UK there is an intercontinental dimension to the objections with 25 submissions from the EU countries, 24 from the US, 17 from Asia, 7 from Australia and 1 from Africa. As a consequence of internet communications and the campaigning by the Proact organisation behind MSD 6 the additional number of individual

stakeholders represented abroad are +594 for the EU, +96 for AMR, +80 for AUS and +24 for AFR.

Fig. 7.4 GEOGRAPHICAL DISTRIBUTION OF STAKEHOLDERS - WESTERN ISLES RESIDENTS
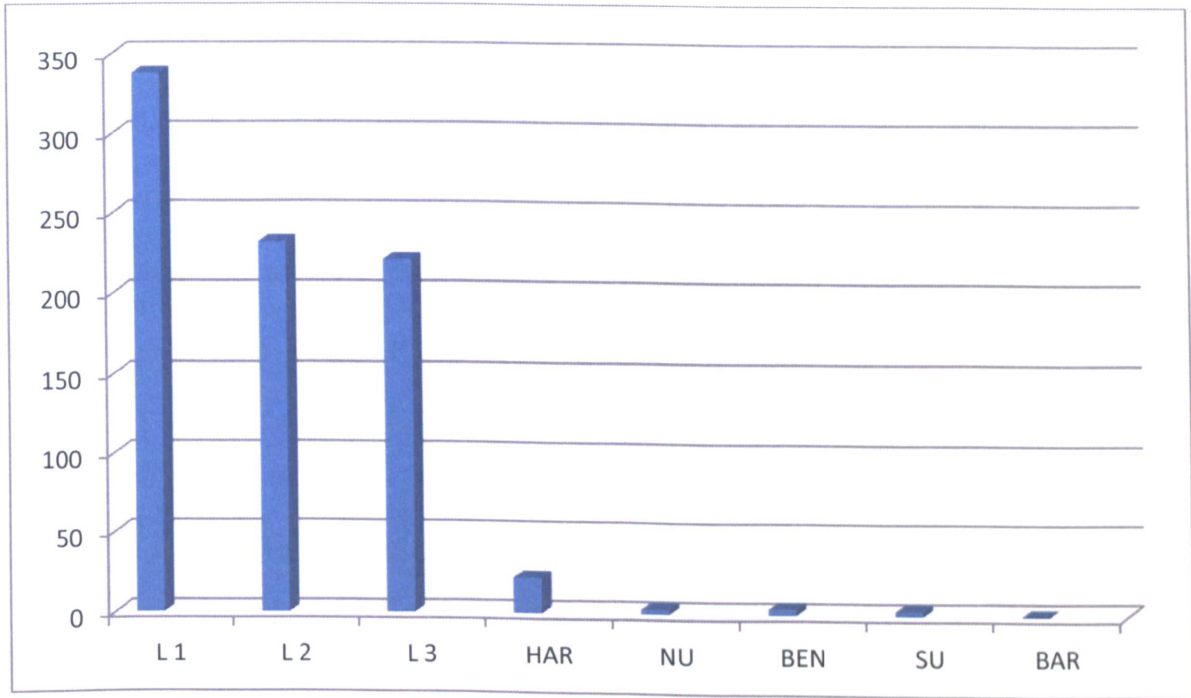
Fig.7.5 GEOGRAPHICAL DISTRIBUTION OF STAKEHOLDERS – UK AND NON-UK RESIDENTS
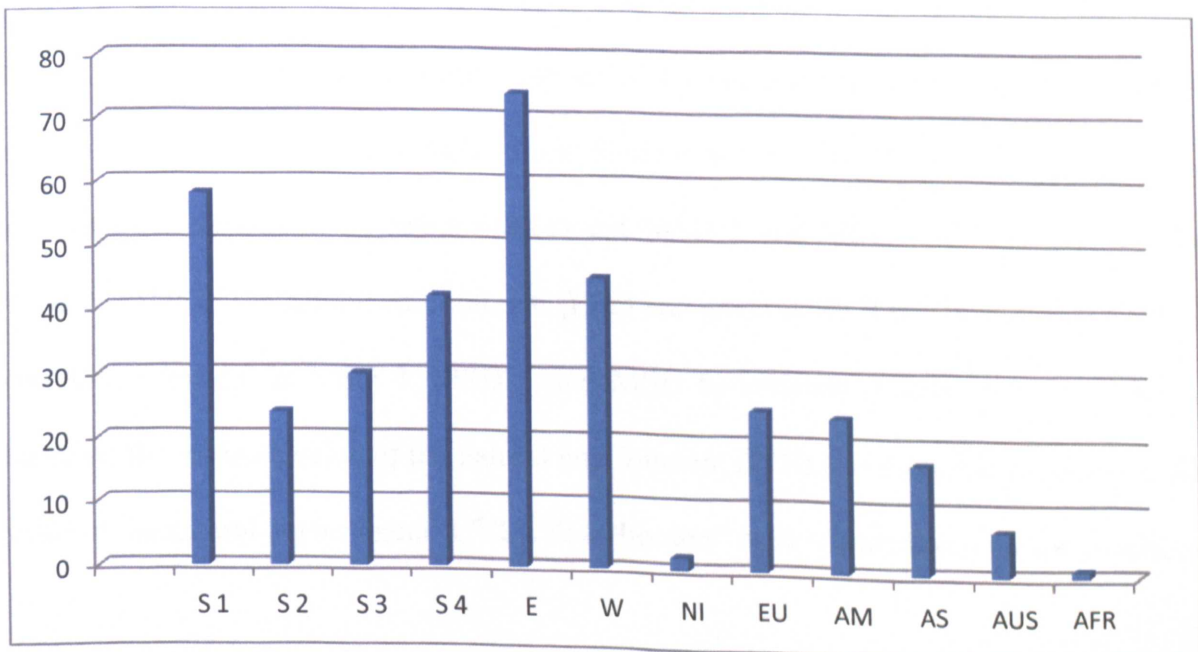
7.6 THE META-THEMATIC ANALYSIS OF ALL THE DISCOURSES

In addition to the natural environment the non-environmental Meta Themes are identified as Culture and Governance (Fig 5.2). In the context of the communities of the Western Isles culture is embedded in the fabric of the Islanders' communications and understandings. Consequently it is through these filters that values, beliefs, attitudes and policies (and the LWF and the issues surrounding it) are perceived (Meppen 2000). The importance of governance in the context of this case study can be gauged by the meta-thematic discourse analysis finding that 88% of stakeholders were motivated to object to the LWF on the basis of governance issues (Fig 7.6).

7.6.1 META-THEMATIC DISCOURSE ANALYSIS RESULTS

Fig.7.6 summarises stakeholders' motivations for becoming participants in the planning process. For example 404 individual stakeholders (92% of the total number of individual stakeholders) were motivated to object to the LWF on the grounds that it impacted negatively on their intrinsic evaluation of the natural environment (IVE). Whereas the intrinsic value of the natural environment was the dominant motivational factor in all categories except MSD 5, the utility valuation did not register within the discourses of stakeholder categories MSD 3, MSD 5 and MSD 6 as a motive for objecting. One of the strongest correlations in all categories (except MSD 5 and MSD 6) is that between the intrinsic value of the natural environment (IVE) and governance (G). There is also a strong correlation (except in MSD 3, MSD 5 and MSD 6) between stakeholders' motivations based on the intrinsic value of the natural environment (IVE) and those based on the utility value of the natural environment (UVE). Stakeholders' motivations based on socio-cultural

Fig.7.6
STAKEHOLDER
MOTIVATION

STAKEHOLDER CATEGORY	INTRINSIC VALUE OF THE NATURAL ENVIRONMENT (IVE)	UTILITY VALUE OF THE NATURAL ENVIRONMENT (UVE)	SOCIO-CULTURAL (SC)	GOVERNANCE (G)
INDIV	404 (92%)	302 (60%)	80 (17%)	240 (54%)
MSD 1	453 (100 %)	453 (100%)	0	453 (100%)
MSD 2	94 (100%)	94 (100%)	0	94 (100%)
MSD3	107 (100%)	0	107 (100%)	107 (100%)
MSD4	51 (100%)	51 (100%)	51 (100%)	51 (100%)
MSD 5	0	0	0	30 (100%)
MSD 6	847 (100%)	0	0	847 (100%)
TOTAL	1956 (97%)	900 (65%)	238 (12%)	1843 (88%)

value discourses (SC) vary greatly within stakeholder categories. A correlation is also evident in MSD 3 and MSD 4 between the meta-discourse themes of socio-culture and governance suggesting that stakeholders subscribing to these MSDs were also concerned that their cultural values would not be taken into account adequately in the decision-making process.

The meta-thematic DA highlights that in addition to tourism there is evidence of other important stakeholder motivational linkages between the IVE and UVE Meta themes. For example the symbiotic links between traditional land uses (UVE) and the intrinsic valuation of the natural environment (IVE) were stressed by some stakeholders. Another stakeholder motivation to become engaged with the planning process was their perception of important linkages between culture and the intrinsic value of the natural environment.

The past and current relationship between cultural and environmental values was perceived to have led to the creation of what was claimed by some stakeholders to be a "cultural landscape".

The overall strength of feeling about weaknesses in governance can be gauged from two discourses. One was the 72 calls for a public inquiry (the term enquiry was often used in the submissions) to circumvent the Comhairle's authority and the other the strength of feeling identifiable in MSD 5 where the 30 subscribers made reference only to the governance meta-theme. The largest number who requested a public inquiry resided in the Western Isles, with 38 in Lewis and 5 in Harris. However, an indication of the more widespread call for the public inquiry needed to overcome perceived governance inadequacies is reflected in the number of stakeholders from outwith the Western Isles; 11 from mainland Scotland, 11 from England, 4 from the EU, 2 from America and 1 from Australia. One of the most frequently cited reasons for justifying a public inquiry was the lack of a Local Plan for Rural Lewis. This it was claimed would have allowed residents to express an opinion about the most appropriate land uses for their area. The MTDA therefore provides evidence that stakeholders' perception of a consultation deficit was a strong motivation for an objection to be submitted.

Despite what appeared to be a comprehensive and fairly geographically extensive consultation process carried out by LWP and the Comhairle (in the context of the Case Study) significant weaknesses were revealed by the Strathclyde University NPP Spatial North Project (Fagan et al 2006). As noted in Chapter 6 one of the conclusions reached in this Report was the ineffectiveness of the role played by Community Councils in the consultation exercise. Although Community Councils were acknowledged in this Report as

an important means of disseminating information it was recognised that they were not experienced, lacked resources and were heavily dependent on volunteers. This latter point is important. When members of the local community were involved in collecting information issues of anonymity, confidentiality and partiality, referred to as "the goldfish bowl" of rural areas (Fagan et al 2006), may have had some influence on inter-personal communications. This weakness in the Comhairle's consultation exercise is highlighted here because in none of the submission discourses analysed were references made to the role of Community Councils in legitimising the anti-LWF discourse. There was a considerable strength of feeling amongst stakeholders about the perceived deficit in accountability. This is expressed for example through statements referring to the ignoring of communities' views, the expression of a lack of trust in the Comhairle and the perceived lack of opportunities for communities to participate in the decision-making process.

Stakeholders also put forward a more holistic and positive reason to explain their motivation to become a stakeholder. Their motivation was to ensure that an attractive and ecologically rich environment was created, one that was essential to the social and economic well-being of the area. In this context the LWF was perceived as lowering the intrinsic value of the natural environment thereby reducing the opportunities opened up by Lewis's unique environment thus impacting on its utility value. This in turn was perceived to place restrictions on achieving the aims of the Land Reform, (Scotland) Act which had given the land and its rights back to local communities.

7.6.2 THE ENTREPRENEURIAL PERSPECTIVE

A total of 19 small businesses located within Lewis and Harris made representations objecting to the LWF. These consisted of 9 businesses providing tourist accommodation

(including 1 hotel and 4 self-catering cottages), 1 caravan park, 5 craft businesses and 4 businesses that provided opportunities for field sports and boat trips. All stated that they depended to some extent for the viability of their business on the success of the tourist industry, either directly or indirectly. From the MTDA of their discourses it appears that the owners of the businesses that were motivated to object did so because of their appreciation of the important relationship between the intrinsic value of the natural environment and tourism. In effect their valuation of the environment was influenced to a significant extent on how much their business's viability depended on the quality of the natural environment that comprised the natural capital from which they benefited commercially. There is no evidence from the data to indicate that there was any disagreement among the businesses or between businesses and the relevant authorities on PAs in principle or their coverage in the Western Isles. However, the valuation of the natural environment resource which was considered to be very important by the businesses submitting comments appeared not to be constrained by the PA boundaries.

It is unclear from the data collected to what extent the views expressed through the relatively small number of commercial submissions reflected the views of the Western Isles' business community more generally on the LWF/natural environment relationship. There were for example no submissions from non-tourism dependent businesses or the retail and service businesses based in Stornoway.

7.6.3 THE INTERGENERATIONAL DIMENSION

The desire to hand down to future generations the intrinsic values attached to the natural environment and the value of the cultural heritage proved to be a strong motivation to become a stakeholder. In this context discourses stressed the importance of the LWF not

194

being allowed to desecrate valued and culturally symbolic landscapes and habitats so that these could be inherited by future generations. These discourses by stressing IVE-UVE-SC relationships thereby illustrated concerns not only about the impact of the LWF on contemporary valuations of the natural environment, but also its implications for the values that would be attached by future generations. These discourses therefore reveal that the motivation to object to the LWF was not only based on the present generation's values but also on a desire to preserve them as a cultural legacy for the future. This in effect is a demonstration of the attempt to promote a sustainable social and cultural environment in addition to preserving the natural environment which in the minds of some stakeholders is inextricably interlinked.

7.6.4 STAKEHOLDERS' AWARENESS OF PROTECTED AREA MECHANISMS

An important yardstick of stakeholders' valuation and recognition of the wider society's valuation of the natural environment was the awareness of and support for natural environment protection measures. This is evidenced in the references made in discourses to the nationally and internationally Protected Areas (PAs). The pattern of all stakeholders' general awareness of this is illustrated in Figure 7.7. It should be borne in mind when interpreting this data that direct comparisons between the numbers of references to PAs made in individual stakeholders' discourses and MSDs are inappropriate. This is because in the instance where one reference or no reference is made to PA/Protection Policy in a multi-stakeholder discourse this is then allocated to all the stakeholders subscribing to this discourse. For example, in MSD 2 and MSD 5 no references are made to any PA/Protection Policy. Fig.7.7 further illustrates that within the individual stakeholder category allusions to the global RAMSAR status and the European Special Protected Areas (SPA) designations are dominant. RAMSAR sites and SPA designations also feature strongly in MSD 1, MSD 3, MSD 4 and MSD 6. The strong emphasis on RAMSAR sites

and SPAs in MSD 6 is due to the large number of stakeholders subscribing to that discourse and the intrinsic values animating these stakeholders' discourses.

Fig. 7.7 PROTECTION POLICIES – STAKEHOLDERS' RECOGNITION
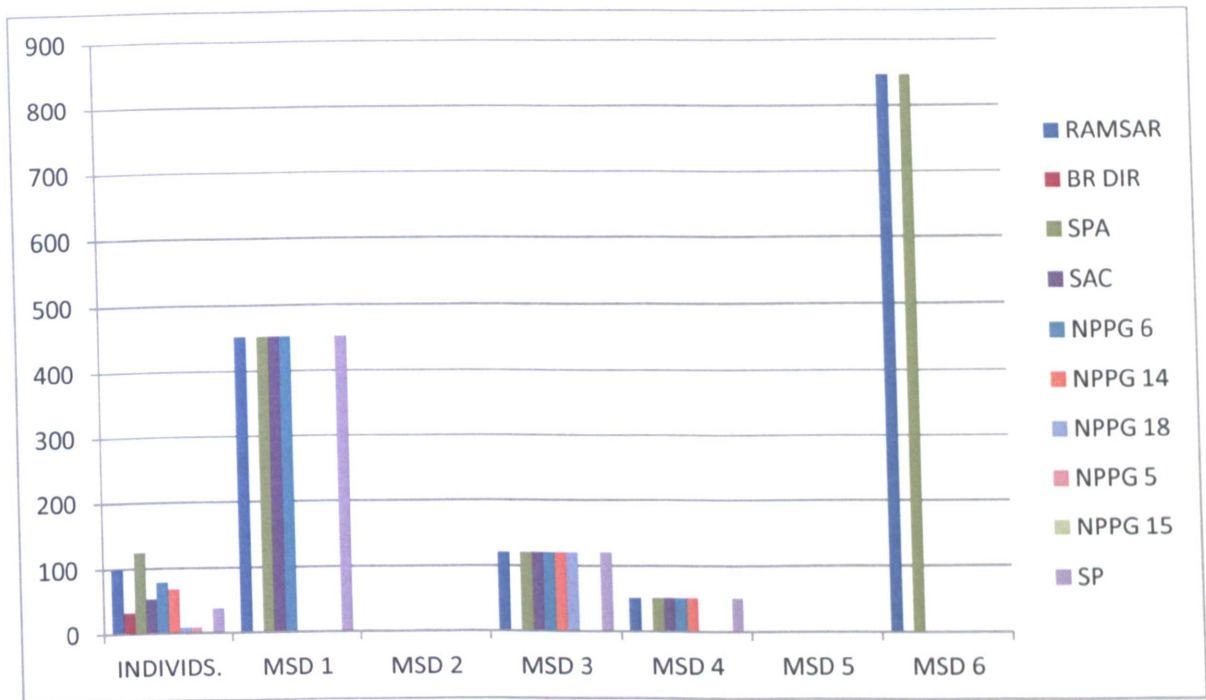
The MTDA of LWF objection discourses to identify references to PA legislation and PA policies revealed that they were both used to substantiate and give greater robustness to these discourses. What is also evident from the analysis is that the value attached to the natural environment and the level of concern expressed about the impact of the LWF is reflected in the PA chosen. Thus references to local PAs - Local Nature Reserves (LNRs) - showed local concern, references to national PAs - Sites of Special Scientific Interest (SSSIs) - showed national concern, references to PAs of European importance - Special Protected Areas (SPAs) and Special Areas of Conservation (SACs) - indicated a concern at international level and references to PAs of global importance - RAMSAR designations -

indicated concerns at a global level. There is also evidence (particularly in the discourse contained in MSD 6) of stakeholders' outwith the UK using internationally recognised PA designations, especially SPA and RAMSAR designations when wishing to highlight natural environment values to an international audience.

7.6.5 THE CHRONOLOGY OF STAKEHOLDERS' SUBMISSIONS

The date given on the submissions has been used here to determine when the submission was sent to the Scottish Executive. The submission date is therefore used as a proxy for when a member of the public had what was referred to above (Hards 2010), as their transformative moment. The results of the analysis of all the submission dates between November 16th and December 23th are depicted in Fig. 7.8. and the evidence points to more of the stakeholder transformative moments occurring very late within the 28 days allowed. There is a considerable increase in the number of submissions at the beginning of December, the latter part of the consultation time frame. The analysis also reveals that some 60% of the dated submissions (some were not dated and thus cannot be considered here) were made within a 4 day period between December 6th and 9th December 2004. Thus 60% of the submissions were made during 14% of the time frame allocated. Another significant feature of the submission chronology is that only 7% of the submissions were made in the 14 days between the dates of 16th and 29th November 2004. These findings indicate that initially there was relatively little impetus behind submission activity but that a relatively late and sudden increase took place in stakeholders' inputting their discourse to inform the decision-making process.

A further analysis of the data was carried out in order to attempt to find explanations for the asymmetrical chronological distribution of submissions. Within the 28 day time frame

the six MSD submissions represented 72.5% of the total number of submissions received by the Scottish Executive during the 6th – 9th December four day period. MSDs are the most visible outcome of the collaboration between organised third parties and the influence of campaigning agents. However, as was stated earlier, organisations such as the RSPB may have had a more covert influence on the promotion and timing of submissions. External influences such as the media and the rural community 'gold fish bowl' (Fagan et al 2006) may also have had a bearing on motivation and timing. However, the findings provide strong evidence that collaboration, whether of stakeholders own volition or through the activities of the campaigning agents, had a very strong influence on the chronological distribution of submissions.

Fig. 7.8 THE CHRONOLOGY OF STAKEHOLDERS' SUBMISSIONS
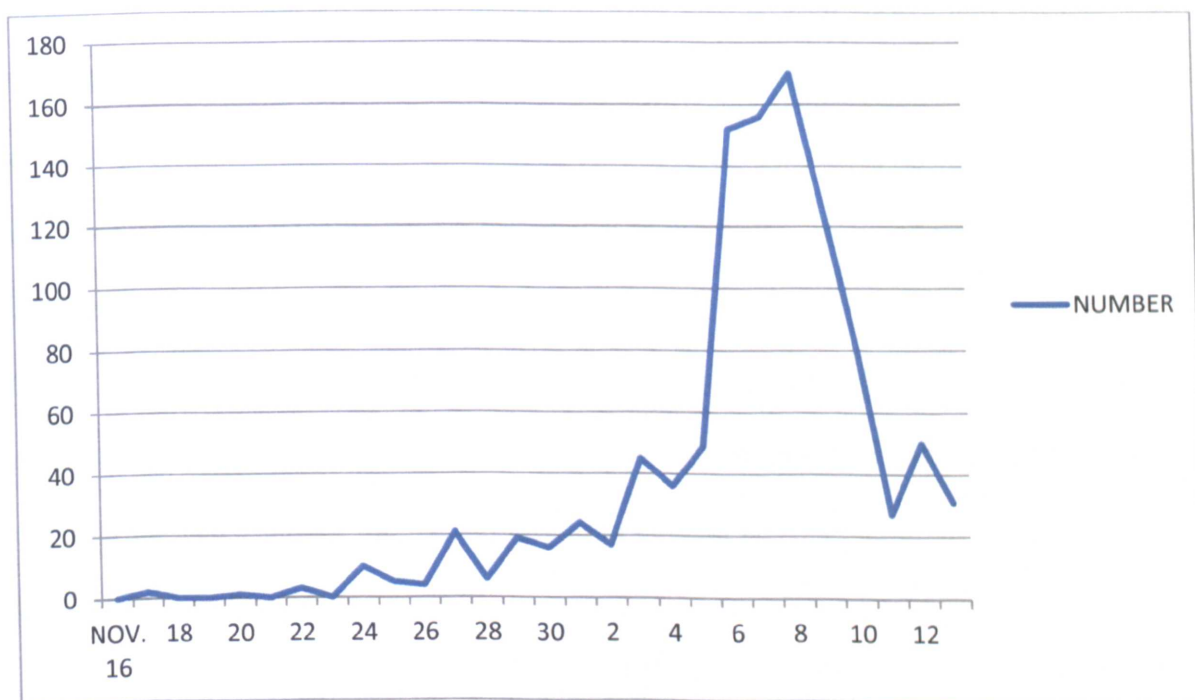
7.7 DISCUSSION

7.7.1 THE NIMBY FACTOR

The large number of objections to the LWF received by the Scottish Executive can be compared to only three submissions containing an unqualified support for the LWF. Some of the data points to the possibility of the existence of a NIMBY factor in the objections made. For example data in section 7.5.1 identifies a decreasing level of objection (by population ratio) with distance from the LWF and this may support the argument (Swofford and Slattery 2010 for example) that the closer the proposed LWF is to the stakeholders' 'back yard' the more likely there is to be an objection. However, ballots were held in Ness (L1), Barvas and Bru (L1), Shawbost (L1), Sandwick (L3) and Laxdale (L2) to determine public opinion on the LWF. Of those participating the percentages against were Ness 83%, Barvas and Bru 67.5%, Shawbost 73%, Sandwick 55.5% and Laxdale 67.2% (Comhairle nan Eilean Siar 2005). It could therefore be argued that because such a large proportion of these communities were clearly opposed to the LWF that it is the scale of opposition that is underestimated by the submissions. Another piece of data that may be used to counter the NIMBY hypothesis is that many of the objectors came from mainland Scotland, the remainder of the UK and from other countries and continents. These are clearly not stakeholders whose 'back yards' are located close to the proposed LWF. In addition several of the reasons given for objecting, for example culture and heritage and the international value of the natural environment did not depend upon close proximity to the LWF for their validity.

7.7.2 THE GEOGRAPHICAL DIMENSION

There is a very wide geographical distribution of stakeholders (Fig. 7.4 and 7.5) with the largest number coming from the Island of Lewis. The largest proportion of these comes

199

from the communities in the north of the Island closest to the proposed LWF. A significant finding is that very few members of the public in the more southerly islands in the Western Isles chain were motivated to object or in the case of Barra, not motivated to object at all. That the number of objections from the southern islands is so low is perhaps surprising bearing in mind that all the islands are within the same local authority boundary as Lewis and Harris. In addition the southern islands share many of the same economic and cultural ties with the other islands in the Western Isles chain. On the mainland of Scotland the largest numbers of objectors were resident in the Highland Region. This correlation is perhaps what might be anticipated bearing in mind the close cultural ties, shared values and the family links between the Western Isles residents and those in Highland Region.

A relatively large number of objections, compared for example to those from the southern islands of the Western Isles, came from the Central Belt of Scotland and again the Diaspora and family links referred to in section 7.2 may be an important factor here. In the UK, a significant number of objections came from England and Wales and from the discourse analysis the activity of visiting the Islands as tourists and the appreciation of the value of the natural heritage appears to be the main motivation.

The number of objections received from outwith the UK adds a significant international dimension to the origins of submission discourses. The increasing importance of the internet in fostering international participation in the planning process is evidenced by the number of submissions sent by email. MSD 6 illustrates graphically the effectiveness of the internet in mustering support for an anti-LWF discourse. Evidence of international academic collaboration is contained in the MSD 6 submissions from stakeholders based in the following academic institutions: the University of Parma, Italy; Harvard Medical

School in the US; the Institute of Nature Conservation, Belgium; the University of Natural Resources and Applied Sciences, Vienna and several academics with no stated attachment to any academic institutions. This compares with UK Universities where there were no submissions. There is evidence that academic institutions also stimulated other submissions internationally with the same texts appearing in submissions from the US, Austria, Italy, Belgium, Germany, Hungary and Australia.

7.7.3 CHRONOLOGY OF TRANSFORMATIVE MOMENTS

An analysis of the data was carried out in order to understand the asymmetrical distribution of the submission chronology. Within the statutory 28 day time frame 72.5% of the total number of submissions were received by the Scottish Executive during a four day period between the 6th – 9th December. The submission dates of the MSDs give some indication of the timing of the conclusion of the stakeholder reticulation leading to these submissions. The campaigning of organisations such as the RSPB may have had a more covert influence on the number and timing of submissions. The media coverage of the LWF application would have resulted in raising the profile of the LWF debate. The timing of this media coverage would therefore have had an influence on the timing of some stakeholders' transformative moments and the subsequent submission of their objection. However, to what extent these factors have resulted in the concentration of the submissions within the four day period is unclear.

7.7.4 THE OUTCOMES OF GOVERNANCE

Environmental justice is an important component of the sustainability paradigm and its success is determined at least in part by the opportunity for all those affected by environmental decision-making to be heard (Scottish Executive 2006 p117). The large

number of LWF submissions is therefore one measure of the extent to which this opportunity was grasped by the general public(s) and consequently an indication of the level of environmental justice in the context of the LWF. Intergenerational equity is another constituent of the sustainability paradigm identified by the Scottish Executive (2006 p118). There is a clear message contained in some stakeholders' discourses that they wanted the decision taken on the LWF to ensure that future generations inherited a natural environment with no lesser a value than the current value.

Strong linkages existed in this Case Study between discourse patterns and the socially shared attitudes and ideologies, norms and values and other forms of social cognition (Hillier 2003; Guillem 2009 p732). The linkages between the Meta discourse themes are illustrated in Fig. 7.9. The analysis of stakeholders' discourses has revealed that the most important interaction, outwith that of governance, is that between the Intrinsic Valuation of the Natural Environment (IVE) and the Utility Valuation of the Natural Environment (UVE). The majority of the stakeholders and all of the entrepreneurs based in Lewis and Harris cited the negative impacts of the LWF on the IVE and therefore the IVE/UVE relationship as their motivation for objecting. It was also evident from the MTDA that there were also strong (but fewer) linkages between cultural themes and the intrinsic and utility values of the natural environment. These cultural links can be found in some stakeholders' discourses emphasising the role of crofting in the evolution of a cultural landscape. However, a major concern of stakeholders' was that all their views on relevant values and value linkages were conveyed meaningfully to the key decision-making stakeholders. In this context perceived deficiencies in the consultation processes (despite the amount of time and effort key stakeholders had devoted to them) were highlighted. The level of stakeholders' desire that their values and concerns about the impact of the LWF on these values, would be give due consideration is reflected in the references to the

overarching governance discourse theme. Evidence of the level of concern expressed about weaknesses in the Comhairle's governance and its handling of the LWF application can be found in the statistic that the governance theme was ranked second among stakeholders' motivations for objecting.

Fig. 7.9 CONCEPTUALISATION OF META-THEMATIC RELATIONSHIPS

LWF

GOVERNANCE

GOVERNANCE

CULTURE

IVE

UVE

LWF

GOVERNANCE
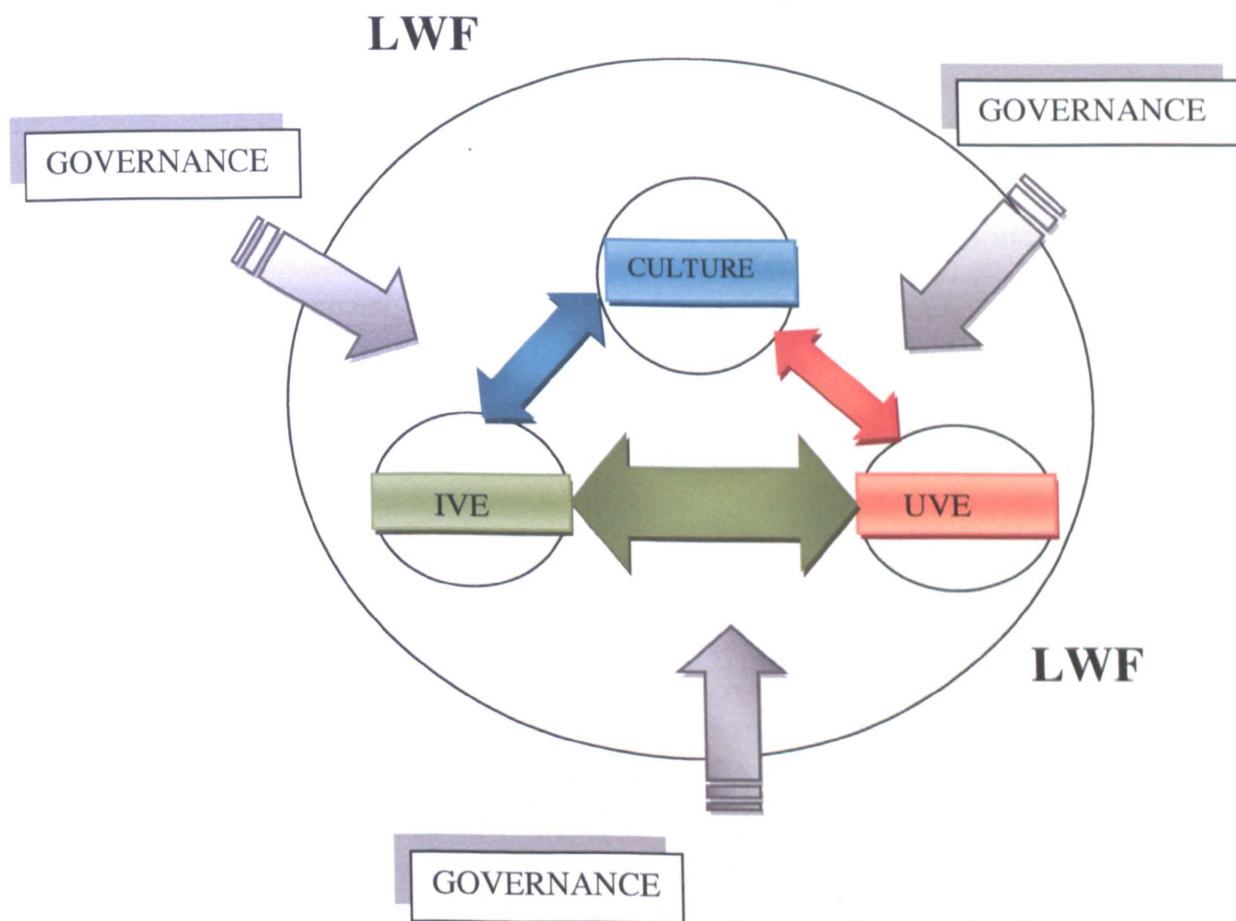
One statistical measure of the lack of support for the LWF was contained in the opinion polls referred to above. Because of a perception by some stakeholders at the time that the Comhairle or some of its members were minded to favour the development these statistics were used in their discourses to illustrate a perceived lack of the Comhairle's accountability. The decision reached by the Comhairle as principal consultee at the Comhairle's Environmental Services Committee meeting on the 28th June 2005, was a vote of 19 councillors in favour and 8 against the LWF.

7.8 CONCLUSIONS: GREEN ON GREEN

The MTDA has analysed stakeholders and their discourses as if they had been situated within a range of environmental, socio-economic, socio-cultural, geographical and temporal frames of reference. The MTDA has also positioned stakeholders and their discourses within the relationship between society's requirement to produce energy (the LWF) in a sustainable manner and the valuation of the (Western Isles' internationally important) natural environment. The results of the MTDA are portrayed graphically in Fig. 7.10. The research has shown in the context of the LWF case study that in the opinion of stakeholders the values attached to the natural environment within the sustainability cycle should take precedence in any assessment of what constitutes sustainability in a rural environment.

Fig. 7.10 THE LWF, SUSTAINABILITY AND THE NATURAL ENVIRONMENT NEXUS – THE STAKEHOLDERS' ASSESSMENT OF GREEN ON GREEN
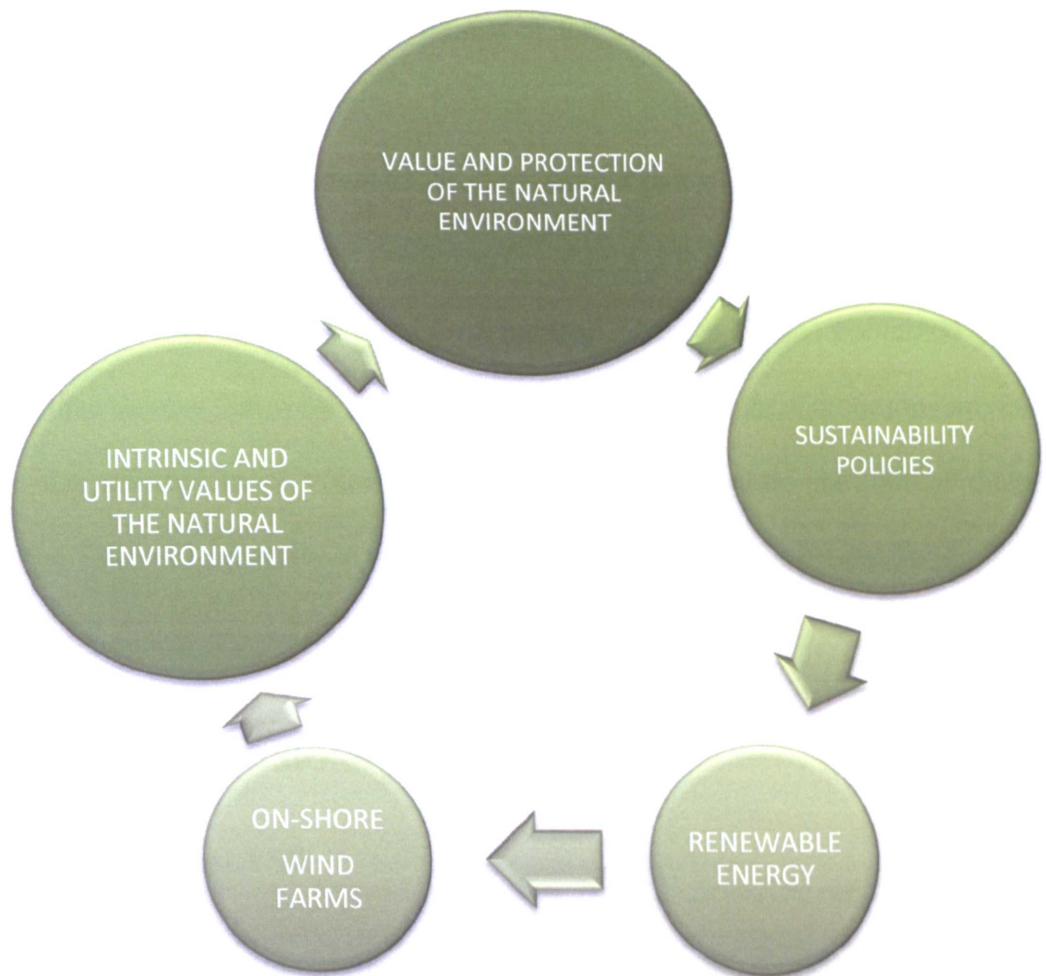
CHAPTER 8 LEWIS WIND FARM DISCOURSES - A THEMATIC DISCOURSE ANALYSIS OF INDIVIDUAL STAKEHOLDERS' DISCOURSES

8.1 INTRODUCTION

This chapter contains an analysis of the findings of the TDA of individual stakeholders' submissions. The first part of the analysis focuses on the geographical characteristics of third party stakeholders and their submissions. The second part of the chapter presents the outcome of the Thematic Discourse Analysis (TDA) of the stakeholders' submission discourses. The focus here is on the Discourse Induced Themes (DITs) contained within the meta discourse themes that were analysed in the previous chapter. Quotations are used here to give the stakeholder a 'voice' in this analysis, to illustrate the salient themes identified in the TDA and generally to give a greater richness to the analytical output.

8.2 THIRD PARTY SUBMISSIONS

8.2.1 STATISTICAL ANALYSIS

A total of 428 individuals' submissions were received and the pattern of their geographical distribution is shown in Figs. 8.1, 8.2 and 8.3. The number and geographical distribution of objections from within the Western Isles is tabulated in Fig. 8.1. This also shows the number of submissions as a percentage of the total population of the region and the ratio of objections to total population. The 'upward climb' in numbers and the correlation between the numbers objecting and the stakeholders' close proximity to the proposed LWF development reflects the findings in the previous chapter. These findings are tabulated in Fig. 8.2. The statistics show that residents in communities in the north west of Lewis (L1) the area closest to the LWF, were most motivated to object to the proposed development.

However, individuals resident in rural Lewis (L2) an area more distant from the proposed LWF were less motivated to object. Residents in the Stornoway area (L3), the most populous part of Lewis were in spite of their relatively close proximity to the southern part of the proposed LWF, least likely to object. The population of Harris is significantly lower than Lewis yet the ratio of objectors per total population was almost the same as L3. The number of objections from the southern islands in the island chain, although part of the same Western Isles local government area, was extremely low. Only 3 objections came from North Uist and there were no submissions from Benbecula, South Uist or Barra. Fig.8.3 illustrates that the largest number of objectors from the mainland were based in Highland Region. Within the rest of the UK the number of objectors based in England was the highest.

FIG. 8.1 GEOGRAPHICAL ANALYSIS OF INDIVIDUAL STAKEHOLDERS' OBJECTIONS

LOCATION	NO. OBJECTIONS	% POPULATION (TOTAL 2001)	RATIO
L 1	102	2.5% (4,071)	1 PER 39
L 2	76	2% (6,176)	1 PER 80
L 3	47	0.6% (7,653)	1 PER 163
HARRIS	11	0.6% (1,984)	1 PER 180
NORTH UIST	3	0.11% (1,657)	1 PER 552
BENBECULA	0	0 (2,249)	0
SOUTH UIST	0	0 (1,952)	0
BARRA	0	0 (1,172)	0

8.2.2 THIRD PARTIES – DISCUSSION

The geographical distribution pattern of individual objectors was compatible with that of stakeholders as a whole. The large number from the Highland Region correlated with its geographical proximity to the Western Isles (Fig. 8.3). The relatively large number of objectors from Eastern Scotland was perhaps surprising given the apparent lesser influence of the Western Isles' Diaspora referred to in the previous chapter. The more detailed TDA of the data revealed that the significant number of objections from England and Wales was strongly linked to those visiting the Western Isles as tourists. The largest difference between the total number of objections lodged and the number of individual stakeholders' objections related to residents in the Americas. The TDA of the texts pointed strongly to the influence of Multi-Stakeholder Discourse 6 (MSD 6) on the overall statistics (discussed in more detail in Chapter 9. The numbers in brackets denote stakeholders' identification number in the planning submission files.

Several of the individual stakeholders felt it important enough to include some details concerning their personal lives in their discourses. The resulting narratives illustrated what some stakeholders felt was the necessity to (re)engage with and bring to the attention of the key stakeholder audience their sense of 'belonging' (Stratford 2009 p 796) in order to legitimise their discourse. Two principal categories of stakeholder legitimising narrative were identifiable in objection preambles and these reflect the discussion on rurality in Chapter 3. The first is the incomer integration narrative. Legitimising narratives in this category referred to the extensive length of time resident in Lewis, marriage to a Lewisman (no mention was made of marriage to a Lewiswoman) and having children born and brought up in Lewis. There were examples of a more defensive turn in the incomer integration narrative. One came from a resident (496) who made reference to the 'racist' comments directed at anyone with an English surname who had objected to the LWF. This

was reflected in a narrative where the stakeholder commented on the combining of 'white settler' and objector to discredit their discourse. Another stakeholder referred to objectors being labelled NIMBYs and 'tree-huggers' but protested that this was not his stance. The second legitimising narrative was that of the 'concerned Diaspora' those living outwith the Islands but still having connections, e.g. members of family still living or crofting on the Western Isles. Another submission preamble, although not a legitimising narrative, can be classified as an apologetic narrative. Stakeholder (1036) exemplified this by beginning his submission discourse with the statement "I do appreciate that as someone living on the mainland (S2) I have no right to protest against a development for aesthetic reasons......"

It is difficult to determine from the evidence available why the number of individual submissions from the southern islands of the Western Isles chain is so low. It may be due to the absence of the exhibitions or formal consultation exercises that may have influenced residents' perceptions of the proposal. However, it could also be argued that many of the means of communication, including the internet, available to those even more remote from the LWF proposal who were motivated to object, mainland Scotland, the rest of the UK and almost every continent were at the time also available in most of the southern islands. These means of communication may also have had an important role to play in the creation of intellectual capital flows to and from the Western Isles (Stratford 2009). The reason for the lack of involvement by residents in the southern islands therefore remains unclear. Islands as geographically finite entities of locality and their own story lines of belonging may have had an important influence on any individual's judgement of the importance of the impact of the LWF on stakeholder values and the number of submissions made.

Fig. 8.2 INDIVIDUAL STAKEHOLDERS - WESTERN ISLES RESIDENTS

Legend: ■ NO. STAKEHOLDERS

Categories: L 1, L 2, L 3, HARRIS, N UIST, BENBEC, S UIST, BARRA
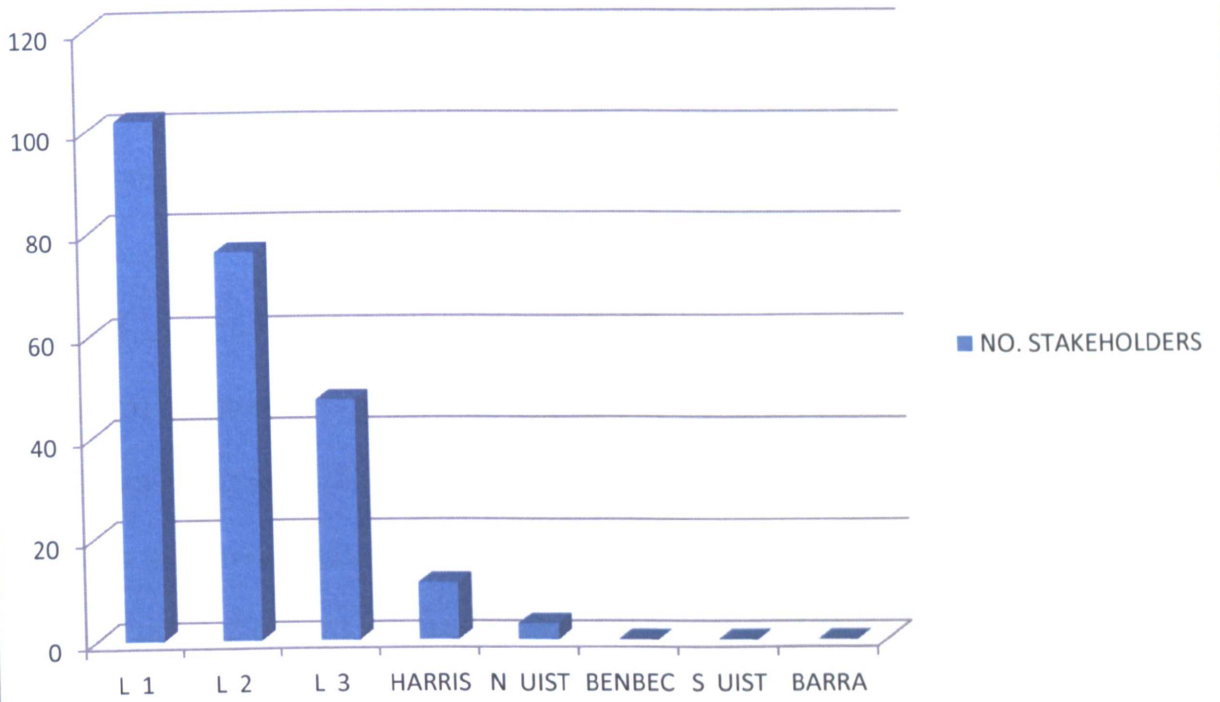
Fig. 8.3 INDIVIDUAL STAKEHOLDERS - NON-WESTERN ISLES RESIDENTS

Categories: S 1, S 2, S 3, S 4, ENGLAND, WALES, N I, EU, AM, AS, AUS
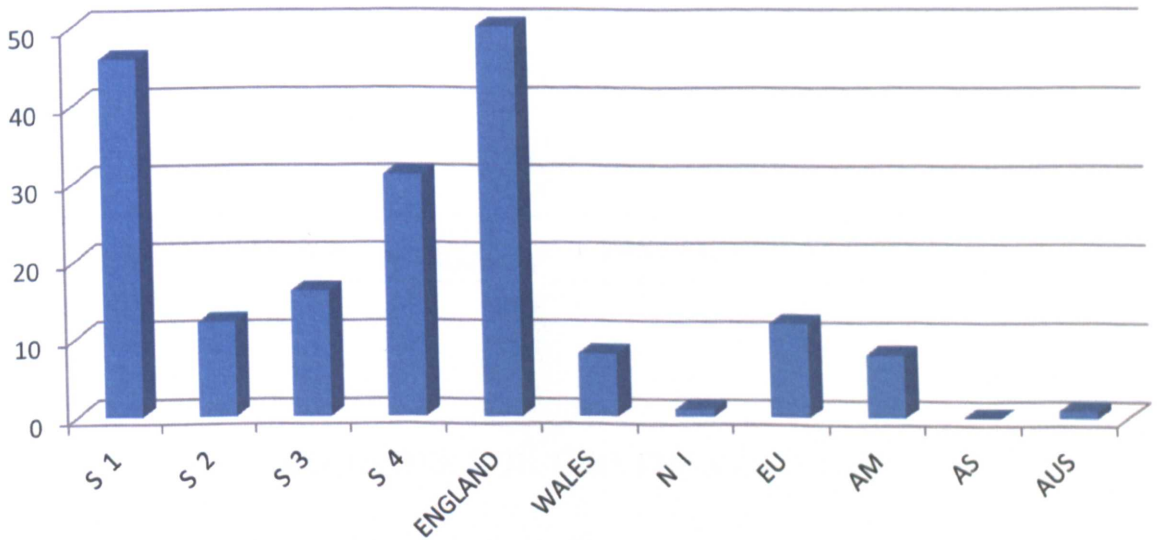
8.3 A THEMATIC DISCOURSE ANALYSIS

The TDA methodology being used to identify stakeholder discourse patterns and stakeholder motivations was illustrated in Fig. 5.2. The first of the four Meta Discursive Themes (MDT) analysed in depth in this chapter is the Intrinsic Value of the Natural Environment and Fig.8.4 indicated the constituent Discourse Induced Themes. What constituted an intrinsic value was discussed in Chapters 2 and 3. In this context Lewis (1983) explained that 'intrinsic' is the valuation expressed entirely about a single entity, in this instance the natural environment, its properties and nothing else. A key aim of this research is to identify and analyse the valuations attached to the natural environment by individual stakeholders. As was indicated in Chapter 7 the Intrinsic Value of the Natural Environment was of particular concern. Out of the total of 428 submissions received by the Scottish Executive expressing the views of 453 individual stakeholders, 404 (92% of the total) touched on the Intrinsic Value of the Natural Environment (IVE).

FIG. 8.4 SUSTAINABILITY COMPONENT: THE ENVIRONMENT

META THEME: INTRINSIC VALUE
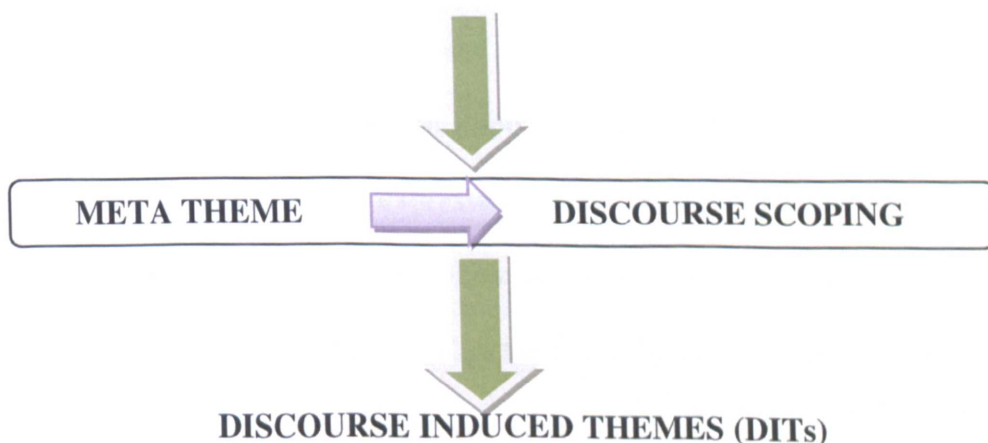
DIT 1 Landscape

A. Stakeholders' valuation of the Western Isles landscape;

B. Stakeholders' assessment of the LWF as a threat to the valued landscape;

DIT 2 Biodiversity

A. Stakeholders' valuation of the Western Isles' habitats and species;

B. Stakeholders' valuation of the bird species found in the Western Isles;

C. Stakeholders' assessment of the LWF as a threat to biodiversity;

D. Stakeholders' awareness of Protected Area Legislation and policy measures

DIT 3 Quality of Life

8.4 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT – LANDSCAPE

There were important linkages between the discourse patterns contained in objections and the conditions of their production (Heller 2003). In the context of this Case Study, these included the underlying economic and socio-cultural conditions described in detail in the Case Study (Chapter 6). Herring (2009 p68) quotes the European Landscape Convention's definition of landscape as "an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". It was this concept of landscape with its move away from the use of 'expert' criteria towards that of community owned landscape values that formed an important part of this Discourse Induced Theme. Some 273 individual stakeholders expressed a view on the landscape features within the case study and the surrounding area and their assessment of the impact of the wind farm on this landscape. This represented 64% of all the individual stakeholder discourses received by the Scottish Executive. The landscape in the vicinity of the proposed LWF is not protected by a National Scenic Area (NSA) designation. Nevertheless, a number of national and local planning policies (analysed in Chapter 2) point to landscape features being an important consideration when any land use decisions are being made.

8.4.1 LANDSCAPE VALUED DISCOURSES:

8.4.1.1 HOLISTIC VALUATION

The TDA revealed an overall positive evaluation of the landscape. Its pristine nature and fragility was illustrated by comments such as "a real gem" (956); and "one of the most beautiful areas in Britain" (1549). One stakeholder (36) described the Lewis landscape as a sensitive landscape with little or no capacity to accept new development and went on to warn that local planning authorities (LPAs) should take great care to safeguard areas of wild land character. The international dimension to this evaluation is illustrated by one German landscape photographer who had been coming to the Western Isles for several years who described the Islands as "an unspoilt land" (291).

8.4.1.2 OPEN PERSPECTIVES

Another finding of the TDA was the importance attached by stakeholders to the perception of openness which the landscape brought and a sense of tranquillity. These experiential characteristics were identified by some stakeholders as its most valued asset. For example: "the wide open spaces of the Western Isles" (5); "the vast open views, the sky and the ocean dominating the landscape and creating a sense of space and tranquillity" (276); "the landscape has a sense of space and tranquillity and there is visibility over a large area, including Harris" (299); "a feeling of being on the edge of the world" (8).

8.4.1.3 SPIRITUAL AND PSYCHOLOGICAL VALUES

One notable finding of the TDA was the importance attached to the ethereal, spiritual and psychological benefits of the landscape. These landscape characteristics were linked in some instances to the perspective of openness of the landscape by residents of the Western Isles whose illustrative discourse of these landscape values included: "lose yourself in God's beautiful creation" (28); "the open views of Lewis have spiritual and psychological

benefits (468); "the landscape has a traditional and spiritual dimension" (964) and "the landscape created a sense of place and tranquillity" (933). The landscape experiential values were shared by some of the visitors to the Western Isles. For example a visitor from Wales commented on the "spiritual uplift being enjoyed by residents and visitors alike" (904).

8.4.2 LANDSCAPE THREATENED DISCOURSES:

8.4.2.1 GENERAL CONCERNS

There was recognition that the landscape would be scarred forever by the LWF; that the proposed development would be a "monstrous wind farm"; that vast scars would be created on the landscape; and there would be a fundamental change to the landscape of North Lewis. This holistic view of the damage likely to be wrought was also perceived from a chronological perspective. This was encapsulated in the quote from one Island resident (L3) that "the whole development will destroy the landscape damaging thousands of years of natural heritage and wildlife" (97). A more anthropomorphic observation (L2) contained the graphic assessment of the impact of the LWF on the landscape as being like:

"a rash of carbuncles on a beloved friend" (962).

The TDA revealed that wildness was considered by some objectors to be an important feature of the landscape. This prompted a Lewis resident to comment that the LWF was an "intrusion of human activity into land of wild character" (13) and an English visitor to express concern about the despoliation of "an unspoilt land" (291). These negative impressions were exacerbated by the fear that there would be a cumulative impact on the landscape if the other wind farms at the planning consent stage were also to be approved. The perception of there being a national dimension to this viewpoint was illustrated by reference to the destruction of one of the most beautiful parts of Scotland by such an "idiotic plan" (93). This can be seen as an example of Herring's observation that landscape contributed to shaping or reflecting aspects of national as well as personal local identities

214

(Herring 2009 p68). This point also echoed the view of many stakeholders that the suggested benefits of the proposal was seen in a very poor light in comparison with the damage done to an important and valued landscape. Several submissions made a reference to National Planning Policy Guideline 6 which in the context of renewable energy and sustainable development provides guidelines on the location of renewable energy developments. The section referred to states that renewable energy developments should only be permitted where "it can be demonstrated that the underlying objectives and overall integrity of the designated area will remain largely unaffected" (NPPG 6 paragraph 31). However, although the LWF is not located within a National Scenic Area (NSA) designation it would nevertheless be very visible from the South Lewis, North Harris and North Uist NSA.

8.4.2.2 THE SCALE OF THE LWF DEVELOPMENT

The large scale of the LWF and its impact on the landscape were revealed by the TDA as an important theme. Western Isles residents referred to the LWF as being out of scale with the landscape and argued it was being imposed on a sensitive landscape which had little or no capacity to accept new development. Epithets such as 'destruction' were used to impress upon the Scottish Executive how stakeholders felt about this landscape threatened issue. These fears were reflected in a questioning of how such a small island and its inhabitants could cope with the size of this development because it would change 'our' landscape forever. The use of 'our' in the context of landscape signifies individual stakeholders' feeling of empathy with community values and the belief that what was considered to be a community 'owned' asset was under threat from the LWF. This perspective in relation to the appreciation of Lewis landscape confirmed Herring's point that democratic (as opposed to expert-orientated) landscape evaluation was cognitive in the context of perception, memory and judgement and central to the landscape of people's sense of place (Herring 2009 p68). Lewis stakeholders in particular, were concerned about

the size and scale of the development being completely out of balance with the result that the Island would be dominated visually. Specific reference was again made to non-compliance with National Planning Policy Guideline (NPPG) 6 (36) to strengthen these arguments. Concerns about the scale and domination of the LWF were also voiced by non-Western Isles residents in their discourses which contained epithets such as 'massive' and 'obscene'.

8.4.2.3 TURBINE SIZE

In addition to the overall scale of the LWF and its impact on the landscape, the TDA revealed more specific concerns by individuals about the impact of the LWF on the landscape. These concerns related to the size and number of the turbines and their associated infrastructure. For example Western Isles residents made comments referring to the height of the turbines spoiling the natural landscape and the impossibility of hiding the turbines because of their size. One stakeholder (226) described the turbines graphically as "moor-eating giants" Some stakeholders put the impact on the landscape into chronological perspective by concluding that the turbines would have a negative effect on the landscape and the culture that would last for at least 25 years (the maximum design life span of the wind farm turbines). This touches on the intergenerational dimension of the LWF impact referred to in Chapter 7 whereby a non-use but bequest value is assigned to landscape for future generations. A number of non-Western Isles residents both within and outwith the UK also referred to the inappropriate scale of the LWF and judged that the size of both the turbines and pylons were totally unacceptable. Not all of the submissions from outwith the Western Isles indicated that their authors had visited the Islands implying that some other experience had energised the expression of their fears about the impact of the size of the turbines on the landscape.

8.4.2.4 WIND FARM VISIBILITY

An important TDA finding arising from the scale of the LWF and turbine size and linking landscape to habitat were the specific references made to the domination of the flat blanket bog landscape type found on the LWF site and the adjacent areas. Because of the visual properties of this landscape type some stakeholders concluded that the negative visual impact of the LWF would be exacerbated. The Western Isles residents commented that the flat blanket bog would make it difficult to hide the LWF thereby allowing 'virtually everyone in North Lewis' (3) to see the development. The impact of the LWF on important viewpoints was a concern expressed in several discourses. Two visitors from mainland Scotland (290 and 506) specifically linked the LWF's high visibility to its negative impact on tourism by pointing out that it would spoil the view from the ferry as it approached Stornoway.

8.4.2.5 LANDSCAPE INDUSTRIALISATION

Some of the strongest and most vitriolic language concerning the impact of the LWF on the landscape related to a perception that this would result in an industrialising effect. This discourse was used to highlight the perceived radical change that would occur to a valued landscape for what was assessed to be little gain. Western Isles residents were concerned about the impact of the LWF on the landscape and in turn the impact on their perception of the place that they had chosen to live in:

> *"If I had wanted to live in an industrial landscape I would have chosen to live in a city"* (15);

> *"The Lewis Windfarm would turn vast areas of wonderful landscape into nothing better than a huge industrial estate for little gain"* (36).

> *"The scale (of the LWF) was too large and would change the landscape into an industrial site"* (20);

"We are about to turn one of the few remaining natural areas in Britain into an industrial landscape all in the name of so-called progress" (320).

An international dimension to stakeholder collaboration in relation to concerns about landscape industrialisation can be seen from the submission from a US citizen (1525):

"Someone who has visited Scotland several times has alerted me to the plan to turn a scenic countryside into power line vistas".

Viewpoints were also expressed that the LWF would result in the industrialisation of what stakeholders' believed to be one of the few remaining natural landscapes in Western Europe. At a local scale the view was expressed that those living on the West side of Lewis would be most adversely affected. One stakeholder observed that this would result in the claustrophobic effect of condemning those living on the West side of Lewis to live in a "narrow corridor between the Atlantic and a 140M high prison fence" (496).

8.4.2.6 IMPACT ON THE LANDSCAPE'S SPIRITUAL VALUE

It was clear from the TDA that some stakeholders attached considerable importance to the cultural and spiritual values of the landscape. In this context references were made to NPPG14 (paragraph 16). This Guideline recognises and seeks to protect the remoter areas in Scotland which possess an "elemental quality from which people derive psychological and spiritual benefit". Some of the most impassioned views expressed about the negative impact of the LWF referred to this landscape quality:

"It grieves the heart of God to see his creation treated in such a way" (28);

"The spiritual uplift of the landscape would be removed by the LWF" (904);

and a visitor from Wales warned that:

"The Lord on High is mightier than the sound of many waters (Psalm 93)" (28).

FIG. 8.5 LANDSCAPE CHARACTERISTICS – STAKEHOLDERS'

DISCOURSES

KEY SUBJECTIVE LANDSCAPE CHARACTERISTICS	LANDSCAPE VALUED DISCOURSE	LANDSCAPE THREATENED DISCOURSE
OVERALL EVALUATION	NATIONAL IMPORTANCE UNSPOILT LANDSCAPE PRISTINE LANDSCAPE	LWF - A FUNDAMENTAL CHANGE IN LANDSCAPE METHODOLOGICAL WEAKNESS IN THE ES LANDSCAPE APPRAISAL
VISUAL/ AESTHETIC		LANDSCAPE SCARRING LWF SCALE TOO LARGE WIND TURBINES TOO LARGE GEOGRAPHICAL SCALE OF VISIBILITY LANDSCAPE INDUSTRIALISATION
EXPERIENTIAL	WILDNESS OPEN PERSPECTIVE TRANQUILITY SPIRITUAL VALUE PSYCHOLOGICAL VALUE	NEGATIVE IMPACT ON WILDNESS LANDSCAPE INDUSTRIALISATION LESSENING OF SPIRITUAL VALUE SENSE OF ENCLOSURE
PHYSICAL/ TOPOGRAPHICAL		BOGGY MOORLAND TOPOGRAPHY
CULTURAL AND HISTORIC LANDSCAPES	TRADITIONAL LAND USES MEMORY OF EVENTS	NEGATIVE LONG-TERM IMPACT INTERGENERATIONAL PERSPECTIVE
UTILITY VALUATION		NEGATIVE IMPACT ON TOURISM
CAPACITY FOR DEVELOPMENT	LITTLE OR NONE A FRAGILE LANDSCAPE VALUED LANDSCAPE IN NEED OF PROTECTION	INTRUSION CAUSED BY LWF DEVELOPMENT CUMULATIVE IMPACT OF LWF AND OTHER WIND FARMS

8.4.3 LANDSCAPE DISCOURSES - DISCUSSION

No evidence emerged from the TDA that would indicate that experience of other wind farm developments had helped to inform the views stakeholders expressed about the impact of the LWF on the landscape. Another important consideration is that there are no permanent residents actually within the LWF site and therefore all landscape discourses were composed by stakeholders as 'visitors' or stakeholders 'with an interest in' the LWF location. In addition there is no indication in the comments expressed in some of the non-residents' discourses that the authors had ever visited the LWF location. As a consequence all these submissions may be perceived as representing an existence value, the acknowledgement by stakeholders of the existence of such a valued landscape. Thus many of the submissions may approximate more to a subjective reality (re)construction; a reflection of what Ritchie et al (2003) has referred to as "the world of their values".

Fig. 8.5 summarised the principal findings emerging from within stakeholders' subjective landscape valued and landscape threatened discourses. There is the potential for a wide range of stakeholder views on the impact of the LWF on the landscape as a result of the complex interplay between personal preferences and aesthetic/place attachment issues (Hunter 1976; Smout 1991; Willis 1992; Devine 1994; Hunter 1995; Ball 2002; Mackenzie 2004; McMorran et al 2006; Grant 2006; Rennie 2006; Maclleathain 2007; Herring 2009; Foster 2010). This indicates the potential for an even wider range of landscape discourses than those represented in Fig. 8.5.

The LWF site is not located within a protected landscape (NSA). However, individual stakeholders still regarded landscapes within and around the LWF site as being worthy of

and in need of protection. Their valuation of the landscape as being of national importance and the assessment of it as being unspoilt and in pristine condition dominated landscape value discourses contrasts markedly with the non-NSA designation. The high level of valuation is also inherent in the landscape threatened discourse. Here the dominant assessment of the scale of the potential change can be identified within references alluding to 'fundamental change'.

Stakeholders' discourses also referred to the technical appraisal of landscape within the Environmental Statement (ES). One of the main criticisms expressed is that the ES did not gauge accurately the importance of the landscape within and adjacent to the LWF site. Stakeholders make references in their submissions to the incompleteness and the inaccuracy of the landscape evaluation in the ES. This is another illustration of the gap between the more objective 'expert-led' landscape evaluation and the subjective evaluation by stakeholders experiencing the same landscape. Stakeholders' critique of the assessment of the landscape's capacity for wind farm development contained in the ES laid the foundation for some of the concerns expressed. Ultimately it was the publics' own subjective evaluation rather than any more 'expert-led' objective evaluation of the landscape that motivated their participation in the LWF application process.

It is interesting to note that the visual values of the landscape were not directly referred to in the landscape valued discourses. However, the number of pejorative references in landscape threatened discourses to the 'industrialisation' of the landscape implied that stakeholders' made a more holistic valuation of the current landscape's appearance and characteristics and rejected the perceived implications of the LWF for it. Specific references were made to values which were inherent in the memory of past events. These memories were integral components of the value placed on landscapes (Withers 2005).

221

Three submissions were submitted by 'young persons', two children one aged eight and one aged nine both living in Stornoway (L 3) and a youth group from Ness (L1) and all referred to the impact of the LWF on the landscape. The submission from the 9 year old (283) is quoted here verbatim to illustrate how some members of the next generation might perceive the legacy left by the decision-makers of today. The quote also illustrates the perception of a close relationship between landscape and the traditional land uses.

> *"I have been going to visit my grandparents and going to the peats every summer at Loch Grimabhat. The windmills will be very close, that is why I don't want them. They will be noisy and scare away my gran's sheep and also kill the birds and little animals. I am writing this from my grandparent's house where they will be very close to the windmills".*

These comments were accompanied by a drawing of the landscape adjacent to the house depicting this rural landscape before and after the construction of the LWF.

The Ness Youth Group (223) pointed to the demographic implications that could arise if the LWF was approved. Their discourse concluded that:

> *"As teenagers we can't see ourselves coming back from university to a landscape dotted with metal monstrosities".*

These quotes illustrate the important role that memory played in the context of the LWF in landscape evaluation from an intergenerational perspective. The findings accord with those of Swanwick (2004 quoted in Scott 2006 p4) which suggested that when landscapes were subject to possible change, information about the landscape was more important than what it looked like. This may be especially pertinent in this case study where as discussed in Chapter 3, landscape perceptions have been formed by crofting and its history and by culture as much as by the physiographic elements of the landscape. This finding also

contradicts the conclusion arrived at in other research into wind farm objections to proposed wind farms which highlight the visual impact of the development on landscape as being the main or most important reason for objecting (Warren et al 2005; Jones and Eiser 2007; Wolsink 2007; Toke et al 2008; Jones and Eiser 2009).

Grant (2006 p20) identified the positive attributes of landscapes as being the atmospheric quality of the light, harmonious composition, diverse and lively sequential experience and visual drama as major contributors to the valuation of the landscape. These attributes are contextualised to varying degrees in stakeholders' landscape discourses. The experiential characteristics of the landscape featured strongly in stakeholders' discourses, particularly the emphasis placed on the landscape's wildness and spiritual values. The feeling of 'openness' was a highly valued characteristic of this landscape and the perception was that this was now endangered from what was perceived to be the sense of 'enclosure' that would result from the construction of the LWF. The only references made in stakeholders' discourses to the physical and topographical characteristics of the landscape were made in relation to the imposition of the LWF on what was referred to as flat blanket bog. This topographical feature is classified as Boggy Moorland (SNH 1994) and was closely associated with the valued open views by the stakeholders who made reference to it. When allusions were made to the negative impact of the LWF on topography the negative impact on 'openness' was implicated within these references. However, it is interesting to note that no mention was made concerning the visual impact of the LWF on the more distant hilly topography which forms the backdrop and gives a sense of scale to the 'open' flat blanket bog landscape.

Discourse references to the fragility of the landscape underpinned several stakeholders' opinions that its ability to accommodate major developments such as the LWF was low.

223

Because of these views a number of submission discourses again highlighted the need for (missing) policy measures to be put in place to protect what they assessed to be the most valued landscapes. The impact of the LWF on the bequest value of the landscape was implied within landscape threatened discourses which referred to the perceived threat posed by the LWF over its 25 year life span.

People/place/landscape relationships and interconnections are important concerns in planning for development and this can result in the differentiation in perception and values between those living outside (outsiders) and those living within an area (insiders) (Healey 2005; Stephenson 2010). Outsider/insider issues in relation to the values attached to the natural environment were discussed in Chapter 3 (House of Lords 1990; Urry 1990; Cloke and Goodwin 1992; Marsden et al 1993; Shucksmith et al 1993; Boyle 1997; Hall Aitken 2007; Scott 2008). However, when comparisons are made between the discourses of stakeholders' resident within the Western Isles and those resident outwith the Western Isles there appear to be many similarities between the landscape issues raised. Although the number of resident and non-resident stakeholders differs greatly these findings do not fully accord with the findings of some of the other research carried out on objections to wind farm development. These findings show that stakeholders' attitudes to wind farm proposals become more negative the closer they live to the development. This has been referred to as the 'physical proximity' hypothesis (e.g. Swofford and Slattery 2010). This hypothesis is supported in relation to the relatively high number of objectors in the Western Isles located within Lewis (Fig. 8.2). However, the wider analysis of all the stakeholders in this case study also supports the findings of other researchers (e.g. Devine-Wright 2005) who have been unable to corroborate the 'physical proximity' hypothesis.

The experiential values (Fig. 8.4) alluded to, particularly a sense of peace, quiet, tranquillity and spiritual values were common to both landscape valued and landscape threatened discourses. The perceived inappropriate size and scale of the LWF and its intrusiveness and high visibility due to the flat blanket bog topography were referred to by residents and non-residents. These points were encapsulated in the comments referring to the unwanted 'industrialisation' of the landscape. Some of this commonality may be explained by evidence that some communication between resident and non-resident stakeholders had taken place. One example is the discourses from Western Isles residents and residents from mainland Scotland, England and Wales covering the same landscape issues and containing exactly the same wording. An example of this is the comments alluding to openness: "virtually everyone in North Lewis will be affected"; and "the impact (of the LWF) will be exacerbated by the dominance of flat blanket bog". Although the negative impact of the LWF on the landscape was of concern to both residents and non-residents the latter were more likely to stress linkages with tourism with some expressing an unwillingness to return as visitors if the LWF was constructed.

Individual stakeholders' landscape valued and threatened discourses revealed both a cognitive and non-cognitive approach to the appreciation of the landscapes involved. They were cognitive in the sense that some of the landscape values expressed became imbued with a positivist, scientifically orientated evaluation (scientific cognitivism) and cognitive in a more subjective sense in which stakeholders expressing landscape values based these values on an interpretation of local narratives and cultural practices (Saito 1998; Heyd 2001; Parsons 2002; Herring 2009). The values attributed to the cultural landscapes that have evolved as a consequence of the Islands' traditional land uses epitomise this latter approach. The values are also incorporated within stakeholders' imagination which embodies an historical, religious and spiritual sense of place. Some of the individual

stakeholders' landscape valued and threatened discourses also convey their meaning through what can be classified as a non-cognitive assessment of the landscape's values. In this context there was a perception of the landscape as a seamless unity of places, organisms and perceptions with the stakeholder embedded within the landscape (Hepburn 1996; Carlson 2007). Consequently it is apparent from the findings that stakeholders have adopted what Carlson (2007) referred to as a non- cognitive aesthetics of engagement in valuing the landscape which entails a total sensory immersion in the natural world. There was also evidence in stakeholders' discourses of an even more emotional and visceral aesthetic appreciation of nature which has been described by Carlson (2007) as the arousal model whereby individuals' are emotionally aroused by their experience of valued landscapes. It is important to note that these non-cognitive multi-sensory appreciations of the landscape by stakeholders extend beyond the paradigmatic landscape model of aesthetics whereby individuals passively appreciate landscapes as picturesque scenery (Carlson 2007).

An important physical constituent of the landscape is the biosphere contained within it. This is recognised in the Council of Europe's definition of landscape as being "an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors (Council of Europe 2003). This was echoed in the view expressed by Angileri and Toccolini (1993) that the aesthetic value of landscape was not only represented by the visual components but also by the interrelationship between aesthetic and bio-ecological factors. This interrelationship is touched on here because of its potential relevance to the stakeholders' biodiversity discourses which are analysed in the next section.

8.5 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT - HABITATS AND SPECIES

Habitats and species form an important part of the biodiversity discussed in detail in Chapter 2. A scientific/legislative approach to protecting biodiversity is encapsulated in the Scottish Biodiversity List (Blake 2005) and the Nature Conservation (Scotland) Act 2004. However, the eclectic characteristics of biodiversity as a concept have resulted in it being value-laden and ill-defined so that it has tended to become a catch-all word for various aspects of conservation (Callicott et al 1999; Norton 1994). A total of 257 stakeholders (64%) of the total number of individual stakeholders) expressed views about the habitats and species contained within the LWF case study and surrounding area. A total of 195 stakeholders expressed views specifically relating to the ornithological issues arising from the LWF development.

8.5.1 HABITATS AND SPECIES VALUED DISCOURSES

8.5.1.1 THE INTRINSIC 'PRECIOUSNESS' WITHIN THE SITE

The high value attached to the biodiversity within and beyond the LWF location was contained implicitly in some of the stakeholders' objections. Those discourses containing explicit references to the biodiversity value were geographically widely dispersed: "wonderful wild area" (19) (S1); moorland which is precious and fragile (30); "a virtually unspoilt environment which is sadly a rarity in itself" (290) (S4); as a very rare; and the importance of peat as a habitat (933).

8.5.1.2 HABITATS AND SPECIES - INTERNATIONAL COMPARISONS

In order to emphasise the value, importance and rarity of the habitats located within the LWF site a number of references were made comparing the LWF location to other globally recognised iconic habitats, for example the Brazilian Rainforest and the Greenland Tundra.

8.5.1.3 POSITIONING WITHIN THE GLOBAL WARMING DISCOURSE

An important indication of how stakeholders perceived the importance of peatlands as an ecosystem in limiting the amount of CO_2 that is released into the atmosphere (CO_2 being a greenhouse gas implicated in the anthropogenic global warming discourse) was highlighted in several discourses. For example the importance of peat as a carbon sink (893); the importance of peatlands in reducing CO_2 levels (936); and the conclusion that blanket bog is more effective in reducing CO_2 levels than wind farms (905).

8.5.1.4 THE NATURAL ENVIRONMENT AND STAKEHOLDERS' VALUES

The individual stakeholder's empathy with community values and a sense of community 'ownership' of biodiversity was evident from some of the discourses. Comments similar to those expressed about landscape were contained in stakeholder comments such as "this is our environment" (110). An impassioned narrative from a resident living close to the proposed LWF (L1) (89) included the statement that:

> *"It was my people, generations of them who knew and cared, valued and nurtured those moorlands and kept them in the pristine and unspoilt condition they are today".*

Stakeholders' perspectives also included perceptions of a relationship between the LWF and a spiritual conception which attached sacred value to what was deemed of God's creation. There were therefore spiritual and psychological values attached to the biosphere and landscape of the Western Isles. The danger posed by the LWF to religious values was strongly made by Lewis residents. For example:

"To despoil the creation is an affront to the Creator" (42) and

"This God-given unspoiled natural environment should be protected (95).

These discourses demonstrated the extent to which some stakeholders actually considered the development of the LWF to be immoral.

8.5.2 HABITATS AND SPECIES THREATENED DISCOURSES

8.5.2.1 DESTRUCTION OF PEATLAND ECOSYSTEMS

Fears were expressed about the destruction of the valued peatland ecosystem. The following statements illustrate both the passion and knowledge behind these expressions: Flora and fauna destroyed probably never to return (11); The impact of 100 miles of road and hundreds of tons of concrete would result in the 'face' of the Island and its biodiversity disappearing forever (17); It is difficult to see how substantial damage to the flora and fauna can be avoided (23) (H); The scale of the development (the removal of peat and rock estimated at 4 million cubic meters) and the resultant scale of the negative impact (297); The fragmentation of the moor (302); and The environmental costs are unlikely to be repaired having been built up over many thousands of years (509) (S4).

8.5.2.2 POLLUTION OF WATERCOURSES

The TDA revealed the importance attached to the watercourses by stakeholders and their concern about the pollution that would be caused by the construction of the LWF. This was a concern especially to residents of Lewis who it emerged were most likely to make use of these watercourses for recreational angling. For example one Lewis resident (L1) was concerned that the "rivers and lochs would be sucked dry" (49). Another (L3) concluded that lochs and rivers would be damaged beyond repair (223). Another concern was the damage that pollution of the watercourses would cause to fish spawning. The proposed quarrying activities were also perceived to have the potential to cut off the tributaries of the

River Siader and result in the river becoming polluted (315) (L1). In this respect peatslides occurring at other wind farm locations were considered to be evidence of their perceived danger in the case of the LWF.

8.5.2.3 SPECIES AFFECTED

Among the perceived threats of damage to species by the LWF was that to salmonids through water pollution and the potential flicker caused by the turbines on migrating fish. The negative impact of the LWF on trout was also referred to (e.g.982 and 983). Two references (966 and 969) were made to the impact of the LWF on otters, bats, plants and invertebrates. However, apart from these species and the references to fish species no other concerns were expressed about non-avifaunal species.

8.5.2.4 THE INTERNATIONAL DIMENSION

As in the case of the valued habitat discourses stakeholders set out to strengthen their habitat threatened discourse by making comparisons between the conservation of the Lewis Peatlands and internationally important conservation projects. Contrasts were then made with other globally important habitats and the means taken to ensure their protection. For example "in Brazil we would get more help to protect the natural environment (127). An international interest in protecting the peatlands is exemplified by one of the US stakeholders (1551) stating that:

> *"Today I received an email alert concerning the LWF. I am on the mailing list for many environmental and protection agencies but only have time to participate in the most worthy campaigns".*

8.5.2.5 PLANNING ISSUES

Stakeholders commenting on the role of the planning decision-making process were clear that the planning system had an important role to play in ensuring that the intrinsic value of the natural environment was protected. Several stakeholders substantiated this argument by

making reference to NPPG 14, a National Planning Policy Guideline for local planning authorities to ensure that where the natural environment is valued and cherished it should be protected. Concern was expressed by a number of stakeholders that if the LWF proceeded it would set an undesirable precedent. This in turn could allow further wind farm development resulting in unacceptable cumulative industrial development in the countryside (215, 464, 512, 893, 906 and 957).

The statement in the ES referring to the proposed re-creation of habitats by the felling of recently planted conifer plantations was not regarded as sufficient compensation for damaging habitats (958). It was argued that the status of Protected Areas should be a material consideration when determining the planning merits of the LWF. Consequently some discourses referred to the PA status of the LWF location to fortify their argument about the detrimental impact of the LWF. Fig. 8.7 illustrated the relevant PAs. For example one stakeholder (17) made reference to the impact of 100 miles of road and hundreds of tons of concrete and the major effect these would have on a globally important RAMSAR site. Stakeholders' stressed the need for the responsible stewardship of the land by the key stakeholders. For example:

> "It is up to private landlords, councillors and government agencies and other authorities to make sure we make the best choices when faced with this developing industry" (974).

8.5.2.6 THE THREAT TO THE LEWIS PEATLAND WITHIN THE GLOBAL WARMING DISCOURSE

This issue strays into the utility value of the natural environment meta discourse theme but is included here because of the potential impact of the LWF on the intrinsic value of the natural environment. The key stakeholders' emphasised in their habitat discourses that the main aim for the construction of the LWF was the contribution it could make to a reduction

in greenhouse gas emissions thereby helping to mitigate the impact of global warming on the natural environment. However, the TDA reveals that some stakeholders considered that this aim was incompatible with the construction of the LWF due to the direct threat which the LWF posed to the natural environment by disrupting an ecosystem that had a major role to play in carbon sequestration. The quotes below illustrate the perception of LWF/natural environment incompatibility. Within stakeholders' discourses specific references were made to, and strong arguments are composed about, the perceived negative impact of the LWF to environmental sustainability and the natural environment. For example:

> *"This development would threaten the sustainability of the physical nature and rich biodiversity of the environment"* (874) (S4) and

> *"It is ironic that you state that wind farms will help to combat the effects of global warming by destroying the habitat which is of international importance"* (885).

The value of peatlands as a carbon sink was referred to in section 8.5.1.3. As a consequence of this importance and the threat posed by the LWF to the peatlands, some stakeholders' biodiversity threatened discourses warn passionately of the dangers that would arise if the Lewis Peatlands are disturbed or destroyed (e.g. 893).

8.5.3 BIRDLIFE VALUED DISCOURSES

8.5.3.1 STAKEHOLDER VALUATION OF THE WESTERN ISLES' BIRDLIFE

It is evident from the TDA of some stakeholders' discourses that the birdlife to be found in the Western Isles was considered an important component of the Islands' biodiversity. In this context 20 specific references were made in these discourses to a species considered to be of iconic status, the Golden Eagle. This species was highlighted in the findings in Chapter 2 as being perceived as important from both a scientific and a societal perspective.

The importance of the Western Isles as a migration route for migrant birds, particularly wildfowl, was also stressed by 12 stakeholders. The Western Isles has been recognised in stakeholders' discourses for its value as the location for some of the rarest bird species. In addition to breeding Golden Eagles, the important species consisted of the Red and Black-Throated Divers, Dunlin (the Western Isles reported as having 37% of the UK breeding population), Merlin and Greenshank. These citations again accord with what was referred to in Chapter 2 concerning the importance attached to these species by both the scientific and non-scientific communities.

8.5.3.2 THE ROLE OF THE RSPB IN VALUE DISSEMINATION

The RSPB in their campaigning literature listed bird species found in the Western Isles regarded as being of national importance. This species list was quoted by several stakeholders. The stakeholder's membership of the RSPB was mentioned specifically in some submissions thereby identifying which of the stakeholders had links with and subscribed to the RSPB's values. As well as individuals and groups located within the Western Isles several stakeholder groups outwith the Western Isles (e.g. the Galloway Group of the RSPB and the Friends of the River Kelvin) also declared their membership of the RSPB and made specific reference to the information provided by them.

8.5.4 BIRDLIFE THREATENED DISCOURSES

8.5.4.1 THREATS POSED TO BREEDING AND MIGRATING BIRDS

The danger brought about by the turbines to migrating wildfowl such as geese and Whooper Swans (e.g. 96) was highlighted in some discourses. These dangers were illustrated by references to skeins of geese flying at night (e.g. 45, 48 and 305). In addition to the bird casualties caused by the turbine blades an indirect source of danger was identified:

"Wind farms can act as a baited trap for birds of prey due to the proliferation of rodents at the base of the turbines and raptors being killed when preying upon them".

Individual stakeholders' objections also referred to the potential impact of the LWF on the important range of breeding birds. A more experiential negative impact identified was that the noise of the turbines would drown out the sound of the Corncrake (an iconic Western Isles machair species) at night (309).

8.5.4.2 LEWIS WIND FARM THREAT TO THE GOLDEN EAGLE

A total of 39 stakeholders made reference to the importance of the Isle of Lewis and its breeding population of Golden Eagles (20% of Scotland's Golden Eagle population) and the bird strike dangers posed by the LWF. The greatest concerns were expressed by stakeholders based outwith the UK (27), particularly stakeholders resident in the US. Many of them cited as evidence of their concerns the experience at the Altamont Wind Farm in California where according to the comments contained in one discourse (1545) from a biologist researching the impact of wind turbines on birds, there had been 1,000 Golden Eagle casualties over a 20 year period. One objector from Wales (1559) made reference to the Golden Eagle 'slaughter' in Spain. The international dimension to and the importance of the internet on the dissemination of information is illustrated by some of the overseas objectors making specific reference to the Proact campaigning organisation bringing the LWF and its potential impact on Golden Eagles to their attention.

8.5.4.3 THE ROLE OF THE RSPB

The impact of the RSPB on stakeholders' discourses was evident from those stakeholders making direct reference to their membership of the organisation. References were made to having been alerted to the danger posed to birds by the LWF and through RSPB campaigning literature to the list of the most important endangered breeding species that might be affected by the wind farm.

FIG. 8.6 THE VALUED AND THREATENED DISCOURSES COMPARED

BIODIVERSITY THEMES	VALUED DISCOURSES	THREATENED DISCOURSES
PEATLAND HABITAT	INTERNATIONAL IMPORTANCE	DAMAGE CAUSED BY THE LWF DANGER TO BATS AND OTTERS
AQUATIC ECOSYSTEM		WATERCOURSE POLLUTION DAMAGE TO FISH AND FISH HABITATS
ORNITHOLOGICAL ISSUES	IMPORTANCE OF ISLANDS' BIRDLIFE ICONIC STATUS OF THE GOLDEN EAGLE	THREATS TO MIGRATING WILDFOWL AND OTHER SPECIES THREAT TO NATIONALLY IMPORTANT BREEDING SPECIES THREATS TO THE GOLDEN EAGLE
EXPERIENTIAL VALUE	STAKEHOLDER SPIRITUAL AND PSYCHOLOGICAL VALUES	MORALITY OF THE LWF
PA STATUS	INTERNATIONAL VALUE OF BIODIVERSITY	THREAT TO THE INTEGRITY OF PA
PLANNING ISSUES		SETTING A PRECEDENT NO CONSIDERATION OF ALTERNATIVE SITES INADEQUATE HABITAT RE-INSTATEMENT PAs AS A MATERIAL CONSIDERATION
POSITIONING OF STAKEHOLDER	COMMUNITY 'OWNERSHIP' RSPB DISSEMINATION OF VALUES TO STAKEHOLDERS INVOLVEMENT OF YOUNG PERSONS IN CONSERVATION ISSUES	

235

POSITIONING WITHIN GLOBAL WARMING DISCOURSE	IMPORTANCE OF PEAT AS A CARBON SINK	DANGER OF CO2 BEING RELEASED IF PEAT DISTURBED

8.5.5 STAKEHOLDERS' AWARENESS OF PROTECTED AREA MECHANISMS

Fig 8.7 illustrated individual stakeholders' awareness of internationally important Protected Areas (RAMSAR, the Bird Directive, SPA and SAC), the national PA guidance contained in NPPG 6, NPPG 14, NPPG 5 and the relevant local policies contained in the Western Isles Structure Plan (see Appendix 1). From Fig. 8.7 it is clear that two of the international measures to protect habitats and species, RAMSAR and SPA, are the most frequently referred to by individual stakeholders. Within the threatened birdlife discourses the total number of references made to SPA was 59, to RAMSAR 25, to the Birds Directive 8 and to the Bern Convention 8. Several of the references covered more than one PA. National Planning Policy Guidelines (NPPG) 6 and 14 are the most frequently referred to and the Western Isles-specific policies in the structure plan are the least frequently mentioned. However, one objector (948) indicated that although opposed to the LWF he was also opposed to PAs. One stakeholder (1557) argued that he supported the LWF even though it was located within PAs.

One of the residents closest (L1) to the LWF argued that PAs were a material consideration in development decisions and that the decision-makers should take particular care to avoid harm to species and habitats protected under the EU Directive Habitat (6). Another (17) (L1) warned of the impact of 100 miles of road and hundreds of thousands of tons of

concrete on the Ramsar site. Other stakeholders (e.g. 78) referred to the damage caused to SPA and SAC habitats because of the proximity of the LWF. One European objector (1042) referred to himself as a European citizen concerned about the impact of the LWF on protected European natural heritage. In addition to the potential damage that the LWF could cause to international designations other discourses referred to the negative impact of the LWF on the only Western Isles Local Nature Reserve (LNR) at Loch Stiapavat located relatively close (4 kms) to the northern end of the LWF site.

FIG. 8.7 INDIVIDUAL STAKEHOLDERS AWARENESS OF PAs
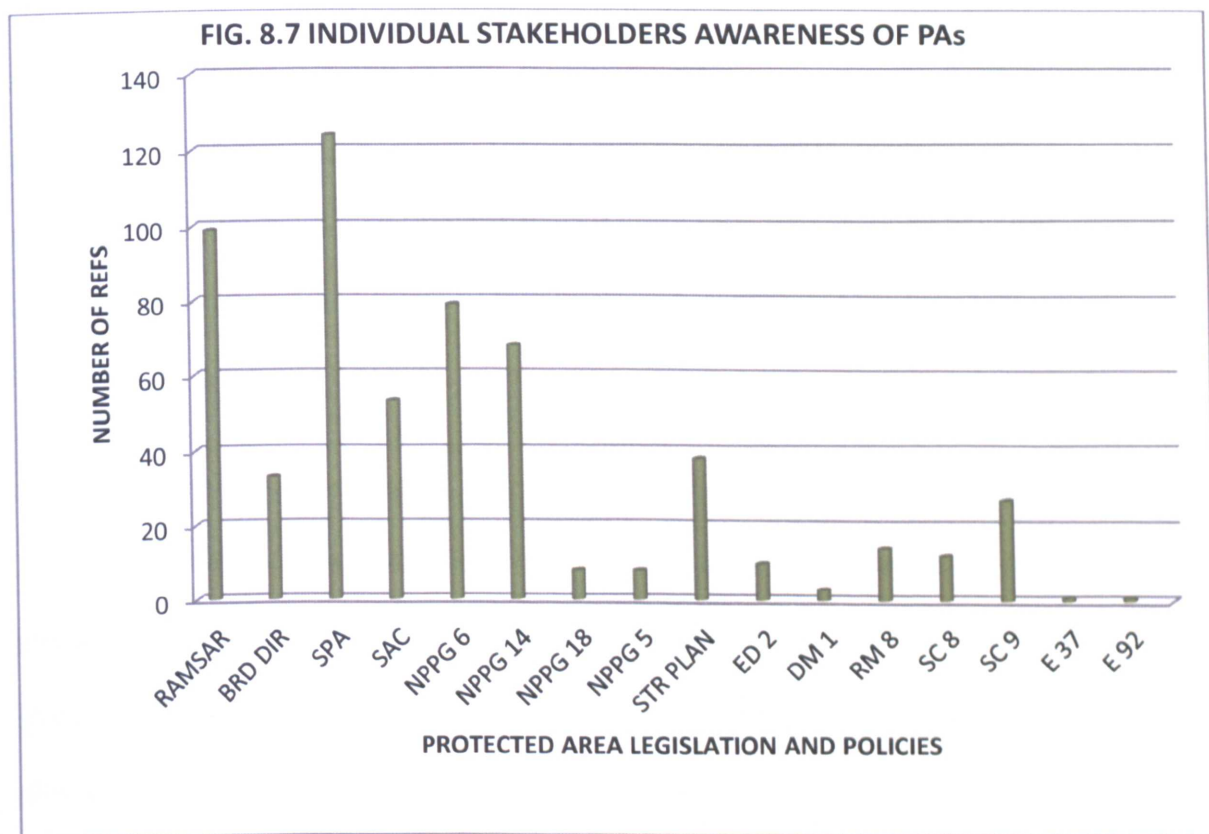
8.5.6 HABITATS, SPECIES AND BIRDLIFE DISCOURSES - DISCUSSION

The sub-title of this section confines itself to the aspects of biodiversity referred to in stakeholder discourses. The difficulty in defining the substance of biodiversity was discussed in Chapter 2 (Wilson 1988; Noss 1990; Norton 1994; Lister 1997; Callicot et al 1999; Faith 2007) with the post-positivist view proffering that there was no one construction of biodiversity and that its interpretation depended upon personal

circumstances and perspectives. Consequently there may be many manifestations of biodiversity encapsulated within stakeholders' discourses. This contrasts with the positivist approach contained in the ES submitted with the LWF application by Lewis Windpower (LWP). The ES illustrated the fundamental divide between the discourses of LWF stakeholders and LWP as a key stakeholder. The fundamental division reflects Katz and Kirby's (1991 p262) conclusion that "there is no role for sentiment and a sense of place in the cost-benefit analysis and environmental impact statements that evaluate the expense of re-structuring our localities". However, the methodology of the ES was also criticised from a scientific perspective by the RSPB for not adopting a holistic approach to ecosystem management thereby underestimating the scientific uncertainties incorporated into LWP's predictions of the impact of the LWF on biodiversity (Lindsay 2005). This less than comprehensive approach to biodiversity is reflected in some stakeholders' discourses.

One illustration of the importance attached by stakeholders to the biodiversity of the Lewis Peatlands was the comparison made between this habitat and what they consider to be the globally important habitats of the Brazilian Rainforest and the Greenland Tundra. This global evaluation was reinforced by the references made to the role that the peatlands played in limiting CO_2 emissions into the atmosphere.

Some stakeholders singled out the danger posed by the LWF to a particular habitat that they considered most important from a biodiversity perspective, for example the aquatic habitat. The main reason given for their concern was the necessity for this habitat to be in a pristine condition for the resident fish species to spawn, a factor crucial for the viability and sustainability of angling in both the recreational and commercial context. An apparent bias towards the same species as those recorded in the public's choice of the top ten species in the Scottish Biodiversity List (Stewart 2006) was also evident. The two species

most often referred to by stakeholders, Salmon and Golden Eagle, also featured in the Scottish Biodiversity List. Only one reference was made to any other species likely to be found within the LWF site, the Pipistrelle bat. It is interesting that none of the stakeholders made reference to insect or plant species that they considered worthy of protecting. These omissions show a divergence from the Scottish Biodiversity List where the butterfly and plant species such as heather and orchid (which grow in the LWF area) appear in the public top ten species (Stewart 2006). Another anomaly refers to the absence of peatland habitat in the List's top ten habitats. The TDA clearly points to this being the habitat that features most strongly in stakeholders' discourses. This would appear to illustrate that the importance attributed to a species and/or habitat is dependent to some extent upon the circumstances in which the importance is being assessed.

The Golden Eagle was the bird species most often referred to (20 references) reflecting its iconic status as the species of 'wild areas' such as the Lewis Peatlands. Migrating wildfowl (12 references) were highlighted in the context of the potential danger of bird strikes caused by the LWF. Rare or scarce breeding species were used to exemplify where the LWF could impact on nationally important bird species. In the latter context there is evidence of the success of the RSPB's campaigning. For example, the species identified in some stakeholders' discourses as being threatened matched those bird species specified in the RSPB's publicity material as being threatened by the LWF. The many references to species and habitats in stakeholders' objection discourses further highlights the importance given in this case study to factors other than just the effect of the wind farms on landscape.

In contrast to the discrepancies between the public/layperson and 'expert' evaluations of the landscape resource there is less of a discrepancy in the case of habitats and species (Wilson 2005; Stewart 2006). As a consequence of this concurrence there was considerable

support for the legislative and policy mechanisms put in place to protect the objectively valued biodiversity values. This was evidenced by the number of references to the local, national and international mechanisms designed to protect biodiversity and that the planning system should be consistent in the implementation of the legislation and policies put in place to protect them. Those stakeholders who queried whether the LWF was sustainable clearly felt that there was an imbalance between this proposed development and the protection of the environment and consequently the LWF was unsustainable and should be refused planning permission.

Individual stakeholders referred specifically to the spiritual and psychological values they attached to the biosphere. This mirrored the values attached to the landscape inferring that the biological values attached to the Lewis Peatlands were embedded in the psyche of some stakeholders. There was also a clear perception by stakeholders of the scale of the damage that would be caused by the LWF and its associated infrastructure to these values. Some stakeholders' perception of their positioning within the natural environment (referred to in 8.5.1.5) reflected what has been referred to by the Gaelic term *duthchas*, the inseparability of people from nature and the bond which unites them. It echoed the crofters' claim to be the time-honoured custodians of the uncommodified natural heritage of which they are a part, and a land worked by the every-day practices of crofting (Hunter 1976; Mackenzie 2006).

8.6 QUALITY OF LIFE DISCOURSES

8.6.1 STAKEHOLDERS' QUALITY OF LIFE – AN AMBIVALENT AND ELUSIVE QUALITY

Chapter 3 illustrated the difficulties in finding a consensus on what constitutes QOL. For example the influence of the quality of the natural environment (Fuhrer 1983; Collados and Duane 1999; Distaso 2005; Hall and Aitken 2007; Moser 2009), personal beliefs (Zidansek 2007), society (Disgupta 2001), the fulfilment of personal or group human needs (Marans 2003; Costanza et al 2008; Kazana and Kazaklis 2009) highlighted the complexity. This TDA has shown that QOL incorporates elements of both the intrinsic and utility values of the natural environment. Many of the QOL valued discourses were also incorporated into the discourses objecting to the perceived threat to the LWF on stakeholders' QOL. Economic development and the personal financial benefits it brings have been used as one of the quantitative measures of QOL (Zidansek 2007). However, the evidence in this Case Study pointed to stakeholders' scepticism about LWP's assertions that the proposed LWF would be beneficial to the Western Isles economy and the financial well-being of islanders.

In order to facilitate a more in-depth understanding of stakeholders' discourses the QOL discourse induced theme has been divided into four sub-themes that have emerged from the TDA applied here. These are: amenities – tangible or intangible contributors to a person's comfort or convenience; health and safety issues; infrastructure – more specifically where stakeholders consider transport infrastructure such as roads or telecommunications infrastructure to be important to their QOL. The fourth sub-theme involves an attempt to quantify the impact of the LWF on QOL through its effect on property prices.

8.6.2 QUALITY OF LIFE DISCOURSES – GEOGRAPHICAL DISTRIBUTION

The geographical distribution of stakeholders commenting on the predicted impact of the LWF on QOL is contained in Fig. 8.8 and shows that the closer to the LWF a Lewis stakeholder lives the more likely they are to object on QOL grounds. As is the case with other themes the number of representations about QOL issues from the Western Isles outwith Lewis is much lower. Representations from the southern islands in the Western Isles chain were very low or non-existent in relation to all the topics under discussion here. On the UK mainland only stakeholders located in S4 and England have objected in any numbers on QOL grounds.

8.6.3 HOLISTIC QUALITY OF LIFE DISCOURSES

Stakeholders' discourses referred to the value attached to the natural environment and its role in holistic evaluations of the QOL in Lewis. This relationship is encapsulated within these discourses:

> *"People moving to Lewis – a beautiful island, a gem set in the sea – relish the peace and quiet, beauty, wildlife and tranquil life"* (271);

> *"When out on the moors I sat for many a rest enjoying the peace and tranquillity only broken by the lark's song"* (284).

The appreciation of the holistic value of QOL and the fear that this would be destroyed by the LWF for the future is illustrated by an 8 year old (44) from Stornoway (L3):

> *"We won't get to sleep at night and we like having summer walks to the loch and playing in the heather.*

The issues arising from the construction of one wind farm in West Yorkshire were re-visited by one stakeholder in order to give greater credibility to the perceived threats posed by the LWF to the valued holistic Qualities of Life. These issues included fear of sickness,

the throbbing noise of rotating blades, shadow flicker and the anticipated lowering of house prices, therefore disadvantaging those wishing to move away from the area. A combined commercial and domestic holistic assessment of the impact of the LWF on QOL was contained in one objector's (480) statement that:

> "This wind farm proposal will undoubtedly have a damaging effect on our lives, our business, the value of our homes and for many of us, will destroy the very reason we choose to live here in the first place".

An interesting comparison was made (952) between the likely impacts of the LWF on residents' QOL and visitors' experiences in that "residents can't avoid the negative consequences in the same way as visitors".

Fig. 8.8 QOL: GEOGRAPHICAL DISTRIBUTION OF SUBMISSIONS
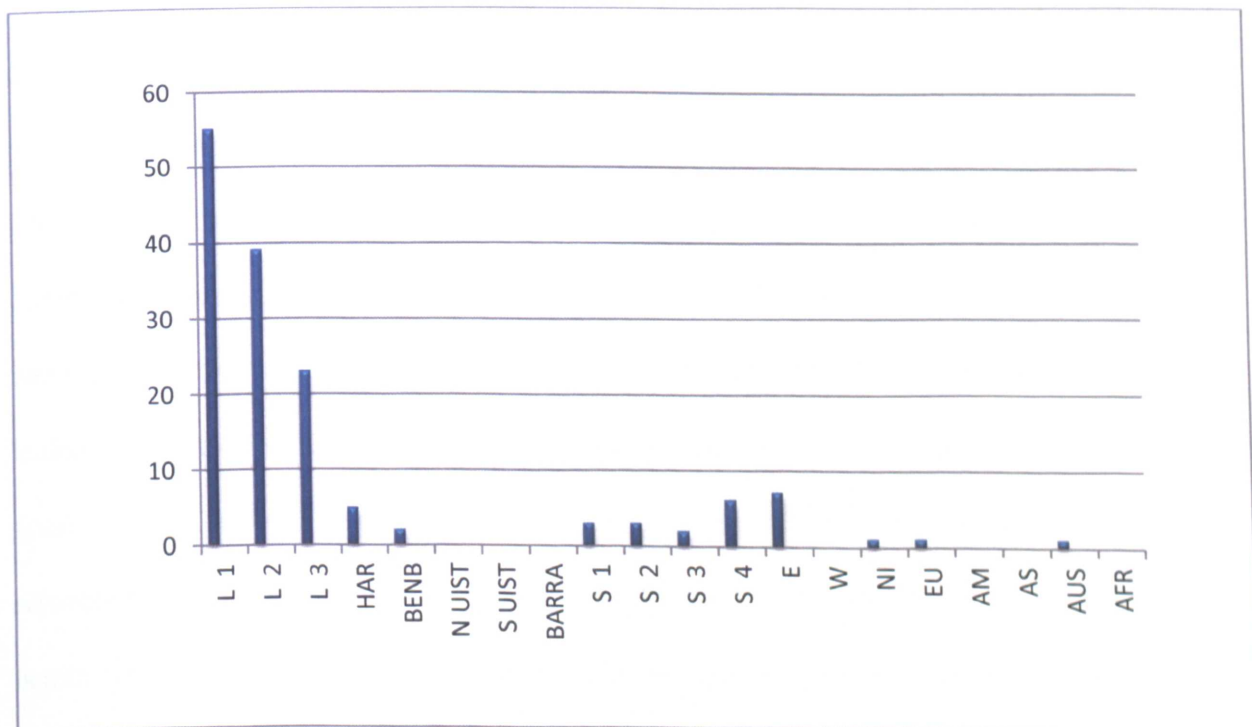
8.6.4 AMENITIES

The most frequently cited negative impact on stakeholders' amenities was noise. A total of 38 submissions contained a reference to the detrimental effect of noise on amenities, with

the noise likely from blasting activities considered to be potentially the most irritating. Others described the noise that would emanate from the operational wind farm as a 'drone', 'throbbing', 'intolerable' and one objector (475) described the noise nuisance more musically as "the howl of the turbines and the hum of the power lines". The proximity of the proposed turbines to the houses, the closest being 1.2 miles from the LWF, was a concern to several stakeholders. Light pollution was referred to by 15 objectors with the flickering of light resulting from the rotating turbine blades pinpointed as a potential sleep disturbance factor. The cumulative impact of noise and flickering lights were also perceived to pose potential dangers to health. In addition the LWF was considered a possible restriction on opportunities for outdoor recreation pursuits dependent on the natural environment for example canoeing.

8.6.5 HEALTH AND SAFETY

Concerns about health and safety were perceived to have been exacerbated by the close proximity of the proposed LWF to houses. One example given was the danger to persons and property posed by ice flying off the rotating blades. Air pollution caused by construction traffic, and electro-magnetic fields from the electricity distribution system were identified as additional health issues, the latter in the context of increasing the risk of leukaemia. A total of 23 stakeholders considered the increase in traffic, especially heavy goods traffic, to be a potential danger to the safety of residents by for example the restriction of access for emergency vehicles. The linkages between landscape and good health were perceived to be put in jeopardy by the proposed LWF with one objector (15) referring to the beautiful scenery so beneficial to my health being put at risk by the LWF. Some visitors to the Islands specifically (289 (E); 290 (S4) and 291 (E), expressed the concern that as travellers they were worried about a potential danger posed by the LWF to air traffic safety.

8.6.6 INFRASTRUCTURE

The scattered communities in the Western Isles depend upon a good road network and damage caused by heavy goods traffic was identified specifically by 7 objectors as a potential problem. They perceived the consequential communications disruption as having a detrimental impact on the local QOL. The perceived negative impact of the LWF on telecommunications infrastructure (important domestically and commercially within the relatively remote islands such as the Western Isles) and TV reception, were the bases for other objections. A fear was expressed by two stakeholders (966 and 969) that the LWF would cause pollution of the water table to the extent that it would endanger the quality of the water supply.

8.6.7 PROPERTY VALUES

A total of 17 objectors referred to the expected devaluation of their properties as a consequence of the LWF, an expectation which they attributed to the QOL issues discussed in sections 8.6.2 – 8.6.6. The anticipated noise pollution referred to in section 8.6.4 was considered a major factor in property devaluation. One stakeholder (215) linked noise pollution to the value of his house indicating that it would become 'unsalable' as a result of this pollution. Another objector (57) linked the presence of background noise to property values. He broadened this concern by arguing that:

"the noise "would seriously devalue properties in all the villages adjacent to the wind farm and that the quality of life would be sufficiently affected to make them leave the island"

It was feared by several stakeholders that limitations would be placed on the ability to move to another location as a result of declining house values. This fear was articulated by one stakeholder (496):

"This will essentially 'trap' those who no longer wish to live here because of the difference in property prices that would result because of the LWF".

An entirely different perspective of the impact of the LWF on house prices appeared in several discourses. These argued that house prices would actually rise because of the increase in demand for houses caused by returners.

8.6.8 QUALITY OF LIFE DISCOURSES – DISCUSSION

A correlation appears to exist between the geographical distribution of individual stakeholders' QOL discourses (Fig. 8.8) and proximity to the proposed LWF development. Stakeholders' perception that the negative impact of the LWF on QOL increases closer to the proposed development points to the validity of the physical proximity hypothesis (Swofford and Slattery 2010). This conclusion is supported by the low number of references to this theme from outwith Lewis. On the mainland UK the distribution of QOL submissions from Scotland does not accord with the Diaspora relationships suggested in Chapter 7. In addition there is no obvious explanation as to why the largest number of QOL submissions outwith Lewis came from stakeholders resident in England.

Some stakeholders' discourses indicated that the natural environment was a very important part of QOL in the Western Isles. Thus there was a perception that if the natural environment was negatively impacted upon by the LWF the holistic value of the QOL could be reduced or even destroyed. However, potential conflict also lay within the QOL/natural environment protection relationship. This is exemplified by some residents

closest to the LWF claiming that their QOL was to be sacrificed to avoid turbines damaging the protected natural environment. In relation to assessing QOL comparisons were made between the QOL of the residents on the island and that of the visitors attracted by the high quality of the natural environment. A comparison was made between residents and visitors perception of the impact of the LWF on QOL. Residents' QOL would be permanently affected by the LWF whereas the impact on visitors' QOL would be transient as they could return to their homes on the mainland.

Environmental goods, for example air quality, low ambient noise and a safe environment, have an important role to play in determining QOL (Pykh and Pykh 2008). This is confirmed in this case study as the TDA highlights that stakeholders' greatest concern in relation to their amenities was the effect of noise pollution and flickering lights. The voicing of these concerns highlighted the value placed on an undeveloped natural environment where ambient noise levels are low and there are relatively few sources of light pollution. As in the case with amenities, the planned proximity of the LWF to residences is perceived by stakeholders to exacerbate the risks to health and safety. The potential dangers identified are wide-ranging. However, the danger to pedestrian safety posed by the increase in road traffic using the public roads received most attention. Increased road traffic was also perceived to inhibit important inter-community communication and the movement of commercial and emergency vehicles. The likely impact of the LWF on commercial activities concerned some stakeholders with the expression of fears about the threat to inter-community communications and the telecommunications systems they considered vital to the Western Isles' commerce.

Because of the elusiveness of peoples' QOL as a concept comprising both quantitative and qualitative components it is difficult to measure although some attempts have been made

(e.g. Cummins 1997; McMahon 2002; Kazana and Kazaklis 2005; Thompson et al 2007; Maro 2007). The envisaged cumulative impact of the LWF on QOL was measured by some stakeholders on the feared level of depreciation in the value of their properties. This is the nearest approximation to stakeholders' quantitative assessment of QOL changes. The reduction of property values was also calculated as having potentially serious implications for Lewis's demographic trends because of the likelihood of emigration due to the impact of the LWF on stakeholders' QOL. However, in order to illustrate the complexity of and subjective judgements involved in property valuation some stakeholders feared that house prices would actually rise beyond the reach of many local people. This conclusion was based on the assumption that because of the limited supply and high demand resulting from incoming workers property values would actually increase which would in turn lessen the availability of houses that local people could afford to buy.

8.7 THE UTILITY VALUATION OF THE NATURAL ENVIRONMENT

Fig.8.9 illustrates the analytical approach taken in this case study to identify the utilitarian value of the natural environment to stakeholders. A total of 302 (60%) individual stakeholders' submissions were received by the Scottish Executive on this Meta Theme and their geographical distribution is illustrated in Fig. 8.10.

FIG 8.9 SUSTAINABILITY COMPONENT: ECONOMY

META THEMES: UTILITY VALUE; EXOGENOUS DEVELOPMENT

META THEMES ⟹ DISCOURSE SCOPING

DISCOURSE INDUCED THEMES
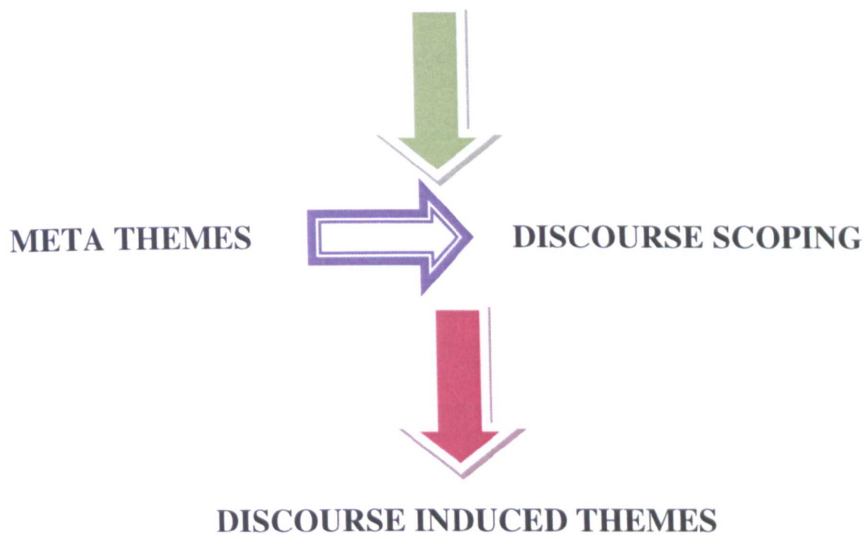
DIT 1 Tourist Industry

A. Stakeholders' assessment of the role played by the Western Isles' natural environment in the Islands' tourist industry;

B. Stakeholders' valuation of the tourist industry within the Western Isles economy

C. Stakeholders' assessment of the impact that the LWF would have on the tourist industry;

D. Stakeholders' awareness of the relevant policy measures available to help safeguard the tourist industry.

DIT 2 Traditional Land Uses

A. Stakeholders' valuation of traditional rural land uses (e.g. crofting and peat cutting) within the Western Isles;

B. Stakeholders' assessment of the impact that the LWF would have on traditional land uses;

C. Stakeholders' valuation of the opportunities available for rural recreational pursuits (e.g. angling, shooting and hill walking) within the Western Isles;

D. Stakeholders' assessment of the impact that the LWF would have on these recreational pursuits.

DIT 3 Exogenous development – proposed LWF Benefits

A. Stakeholders' scepticism about the stated levels of employment generated by the LWF;

B. Stakeholders' scepticism about the delivery of financial benefits generated by the LWF to the Lewis communities.

FIG.8.10 UTILITY VALUE OF THE NATURAL ENVIRONMENT - GEOGRAPHICAL DISTRIBUTION
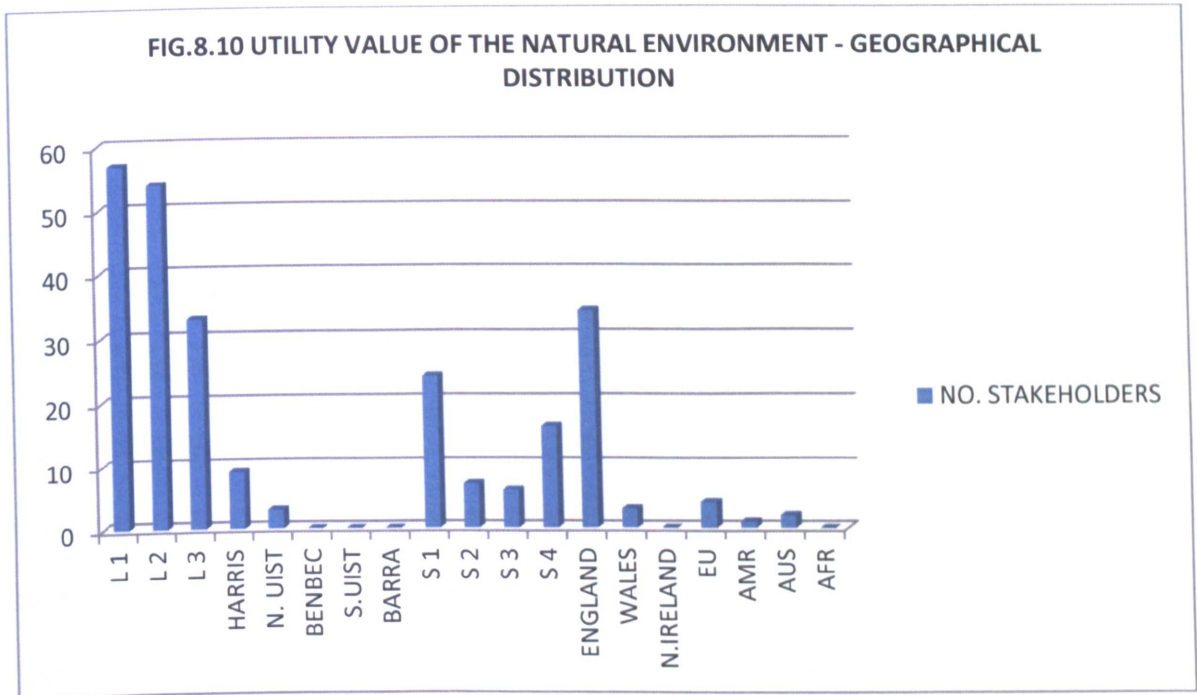
The geographical distribution of UVE discourses in the Western Isles indicates that the most rural areas in Lewis closest to the LWF were concerned most about the impact of the LWF on utility values 1A, 1B, 1C, 1D, 2A, 2B, 2C and 2D. The number of submissions from other geographical areas varies greatly. There are geographical anomalies. For example the number of submissions from England about UVE elements is much greater than those from all other geographical areas (with the exception of L1 and L2).

8.7.1 TOURISM DISCOURSES

One objector (122) estimated that Lewis attracted 180,000 tourists annually bringing an estimated £60M into the Western Isles' economy and that if the LWF proceeded it would mean a loss of £15M and the equivalent of over 900 jobs to the local economy. Data

contained in a Visit Scotland Survey (2005) carried out to assess the impact of the LWF on tourism in the Islands was used by stakeholders to substantiate the accuracy of these estimates. References were also made by stakeholders involved in the tourist industry (e.g. 158 and 271) to emphasise the industry's fragility. Because of this vulnerability these stakeholders opposed the LWF. This conclusion was supported by the results of a survey carried out by tourist operators in NW Lewis in 2004 (North West Lewis Tourism Operators 2004). The survey found that 90% of the respondents stated that if the LWF went ahead it would discourage tourists from visiting Lewis (101 and 122).

8.7.1.1 TOURISM AND THE NATURAL ENVIRONMENT

An important reason given for the negative impact that the LWF would have on tourism was the changes to the landscape that the development would bring about. This view was expressed by Western Isles residents, residents living outwith the Western Isles, businesses located on the Islands and visitors to the Western Isles. The major concern highlighted the 'industrialisation' of the landscape that would be brought about by the LWF. Views expressed by Lewis residents were: "visitors did not come all the way to the Western Isles to see wind turbines that are not unique to this area" (215) (L2); "what tourist would want to come to the Island if it looked like a scrap yard" (48) L2); "tourists are not going to visit a landscape spoiled by giant turbines" (80) (L1) ; and another (279) (L2) stated that "no-one is going to want to come to the Western Isles to view an industrial site". A visitor from England (S8-60) reinforced this point of view when stating "who would want to visit a large industrial site". Some stakeholders made reference to the development of the new tourist facilities and attractions proposed by LWP. These were dismissed as:

> *"sheer lunacy and an illustration of how little idea the company had about the importance of the landscape to the people who visited the Islands"* (3).

In addition to landscape, specific references were made about the attraction of the birdlife and wildlife in the Western Isles for visitors. For example one Welsh visitor indicated that

251

"after repeated visits I would not come again because of the threat to the birds" (511).

This objector also referred to the landscape and 'clean' silence as amongst the islands' assets. The QOL as an attraction for visitors was shared by Western Isles residents. For example (297) (L2) pointed to the peace and quiet of the Islands compared to the overcrowded mainland. One stakeholder (461) (L2) conjoined all of the assets that the natural environment provided for tourism:

> *"The majority of guests visit Lewis to find peace, quiet and tranquillity, solitude and to enjoy the scenery, outdoor pursuits and wildlife".*

One measure of the success of tourism in the Western Isles in satisfying visitors' expectations is the number of repeat visits, extending from annually to every three years. An indicator of visitors' strength of feeling about the impact of the LWF on the Islands' tourism assets was their decision that they would not return if the LWF was constructed. Objectors made reference to the Visit Scotland Survey (2002) and the McPherson Report (2003) to support their predictions of falling tourist numbers. The most often used quote from the Visit Scotland Survey referred to the 20% to 26% of non-returners.

The destruction of the 'wilderness' experience was highlighted and one visitor from England (507) made mention of the spiritual qualities of the natural environment:

> *"I cycled alone along the Pentland Road and it was one of the most uplifting experiences of my 66 years. If this monstrosity is built you can cross my name off the list of passengers on the Ullapool- Stornoway Ferry".*

The TDA of the commercial discourses reveals the prediction by proprietors of small businesses of the LWF's potentially serious implications for the viability of their businesses. All of these enterprises were partly or fully dependent on visitor numbers. The number of businesses objecting to the LWF fell into the categories of Hotel - 1, Bed &

Breakfast - 4 , self-catering accommodation - 4, caravan park - 1, catering - 2, craft business - 4, field sports - 2 and boat trips - 1. One B& B owner (461) warned that they had been running the B&B for 8 years and should the 'monstrous proposal' go ahead they would simply leave the Island and seek a more pleasant location for their retirement. The owner of one craft 'mini-business' (306) warned that assets built up over 30 years would be put in jeopardy along with their livelihood. The proprietor of a small soap-making concern (480) confirmed that the business was dependent on tourism for its viability and illustrated the strength of their commitment to the business by the investment of all their savings in it. One owner of a self-catering house (66) and one guest house owner (240) in Lewis referred to discussions that they had had with guests throughout the season. These discussions had revealed that 60% and 90% respectively had no desire to return to the Island should the scheme go ahead. Another business proprietor (62) providing accommodation and boat trips painted an even bleaker picture when concluding that the LWF would:

"devastate our Island increasingly dependent on tourism which depends on the unspoilt nature and unique landscape which will be dominated by wind turbines and pylons".

A more personalised reflection of the future was that of the B&B owner (495) who had been resident on Lewis for eight years:

"Should this monstrous proposal go ahead I would simply leave the Island and seek a more pleasant situation for retirement".

A craft worker in Harris Tweed (477) an important product for which the islands are well known extended this sentiment to the whole of their family:

My job, home and family life would be irrevocably altered for the worst and I would have to leave the Island. My family also work in the tourist industry and would lose their jobs and have to leave".

The direct linkage between tourist-related businesses and the natural environment is illustrated by the owner of Garrynahine Lodge. This is the centre for a sporting estate which the proprietor states is dependent on wild birds such as grouse, snipe, woodcock, duck and geese for its continuing viability and the ability to employ islanders (161).

Substantive evidence for the negative impact of the LWF on tourism and the tourist industry came from one objector (277). He referred to the experience of the profound and long-term decline of tourism in Cumbria that had resulted from wind farm development there. The deficiencies of the ES in properly addressing and quantifying the effect of the LWF on tourism was cited as an example of the inadequate data that had been placed before the key decision-making stakeholders. The lack of adherence to the policy guidance in NPPG 6 (31) was cited as a further weakness in the case for the LWF and thereby strengthened the arguments against the proposal.

8.7.2 TRADITIONAL RURAL LAND USE DISCOURSES

The traditional land uses referred to by individual stakeholders in their submissions emphasised the value of crofting. This is the traditional method of farming and the most extensive land use in the Western Isles with 77% of the land area being held under crofting tenure. It was demonstrated in Chapter 3 that crofting makes an important contribution to the economy of the Western Isles and its history and traditions are important to the communities of the Western Isles and their relationship with the land and Gaelic culture. Crofting and related agricultural activities also play an important role in the management

of biodiversity within PAs (Ritchie 1976; Cox et al 1985; Hunter 1991; Willis 1991; Marsden et al 1993; RSPB 1993; Coppock 1994; Bishop et al 1995; Angus 2001; FWAG 2002; Mackenzie 2006; Committee of Inquiry into Crofting 2008). Crofting in the LWF area involves moorland grazings for sheep and (less so) cattle, family shielings, peat cutting and recreational pursuits such as angling and hill walking. Family shielings are small, roughly constructed hillside dwellings in which families lived during the few weeks of summer when animals could use the hill pastures in order to give the lower pastures a rest from intensive sheep grazing.

The TDA revealed that the traditional crofting-related land uses were regarded in a very positive light by the stakeholders concerned. It was also evident from stakeholders' discourses that crofting and crofters had strong linkages with the intrinsic and utility values of the natural environment and its value. For example the role played by crofting in managing the quality of the natural environment was stressed and the experiential values of peace and tranquillity which contact with the natural environment brought were an important background to crofting activities. The traditional land uses were also considered as an important and integral part of the history and culture of the Island and stakeholders' family history. For example one candid comment:

"I have lived and worked on the island all my life and these are my moors I got to know so well during my youth – every aspect of them from shielings to sheep and peats to poaching" (89); and another:

"The moorland and shielings are a precious part of the cultural heritage of the Islands' people" (276).

The Category B listed building status of the shielings at the Cuidhsiadar Shieling Settlement and the more general protection given nationally (NPPG 5) and regionally (Western Isles Structure Plan (EN13)) were mentioned specifically (for example 112 and 959) as an indication of the importance attached to these physical manifestations of local history and culture.

Other specific references were made to the effect of the proposed blasting on the welfare of sheep (315), the resumption of the land and the felling of trees (477), the dumping of hundreds of tons of peat in abandoned peat cuttings and the migration of labour away from crofting (958). The fear was also expressed (for example 957) that the industrialisation of crofting areas would remove land from crofting and crofters would be enticed away from earning a living from traditional methods. These fears echo the past history of the rejection of industrial ventures in Lewis and Harris, for example those proposed by Lord Leverhulme in the 1920s. The important intergenerational and 'ownership' issues (duachas) and the negative impact of the LWF on them were also brought to the fore. For example (89):

> *"It was my people, generations of them, who knew and cared, valued and nurtured these moorlands and kept them in the pristine and unspoilt condition they are today"* and (933):

> *"My cattle and sheep graze this area as has been the practice for centuries".*

The extent of the opposition to the LWF among crofters was vividly illustrated by the submission from South Bragar (an area close to the proposed LWF) Grazings Committee (58):

"The South Bragar Grazings Committee felt that it was important to ascertain the views of all the shareholders on the LWF and a postal ballot was held. 88% (55) returned their ballot papers. A total of 20 (36%) were in favour of the Lewis Wind farm being located on the Grazings and 35 (64%) were opposed. This overwhelming rejection of the proposal was despite the fact that the crofters would stand to be compensated should this (LWF) go ahead. Please be clear that the township is very much opposed to it".

Another issue raised was the disruption the LWF would create through water pollution to the 'traditional' recreational activities such as angling. For example the damage that could be caused by the LWF to the River Shiader and its tributaries (315).

The most vitriolic views expressed about the ES were reserved for its inadequacy in measuring the impact of the LWF on traditional land uses. In the view of some stakeholders it had in effect "disregarded" the impact on grazings, peat cutting, visiting and using family shielings and angling. In addition there was criticism of LWP's inadequate implementation of the national policies regulating development in designated areas (NPPG 6 was referred to specifically) and the local planning policies (SC8). The same wording was used by the majority of stakeholders commenting on this issue pointing to some collaboration having taken place in the composition of the text.

8.7.3 EXOGENOUS DEVELOPMENT – LWF ECONOMIC DEVELOPMENT AND EMPLOYMENT BENEFITS DISCOURSES

It emerged from the TDA that a total of 81 individual stakeholders (19% of the total number of individual stakeholders) made specific reference to the employment opportunities that it was claimed by LWP would be generated by the LWF development.

All but one of these expressed scepticism about the forecast number of jobs that would be created. A total of 59 of these submissions came from Lewis, 9 from mainland Scotland, 6 from the rest of the UK and 1 from the EU.

8.7.3.1 OPTIMISTIC DISCOURSES

The only specific reference to the feeling of optimism about the economic benefits that the LWF would bring was expressed by one of the three stakeholders who had indicated their support for the development (471):

> *"This development will bring significant economic benefits to an island suffering from the demise of the fishing industry, Harris Tweed etc. and a declining and aging population".*

8.7.3.2 SCEPTICAL DISCOURSES

As indicated in Chapter, the Case Study, one of Lewis Wind Power's principal objectives for the LWF was to arrest population decline through the claimed employment created and the community benefits generated. Stakeholders' scepticism about achieving this objective was summarised in statements such as:

> *"One of the things the developers always say is that the LWF would help to reverse the declining population but the turbines are not even going to be manufactured here"* (28).

Another illustration of the scepticism expressed about the number of jobs likely to be created was based on the perception that many of the jobs would be taken up by mainland workers and doubts about the strength of the commitment to place contracts with the local Arnish pre-fabrication Yard near Stornoway which was mothballed at the time. Other stakeholders wanted to know what the **net** increase in jobs would be when jobs lost in the tourist industry and the number of employees that the contractors would bring with them were taken into account (e.g. 11, 955 and 966). In some stakeholders' submissions there

was a questioning of the duration of the jobs promised. One stakeholder (318) questioned if the "wrecking of Lewis" was worth it for the sake of "a couple of years work for a migratory workforce". The availability of the relevant skills in the local workforce was also raised in relation to the Islands being able to benefit fully from the employment opportunities created. More specifically if there were an absence of skills required to construct such large structures there would be a need to bring in labour from the mainland with the necessary skills (17, 279 and 519). The lack of trust in the employment calculations contained in the ES is further illustrated by epithets such as "highly sceptical" (5) and "misleading hype" (1560).

8.7.4 EXOGENOUS DEVELOPMENT – THE LWF COMMUNITY BENEFITS DISCOURSES

A total of 56 individual stakeholders (13% of the total number of individual stakeholders) made reference to community benefit issues in their submission discourses. The number of these discourses from Lewis was 39 (with 17 from L1 closest to the proposed LWF), 6 from mainland Scotland and 5 and 1 from England and Wales respectively.

8.7.4.1 OPTIMISTIC DISCOURSES

None of the stakeholders' submissions agreed with the predictions in the ES about the benefits to the communities that would arise from the receipt of the community benefits.

8.7.4.2 SCEPTICAL DISCOURSES

The community benefits being claimed by LWP were based on the stimulation of the local economy, employment generation and the stabilisation of population levels. These aims were viewed with some scepticism by local communities and concerns were expressed about the distribution of the benefits generated by the LWF. Concerns raised included: "crofters realise that the money offered was quite small" (11); that 90% of the benefits

would go to the multi-national companies (17); that half of the "local" payment would go to the Estate owners (some of whom live off the Island) (278) and to Government Ministers, "who were only too happy to play on public ignorance" (1562) and not the crofter and the community (215 and 278). The benefits payment was also thought not to compensate for the damage to the landscape that would affect every village in Lewis and the net loss of jobs that would accrue from the damage to the tourist industry (161 and 299). The strength of the feelings of loss was summed up within one submission 138):

> *"Why should we surrender so much for so little? The landowner will receive £1.5M income but this will not compensate for what we will lose by way of life and heritage".*

The community benefits being offered by the developer therefore did not alter stakeholders' perceptions of the LWF proposal. This point is illustrated by the submission from the South Bragar Grazings Committee quoted above (58). There were two mainland Scotland viewpoints (486) (S1) and (961) (S4) that perceived the community benefits being offered from a different perspective. One referred to the 'shilling' that was being given to greedy and short-sighted Community Councils and the other that the anticipation of wealth was misplaced and should not influence the outcome of the determination of the LWF proposal.

8.7.5 EXOGENOUS DEVELOPMENT - THE LWF's POSITIONING WITHIN THE GLOBAL WARMING DISCOURSE

The reliability and strength of the wind in the Western Isles was according to LWP the main reason for locating a major wind farm on the islands. A total of 86 individual stakeholders (20% of all individual stakeholders) agreed that wind farms had a role to play in tackling global warming. Support for and opposition against wind farms within the submissions received in this category of opposition was split 43/43 with 13 of the latter

stating that they were inclined to support smaller rather than large wind farms. The view taken by stakeholders located in Lewis towards wind farms of any size showed 17 in support of wind farms generally and 23 against.

8.7.5.1 SUPPORT FOR WIND FARMS

The support expressed for wind farms generally formed an important background to stakeholders' judgement of the LWF. A total of 17 individual stakeholders indicated in their discourses that they would give unconditional or conditional support to certain wind farms without specifying the preferred scale of development. However, some did specify some conditions. For example:

> "I am not against wind turbines as a matter of course, in fact located sensibly and run by local people for local people, I believe that they can contribute much" (12 and 13);

> "I support wind farms but do not give the developers a green light allowing them to disregard statutory legislation for protected wildlife, landscape and valuable wildlife habitat" (1034).

There was only one example (1546) of an appreciation of wind farm aesthetics and this was based on personal experience:

> "I find turbines quite beautiful. I would rather have fields of wind turbines than three gigantic coal powered stations that are located near my house in Central Yorkshire".

8.7.5.2 SUPPORT FOR SMALL SCALE WIND FARMS

Some stakeholders' discourses referred specifically to their support for small-scale wind power developments to indicate that they were not totally against wind power. This is revealed in statements such as "small-scale wind farms preferable" (2); "large-scale wind farms in remote landscapes are not the answer to the Scottish and UK Government's

affects on global warming ... but I support domestic renewable energy schemes" (3); "not against wind farms but the LWF is inappropriate in scale" (6); "not against wind power but prefer small community schemes supplying a small area like Ness and Dell" (20 and 22); "support for wind farms but only on a small scale" (293).

8.7.5.3 SUPPORT FOR WIND FARMS OUTWITH LEWIS

Some stakeholders' gave a qualified support to wind farms in a different sense by giving general support to large-scale wind farms but objecting to the LWF. Some of the reasons articulated included the "desecration of the preciousness of lands in Lewis" (953), the argument that it was necessary to look for an alternative site in Scotland with a landscape that could cope with a major wind farm (958 and 1536) and the need for an energy audit to be carried out before the LWF proceeded (478). One stakeholder (12) while not objecting to doing their 'bit' to help reduce global warming was concerned that:

> *"What we on this small island of ours are being asked to do is accept without formal consultation the largest wind farm in the world with the largest turbines in the world".*

The stakeholders' discourses cited in 8.7.5.1, 8.7.5.2 and 8.7.5.3 represent the views of stakeholders who do not support the LWF for the reasons given but could support individual carefully located wind farm projects. These stakeholders reflect what Wolsink (2000 p57) called 'qualified supporters'.

8.7.5.4 SCEPTICISM ABOUT WIND FARMS AND CO2 REDUCTIONS

A number of objectors also made reference to scepticism about whether the LWF or wind farms generally could make a significant or indeed any contribution to reducing CO2 levels. The points made included reference to a study in Denmark which concluded that the increased development of wind farms did not reduce CO2 levels (2); three stakeholders considered that the carbon savings figures were inaccurate (460, 874, 904 and 1523);

another included in their objection a statement indicating the importance of peatland habitat in reducing CO2 levels and that the disturbance of the estimated 2,580,000 cubic meters of peat as a consequence of the construction of the LWF would not compensate for the amount of CO2 the LWF would save (S8-480); that the LWF would create a larger carbon footprint (935); and that wind farms were ineffective in reducing CO2 contrary to what was stated by the Enterprise and Culture Committee of the Scottish Executive (905). One stakeholder (292) summed up the wind farm CO2 scepticism discourse:

"We are pretending that we have a non-polluting attitude to life because we are producing 'green' energy' while at the same time destroying nature on a large scale".

8.7.5.5 OPPOSITION TO WIND FARMS - NIABY

The position referred to by Wolsink's (2002) as a Resistance Category B objector – not in anybody's back yard (NIABY) is reflected in the wide scope of the reasons given by individual stakeholders' to explain their opposition to wind farms. Reasons included the higher electricity prices that would result and "their impact negatively on local businesses" (1); their obsolescence within a few years (272); scepticism about their reliability (1 and 486); wind farms depending on subsidies with their green credentials being a sham (874). One quotation which illustrates the NIABY position comes from 893:

"Wind power is not reliable and costs a fortune to install, causes more damage to the environment than it saves in emissions and in the majority of cases lines the pockets of developers and landowners".

8.7.6 NATURAL ENVIRONMENT UTILITY VALUES DISCUSSION

Taking into account the importance of the tourist industry throughout the Western Isles and the perceived negative impact of the LWF on tourism this might have suggested a more general geographical distribution of submissions within Lewis and Harris. The predicted impact of the LWF on tourism might to some extent help to explain the submissions from visitors from mainland Scotland and England and Wales.

Within some stakeholders' discourses what has been classified in this research as the intrinsic and utility valuations of the natural environment appear to be conflated. The comments on tourism illustrate that stakeholders believed that the importance of one quality of the natural environment, its intrinsic value, was crucial to the success of the industry, its utility value. Consequently there was a strong belief that the impact of the LWF on the natural environment was the most significant issue in any deliberation about the future viability of the tourist industry. There was a perception that the Islands' landscape, habitats and species and its QOL were important assets for tourism. Consequently any impact of the LWF on these assets, especially the landscape, was considered to have negative consequences for tourism. Some proprietors of tourism-related businesses went so far as to indicate that the viability of their businesses was at risk if the LWF were to be constructed. The linkages between the LWF's likely impact on the natural environment and the tourist industry can be considered as being direct and/or indirect. Hotels, self-catering establishments and the sporting estates are examples of the direct impact while craft industries are an example of the indirect consequences anticipated.

The views expressed indicated stakeholders' assessment that LWP's ES did not convey adequately to the decision-makers the impact that the LWF would have on the tourist industry. Some business proprietors went so far as to indicate that they would leave the

island if the LWF was constructed because of the negative impacts on their QOL and/or their business. These strong statements are evidence of perceptions that the LWF could negatively impact not only on existing economic activity but also on future economic activity and as a consequence negatively impact on the Islands' demographics.

The data in section 8.7.2.1 illustrated that traditional land uses are highly valued as an integral part of the Western Isles rural economy and its socio-cultural values. This concurs with the views of other commentators on the role and value of crofting (Turnock 1975; Hunter 1976; Willis 1991; Hunter 1995; Wightman 1996; Mackenzie 2001; Lorimer 2002; Mackenzie 2006; Committee of Enquiry into Crofting 2008; Royal Society of Edinburgh 2008; Mackenzie 2010). Consequently the negative impact of the LWF on traditional land uses was not only perceived to affect present generations in this context but also the heritage left by previous generations and that which would be passed on to future generations. Again the ES and its authors were heavily criticised by some stakeholders for the inability to comprehend and therefore convey to the decision-makers, the importance of the traditional land uses to the Islands' communities. One interesting point that emerged from the TDA was that crofters in their evaluation of the natural environment did not refer to its value to them in the success of their agricultural activities. The LWF objection discourses called into question the accuracy of the scale of the employment opportunities that were claimed in the ES would be created by the LWF. This was yet another illustration of stakeholders' lack of confidence in the data in the ES placed before the decision-makers. Comments on the promised community benefits arising from the LWF were unanimously sceptical especially when tourism related employment loss was taken into account providing further evidence of the lack of trust in LWP.

There were a wide range of stakeholder views about generating electricity using wind farms and the likely success of the adoption of large-scale wind energy developments in counteracting global warming. For example some stakeholders expressed support for wind farms generally but remained opposed to the LWF. Others qualified their objection to the LWF by indicating their support for wind farm development on a smaller scale. Both of these positions exemplify the 'qualified supporters' hypothesis or what Wolsink referred to as Resistance Type D in his typology which was analysed in Chapter 7 (Wolsink 2000 p57). This could infer that at least some of these stakeholders would be more willing to accept smaller community owned wind farms as an alternative to those owned by multinational companies such as LWP. Some of the TDA analysis would at least in part appear to support the prediction made by some researchers that greater support for wind energy in the UK can be mobilised by shifting from a corporate model of wind energy ownership to a community based one (Kahn 2003; Enzensberger and al 2003; Bell and al 2005).

Some stakeholders voiced their opposition to wind farms generally and the LWF in particular the stance which Wolsink (2000 p57) called NIABY (not in any backyard) conforming to classification Resistance Type B. Among the reasons given for this blanket opposition were scepticism about whether wind farms could play a meaningful role in reducing CO_2 emissions; the cost implications to consumers through higher electricity prices; and the detrimental impact of wind farms on landscapes. While opposition to the LWF is clearly indicated in most stakeholders' discourses, some discourses do not express views about wind farms in general. This points to a lack of clarity as to which of Wolsink's four categories their positions fall into-NIMBY; NIABY; initial support which changes to NIABY or 'qualified support' termed Resistance Types A, B, C and D respectively (Wolsink 2000 p57). In conclusion there is no consistent relationship between individual

stakeholders' opinions on wind farms generally and the LWF in particular. These findings lend some support for the objector behaviour-motivation characteristics with regard to wind farms (ibid, p57) discussed in Chapter 7.4.4.

FIG. 8.11 SUSTAINABILITY COMPONENT: SOCIETY

META THEMES: SOCIO-CULTURAL; GOVERNANCE

META THEMES → DISCOURSE SCOPING

DISCOURSE INDUCED THEMES
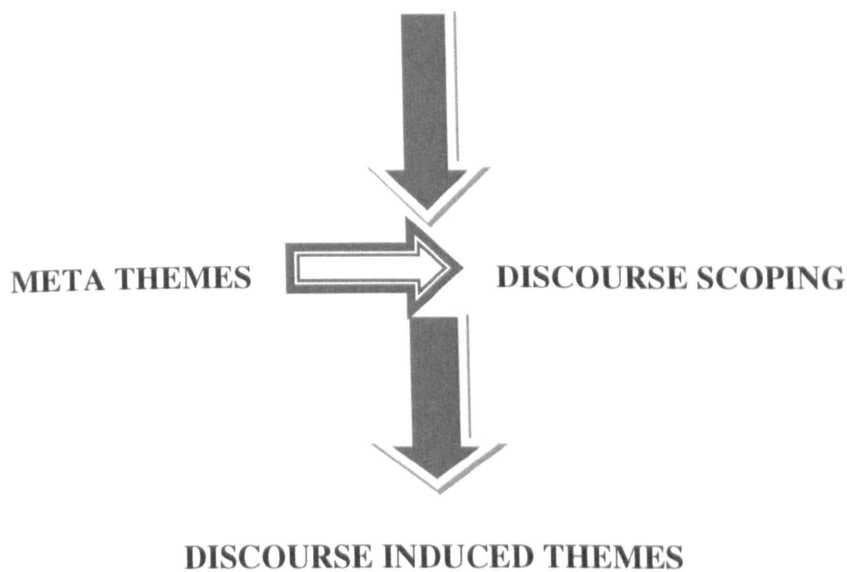
DIT 1 Historical Heritage

A. Stakeholders' valuation of the Western Isles archaeological artefacts and historical narratives;

B. Stakeholders' assessment of the LWF's impact on archaeological artefacts and historical narratives.

DIT 2 Western Isles Gaelic Language Heritage

A Stakeholders' valuation of the Western Isles' Gaelic Language Heritage;

B. Stakeholders' assessment of the LWF's impact on this Gaelic Language heritage.

DIT 3 Governance

A Consultation

B Information dissemination and accuracy

C Stakeholder empowerment

D Accountability and trust

8.8 META THEME: SOCIO-CULTURAL HERITAGE

Fig. 8.11 illustrates the approach used to identify and analyse what were considered by stakeholders to be the most important historical and cultural themes. A total of 80 individual stakeholders (17% of all individuals) made submissions that touched on this theme. An indicative geographical distribution of the historical and cultural based submissions from individual stakeholders invoking historical and cultural themes is illustrated in Fig. 8.12. One stakeholder's submission initially felt the need to substantiate their credibility of belonging in this context. In the preamble to their submission they highlighted that they had lived in the Western Isles all of their lives and embraced the language and rich culture which they had the privilege to inherit (219).

8.8.1 WESTERN ISLES HISTORICAL DISCOURSES

The TDA results contain an assessment of the impact of the LWF on islanders' past history covered two important issues - its impact on the physical manifestations of the past and on the historical narratives and stories woven through time.

8.8.1.1 ARCHAEOLOGICAL ARTEFACTS

There was evidence that stakeholders appreciated the importance of the archaeological artefacts and other physical evidence of the past and the threats to them posed by the LWF. This recognition was not just confined to stakeholders based in the Western Isles but

included that of some non-residents. The possibility that more artefacts existed within the proposed LWF site that have not yet been unearthed magnified the threat. For example a statement by 516 and 517 that:

"there were well over 1,000 sites of local or regional archaeological importance within the site and there may be many more not as yet discovered".

Another assessment by stakeholders of the inadequacy of the Environmental Statement was that in assessing the potential threats posed by the LWF to the archaeological artefacts it was argued that the ES underestimated the significance of these threats.

8.8.1.2 HISTORICAL NARRATIVES

Some of the stakeholders expressed general concerns about the influence that the LWF might have on the historical narratives and culture of the Islands. For example 231 was concerned that the approval of the world's largest wind farm within this cherished historical environment would make a mockery of the guidelines designed to protect it:

"Let us not betray those who fought and sacrificed their lives for the peace of Lewis and Britain".

In addition some stakeholders used historical narratives such as the Highland Clearances to voice their opposition to the LWF. For example one stakeholder referred to the impact of the LWF on the communities affected as being a 21st Century Highland Clearances (11). Another linked the Islands' history of oppression by powerful elites with the actions of LWP. One Lewis stakeholder located close to the proposed LWF, referring to historical wrongs associated with the private landlords, stated that the advent of the LWF and the actions of the key land owning stakeholders in the LWF supporters' coalition would result in these wrongs being revisited in the present age (1058) (L1).

8.8.2 WESTERN ISLES GAELIC LANGUAGE HERITAGE

The cultural issues embedded within stakeholders' discourses covered both linguistic (Scottish Gaelic) and non-linguistic manifestations of culture. It was also evident that some collaboration had taken place between stakeholders living in different geographical areas. For example a submission from one stakeholder in Harris (516) and one from Central Scotland (517) used exactly the same discursive text.

8.8.2.1 GAELIC CULTURE, THE NATURAL ENVIRONMENT AND THE WAY OF LIFE

The LWF's anticipated damage to linkages between the fragile Gaelic language and culture and the landscape was clearly articulated in stakeholders' discourses. The comments made about the LWF and the perception of an industrialisation of the landscape mirrored the historical discourses lamenting the process of industrialisation and its negative impact on the way of life of the islands. References were made to the traditional land uses in the analysis of the UVE; peat cutting, common grazings and shielings were regarded as a part of the culture and way of life (see 8.7.2.1). The TDA revealed stakeholders' assessment that the LWF could damage these directly or indirectly through threatening the traditional land uses which had endured over many centuries (for example 296). Strong feelings were expressed about these perceived impacts by both stakeholders resident on the Western Isles and non-residents. "The LWF would decimate our way of life (L1) (305 a Grazings Clerk); "The dependence of our way of life depends on islanders" (L1) (309); "The island way of life will be gone forever" (925) (S1). The natural environment and culture were the features that bound some stakeholders to the Islands. If these features were badly damaged by the LWF then they concluded that they might leave (for example 1543).

8.8.3 HISTORICAL HERITAGE AND GAELIC LANGUAGE HERITAGE DISCOURSES - DISCUSSION

Meppen (2000 p49) made an important link between culture and land use by describing culture as the living embodiment of the ways things are done now; the actions, the practices, the conventions that are articulations of acquired learning transmitted in the complex non-scientific way of slowly changing self-perpetuating human understanding. One important role for the Gaelic language therefore lies in the transmission to future generations of the understandings associated with what has been referred to here as the sustainable relationship between traditional land use activities and the natural environment. In this context the Gaelic language establishes an important cultural bridge between the past and the present. It has also had an important role to play in communicating the sustainability message to future generations.

The recognition of the extent to which the LWF poses a threat to discovered and as yet undiscovered archaeological artefacts reflected the value of these artefacts as totemic symbols of a more distant past. This valuation was not confined to residents in the Western Isles but shared by non-residents. Less tangible LWF impacts were those posed by the perceived threat to the Gaelic language and its important role in informing current and future generations of intergenerational historical and cultural narratives. The Western Isles remains the most strongly coherent Gaelic speaking area in Scotland (Mac an Tailler 2004). Particular concern was expressed about the unknown but potentially negative impact of the LWF on this highly valued but 'fragile' language. The future of Gaelic is considered important by the stakeholders who expressed concerns because it epitomises for some Western Isles' residents their own sense of 'belonging'.

The TDA enabled an assessment of stakeholders' measurement of the scale of the threats posed by the LWF to the Gaelic language and heritage. Traumatic historical events such as the Highland Clearances were used as pivotal points in this measurement. The LWF's industrialising effect was not confined to physical landscape values (see 8.4.2.5 and 8.4.3). The perception of an industrialisation of the Western Isles brought about by the wind farm proposed for Lewis may be compared to the radical and far-reaching industrialising proposals put forward by Lord Leverhulme in Harris and then by Redlands in relation to the Lingarabay Superquarry also proposed for Harris. The islands' residents' resistance to these proposed developments was based on the perception that they would result in a radical and unwanted change to the traditional crofting way of life and culture. Consequently, in the context of the LWF stakeholders' felt that as well as a threat of 'industrialising' the natural environment there was also concern that the traditions and the language of the islands were at risk.

8.9 META THEME: GOVERNANCE

The TDA of stakeholders' submissions identified stakeholders' evaluation of the relevant strands of governance and their own role in the decision-making process. A total of 240 individual stakeholders (54% of the individual stakeholders) made reference to this theme in their submissions. This indicates the importance attached by these stakeholders to the theme. Governance is a wide ranging theme however, touching as it does on many aspects of the other themes analysed here. The concept of governmentality associated with how and why governance is constructed in particular contexts also played an important and far reaching role in the decisions arrived at by the key stakeholders and how they were arrived at.

8.9.1 CONSULTATION AND INFORMATION DISSEMINATION

The pre-submission consultation exercises carried out by LWP and Comhairle nan Eilean Siar were strongly criticised (Fagan et al 2005). The stated aim of LWP's consultation exercise was to be informed as the applicants of the public's views. The objective was that these views could then be considered by LWP before the submission of the planning application and the ES. The ES that accompanied the LWF application consisted of seven volumes: A Summary of the Key Points (Vol.1); A Non-technical Summary of the ES (Vol.2); The ES (Vol.3); The ES Figures (Vol.4); Landscape and Visual Graphics (Vol. 5); Appendices (Vol.6); and The Technical Report (Vol. 7). The non-technical summary of the ES (Vol.2) was made available more widely. The Comhairle's consultation exercise was designed to gather community views about the proposed LWF in order to inform the Council Members. It is against this consultation and information background that the stakeholders' submissions have been analysed.

Some of the general criticisms of the consultation process included "not enough consultation with the local community (12); "No official consultation has taken place to ascertain community opinion (17); "No official consultation to assess public opinion" (276); "Lack of consultation and therefore a democratic right" (407). More specific comments relating to the consultation process included cynicism about LWP's role in the consultation process. For example "with each of the road shows the development grew each time" (310). The alleged ineffectiveness of LWP's publicity was summed up as "People in the local area were unable to read about the proposal". This comment was made by a resident (966) in a village close to the LWF where one of LWP's road shows had taken place. The inadequacy of LWP's consultation exercise in the context of the Islands' heritage and the estimation of LWP's willingness to take comments into account is illustrated by one comment (489):

"At the last roadshow when asked about the damage that may be done to our heritage, the answer was that we have no heritage"

Some stakeholders felt that the level of statutory consultation did not accord with the Western Isles Structure Plan Policy SC9 (163), Scottish Planning Policy I (216) and National Planning Policy Guideline15 (52, 216, 276 and 520). One stakeholder (1058) in their submission discourse dismissed comprehensively the consultation process by referring to the "lack" of consultation as being a breach of "natural justice" and summed up the LWF consultation process as a "PR disaster". Another comment referred to the absence of consultation targeted at specific categories of stakeholder, for example Grazings Committees (966 and 969). The small business perspective on the lack of consultation was articulated by the proprietor of a small pottery business in Lewis (L1) who stated that as a consequence, the business's survival could not have been considered as an issue in the decision-making process (306). Another general point raised criticised the short timescale allowed for submitting responses bearing in mind the complexity of the application and the issues it raised (4, 899 and 890).

The weaknesses in the ES were cited as the prime reason for the perception that there had been a breakdown in the dissemination of the information necessary to allow for meaningful consultation with the public. A total of 58 submissions referred to what were perceived to be the inadequacies of the ES. Weaknesses cited were the distortion of data, the incomplete analysis of the impact of the LWF on the traditional land uses, the absence of transmission line routes (2), the definition of terms such as 'unacceptable' and 'major' and 'long-term' developments (3), the inaccuracy of the photomontages and the scientifically 'fatally flawed' methodologies used for some of the assessments (518 – a

professional scientist). It was stated in 15 of the submissions that better public involvement would have been achieved if a Local Plan for the area had been in place. This it was argued would have allowed a pre-LWF consultation process to have taken place between the Comhairle and the communities and the general public about the most appropriate land uses for the LWF location.

8.9.2 STAKEHOLDER EMPOWERMENT

Feelings of stakeholder disempowerment and a perception of power inequalities between key stakeholders and stakeholders in the LWF decision-making process emerged from the TDA. Some of the reasons for this were felt to be the nature of corporate power as perceived by the size and influence of LWP (28) and the power of 'monopolistic' capitalism (80). Another manifestation of the powerlessness discourse was the perception of being marginalised by a lack of understanding of professional or 'expert' discourses. Comparisons were made between the senior officer assistance and the legal and financial resources available to LWP and the Comhairle, and the lack of those resources available to stakeholders. The resultant lack of ability to allow communities to 'digest' the content of a complex planning application was perceived as a major handicap. This in turn was considered as hindering the progress of communities in responding in a manner that was compliant with planning control protocols (for example 4, 295 and 520). The view was therefore expressed that the local communities were being "effectively muzzled by councillors and academic experts" (1). Stakeholders' perception of inequalities in power and their ability to influence their own future(s) were expressed forcibly:

"The imposition of the scheme against the will of the people who live in the affected

areas will be directly counter to other efforts to increase community feelings of

self-determination which is known to be beneficial to community health" (515)

(L1);

"Well I've had my rant and made my views known – I can't do more than that. I just wish I did not have the feeling that, like most folk here, I'm just p..... against the wind" (45).

Another aspect of the disempowerment discourse concerned the view that it was the local community who were best placed to judge what was in the best interests of their community (112, 134, 231 and 287). One quote that is prescient in relation to answering the research question:

"The people of the Western Isles are well placed to judge what is in the interests of their environment and the balance between renewable energy and the natural heritage" (231).

A number of stakeholders were of the opinion that, as a generality, the opportunities for the local community to become involved in the decision-making process had been inadequate (for example 467, 934, 958, 964, 966, 969, 1058, 1059, 1093 and 1512). This had resulted in a perception that the voice of the local people and villages was being ignored (216 and 1058). The holding of a referendum, an "official and open discussion between local government, AMEC (a partner in LWP) and most important of all the people of Lewis" was put forward (18, 48 and 475) as a way of overcoming empowerment deficits. Another of the stakeholders' perceptions revealed in the TDA was that the inhabitants in some parts of the Islands were more empowered than others (489, 934 and 1058). For example it was felt that the communities in the Galson/ Barvas area could air their views more independently than those in the Stornoway Trust estate (489).

Stakeholders' feelings of disempowerment appeared heightened when references were made to a denial of democratic rights. The Western Isles Structure Plan policy (SC9) was quoted by some stakeholders to support this view. This policy states that members of the 'sustainable communities' are afforded opportunities to play a full part in the decisions that affected them It was claimed in some discourses that this had not been done (e.g. 474). Another perception was that an unimaginative proposal was being "imposed upon a beautiful island and its inhabitants" (934). Several stakeholders (20, 276 and 467) felt that there was a deliberate thwarting of public discussion on the LWF proposal by the decision-makers which had resulted in a lack of respect for them.

8.9.3 ACCOUNTABILITY DISCOURSES

8.9.3.1 THE ACCOUNTABILITY OF ELECTED REPRESENTATIVES

An assessment of the level of opposition to the LWF in the local communities became possible using the TDA. A survey of 1,400 people carried out in North Lewis showing that 88% of those responding were against the LWF, was often referred to by stakeholders resident in L1 and L2 (more specifically by 30, 16, 61, 96, 112, 113, 120, 162, 163, 276, 277, 298, 308, 468, 479, 890, 930, 933, 934, 958, 966 and 969). These survey results were used by stakeholders as a measure of the opposition to the LWF in those local communities closest to the proposed LWF. The results were also used as part of the argument as to why the local authority should not ignore this strength of opposition. Other illustrations of the strength of opposition were that "I have yet to meet anyone who is in favour of the development" (36) and "the majority of people in Lewis DO NOT WANT the development to go ahead" (501).

The call for a public inquiry (referred to in most submissions commenting on the issue as a public enquiry) was another major issue raised. The reasons cited for the need for the public inquiry included the level of opposition to the LWF (6); so that the issues surrounding the development and alternative options could be explored (10); because of the scale of the development (136); and because those that had been canvassed did not want the turbines (505). The most often expressed reason for the inquiry was the lack of a Local Plan (LP) for Lewis that would have allowed some of the land use issues to be explored in depth on an impartial basis (this was particularly important to 36, 282, 278, 287, 285, 482, 493, 498, 499, 500, 516, 885, 891, 928, 933, 945, 955, 956 and 959).

The TDA revealed the extent to which individual stakeholders considered those promoting the pre-application publicity as unaccountable to the local electorate and criticised the role of the Comhairle in the decision-making process. Statements used included "the views and wishes of the people of Lewis are not being listened to" (95); "if you do what you say in taking objections seriously please remember this letter and others" (112); "it is perfectly obvious that these proposals are being rushed through at an alarming rate (135); the Council are there to work for the majority and not the minority and I may have to take the case to the European Court of Human Rights (310); Councillors openly in favour of the LWF should not be allowed to vote (475); the Council have failed to listen to the public and their wishes (479); our elected representatives are going against the general consensus of us – the inhabitants (484). The most vituperative comments came from a representative of one of the commercial stakeholders (84):

> "I strongly object to the fact that some of our elected politicians have for months before this application was presented, beguilingly touted this proposal for a wonderful scheme to bring jobs and money to the 'poor' islanders. I further object

to the racist and bullying tactics of some of our locally elected politicians towards persons and groups who have deemed to object".

Only one critique (957) was made of the planning process per se rather than the key stakeholders. This observed that the planning system was more concerned with serving itself than protecting those who pay for it from unwanted development. A more reflective view of the Comhairle's level of accountability was provoked by its role in the LWF decision-making process. Stakeholder 53 asked for his faith in British democracy to be given back and:

"allow the citizens of the Western Isles a vote on whether the LWF goes ahead or not".

The ultimate democratic redress for the perception that there was a lack of accountability in the LWF decision-making process was articulated by one outraged stakeholder (51):

"AMEC, supported by local councillors and politicians are going to cause one of the biggest environmental disasters in Europe on this small Island. The whole concept is reminiscent of George Orwell's 1984...and at our first opportunity we will be kicking out the Councillors and politicians who support AMEC and have made no effort to protect the Island way of life".

8.9.3.2 A LACK OF TRUST IN THE KEY STAKEHOLDERS

The key stakeholders in this Case Study LWP, the landowners and the Comhairle were perceived collectively as a LWF supporters' coalition. Thus the Comhairle was not regarded as objective and detached from the competing coalitions. The TDA showed that distrust in the Comhairle manifested itself in the following ways:

There was a feeling among some stakeholders (1, 5, 11, 277, 484, 493 and 495) that the LWF development had been in gestation for several years and that the Comhairle had been

party to this process. This was articulated in the comment that "deals had been done behind closed doors" (315) and:

> *"It has become evident that the councillors, the convener, our MP and MSP are very close to AMEC and their attitude towards the residents of this Island have to be seen to be believed"* (299).

It was therefore perceived that some council members had pre-judged the LWF and already made up their minds to support the development. Some stakeholders concluded that those members of the council should not vote (98 and 99 and 127 – a two person household). These 4 submissions contained the same wording suggesting collaboration had taken place in composing the submissions. In addition to these specific areas of distrust in the operation of the political system, there were several expressions of distrust in politicians generally (223, 310, 876, 944, 1061, 1068 and 1090 – a 2 person household).

Distrust of the applicant, LWP was targeted specifically by 19 stakeholders (43, 45, 79, 80, 84, 89, 104 293, 462, 1038, 1054, 1060, 1068, 1079 – a 2person household, 1091, 1093, 1540, 1560) and LWP was described "as a good for nothing company" (892, 893 and 898). More specific reasons to distrust LWP were that it was greedy in its pursuit of profits at the expense of the destruction of the natural environment (271 and 962); it was making a 'quick buck' and obscene profits (297, 486 and 902); and that LWP was showing a blatant disregard for the 'indigenous' people (1038 and 1054). One stakeholder (1512) expressed cynicism about the role of LWP's pre-application consultation exercise by wondering if the LWF application was deliberately enlarged so that it could be scaled down later to make it look as though they are being gracious to the protesters. Scepticism was expressed about the commitment of LWP to tackle climate change through renewables. "It was the LWP's profit motive and not green energy" that was behind the LWF (484). A lack of trust in another member of the LWF supporters' coalition, the landowners, was expressed by 5

objectors (134, 138, 159, 885 and 886). These stakeholders referred to landowners' greed, selfishness and their 'obscene' profits.

8.9.4 GOVERNANCE DISCOURSES - DISCUSSION

8.9.4.1 CONSULTATION

The details and a critique of the extensive consultation exercises carried out in relation to the LWF before and during the decision-making process were covered in Chapter 6. Many stakeholders concurred with Fagan et al's (2006) conclusion that the key stakeholders' consultation with communities had been inadequate. This in turn appears to have led to a sense of community disempowerment and the feeling that the Comhairle had not promoted a sense of inclusiveness in the decision-making process. More specifically the representatives from the business community (those directly and indirectly dependent on tourism) felt that consultation with them had been inadequate meaning that that decision-makers did not have adequate information to enable them to assess the consequences of the LWF for the viability of local businesses. There was also a perception that consultation and information dissemination had been inadequate.

Many of the individual stakeholders perceived that the dearth of consultation opportunities was exacerbated by the lack of a Local Plan for their area. Stakeholders' argued that this would have provided a forum for some consultation to have taken place on the land uses appropriate for the LWF site. This forum and its output would therefore have provided land use guidance for the decision on the LWF application. The perception was therefore that the local plan process would have provided stakeholders with the opportunity for more collaborative planning with the emphasis shifting away from the adversarial planning framework based on the decide-announce-defend model decried by Wolsink (2000 p57) to

a more collaborative and consensus based approach along the lines proposed by the communicative planning theorists inspired by Habermas whereby public involvement in the planning process would be at a much earlier stage. This would in turn attempt to subordinate the mechanisms of power which exclude some stakeholders from the planning process (Bell et al 2005 p 467). The call for a Local Plan therefore represents stakeholders' call for more genuine public participation and collaboration rather than the consultation exercise carried out in relation to the LWF.

The Environmental Statement (ES) submitted with the planning application was considered by a number of stakeholders to be an integral part of the consultation process. It was also seen to convey the scientific and socio-economic data necessary to enable a more meaningful input to the decision-makers in the decision-making process. However, the extent of the weaknesses and flaws in the ES can be gauged by the 58 stakeholders who made specific comments on the ES's perceived inadequacies. The lack of, or perceived lack of, information about the LWF that was readily accessible and comprehensible may therefore have been implicated in the level of wind farm opposition (Ottinger and Williams 2002).

Two target audiences can be identified as the basis for the stakeholders' discourses concerning their perception of inadequate governance by the local planning authority the Comhairle and a lack of transparency in the case of LWP. One audience was the Comhairle itself in order to impress upon it the weakness in the methods used to collect stakeholders' views and opinions about the LWF. The other audience was the Scottish Executive, the statutory decision-making body in this instance. The objective here was to impress upon it the inadequacies of the Comhairle, in its role as the principal consultee, in consulting with its electorate. In some discourses consultation was considered to be a precursor to

empowerment. However, from stakeholders' criticisms of the consultation process it is evident that stakeholders felt that in this instance even the lower rungs of the Arnstein (1969) ladder were too weak to enable the climb towards meaningful community empowerment.

8.9.4.2 EMPOWERMENT

Stakeholders' discourses expressed the view that communities were largely powerless when engaging with the decision-making process. This powerlessness was perceived by stakeholders within the context of 'monopolistic' capitalism (Lewis Wind Power) and the complexity of and the inability to comprehend the 'technospeak' contained within professional and political discourses. The exclusivity of 'expert' discourses (what Ottinger and Williams (2002) refer to as the knowledge-communication deficit) can be seen here as a particular barrier to empowerment and communication within the decision-making process. Albrechts (2002 p 335) calls the structural barriers to participation in the planning decision-making process caused by the power of systemic forces – economic organisations, political organisations, the courts, the media and social dynamics.

Some discourses debated as to which of the landowners was the most effective in making a judgement about what was in the best interest of the community. One view expressed was that the Stornoway Trust, despite it being the governing body of the longest-established community owned land, was least able to carry out this task. This supports the conclusion reached by Lidskog et al (2005 p 102) that planning decision-makers engage in a struggle to determine the legitimate spokespersons for the public and establishing who represents the best understanding and information about public concerns. Nevertheless, the TDA findings indicate that the democratically elected representatives empowered to decide what was in their best interests were not in fact representing their interests. This sense of

disempowerment indicates that the higher rungs of Arnstein's (1969) ladder are still out of reach.

8.9.4.3 ACCOUNTABILITY AND TRUST

The democratic deficit was referred to in section 7.4.4. However, the TDA indicated that the individual stakeholder may have a different perception of the existence of a democratic deficit. One of the main reasons why individual stakeholders objected was because they did not trust their democratically elected council representatives to take their views and values into account. This was important to them when as principal consultee the Comhairle was conveying on their behalf their views about the LWF to the Scottish Executive. The Scottish Executive was therefore receiving a significant number of objections based on stakeholders' perception that the council that was elected by them was not accountable for its actions and/or lacked the trust of the electorate to represent the electorate's views.

CHAPTER 9 ANTI-WIND FARM COALITIONS – MULTI-STAKEHOLDER DISCOURSE

9.1 INTRODUCTION - INFORMAL NETWORKS OF STAKEHOLDER ALLIANCE

Knowledge of the Multi-Stakeholder Discourse (MSD) evolutionary process is important in the analysis of the role they play in the planning decision-making process. Chapters 2, 3 and 4 have demonstrated that important links exist between stakeholders, the natural environment and sustainability. This reflects the position taken by Lockie (2007 p791) that non-human species, ecosystem processes and technologies can make a material difference to social affairs. The formation, stabilisation and transformation of groups and networks play an important role in shaping these social interactions (ibid p792). Communication discourses are an integral part of the 'energy flows' within the networks of relational processes taking place between networking actors acting to further their own ends, both within and outside the formal planning process (Hillier 2000 p46; Dicken et al 2001 p91). In this research MSDs are taken to be the discursive output of stakeholders' communication through formal and informal networks within the planning development management process.

The analysis of these communication discourses requires an examination of the concept of discourse coalitions (Hajer 1995). Discourse coalitions can be regarded as a post-positivist construct as they are based on the presupposition that there is no ontologically objective world but rather one which is shaped subjectively by the individual and social production of meaning (Hajer 1993; Braun and Busch 1999). In this context a discourse coalition

refers to "an ensemble of a set of story lines, the actors who utter these story lines and the practices that conform to these story lines organised around a discourse" (Hajer 1993 p47). Within the context of wind farm location debates Mander (2008 p585) defined three discourse coalitions each containing its own set of story lines: the wind supporters' coalition; the landscape protectors coalition; and those stakeholders ambivalent about the two opposing discourses whom she christened 'ambivalents'. The first of Mander's (2008) coalitions is represented by the Lewis Wind Farm (LWF) supporters' coalition (the key stakeholders referred to in Chapter 6). The second coalition, the anti-LWF coalition can be compared to what Mander (2008 p285) classed as the 'landscape' protectors coalition in her NW England case study. However, the results of the TDA discussed in Chapter 8 indicate that more importance is attached by the anti-LWF coalition to issues such as biodiversity in the LWF case study. Discourse coalitions comprised of individuals motivated by different cognitive belief systems are viewed as more dynamic and diverse than advocacy coalitions as the latter assumes a stable normative core which informs common policy objectives amongst its adherents (Sabatier and Jenkins-Smith 1999).

The discourses of individual stakeholders who form part of the anti-LWF discourse coalition were analysed in the previous chapter. This chapter analysis the MSD output from the transient alliances of stakeholders acting as participants within the anti-LWF coalition. MSDs are in effect the articulation of the stakeholders' reactions to the textual and visual data relating to the LWF planning application. In order to assist in answering the research question it has been assumed that stakeholders have adopted a cognitive approach to understanding the texts. This assumption is premised on the contention that texts do not have an intrinsic meaning but are assigned meaning by the language users (Van Dijk and Kintsch 1983). When stakeholders adopting a socio-cognitive approach to interpreting the LWF data find that they collectively adhere to and share similar environmental intrinsic or

utility normative values, there is an increased possibility that they will subscribe to the same discourse. In addition, campaigning groups with their own socio-cognitive values may attempt to recruit members of different publics who have already composed their own but sufficiently similar discourses to subscribe to the group's values and discourses. Any such subscription must be temporally circumscribed within the statutorily finite period relating to the LWF decision-making process. This is an important factor in creating the time-frame for any transient anti-wind farm coalition and in differentiating between it and a stable advocacy coalition whose members' actions are based on shared core beliefs (Sabatier and Jenkins-Smith 1993).

9.2 THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 1

MSD 1 (see Appendix 2) was circulated by the local campaigning group Moorlands Without Turbines (MWT) through the local newspaper, the Stornoway Gazette, on the 2nd December 2004. MWT describes itself as "a group dedicated to protect Lewis from inappropriate industrial development". This objective echoes the local opposition to proposed major developments such as the Lingerbay Superquarry in Harris discussed in Chapter 4. From the time MWT had been made aware of the LWF its aim had been to inform the public about what was being planned. MSD1 takes the form of a 'cut out' letter in the Gazette which it was suggested should be sent as a formal LWF objection to the Scottish Executive and then copied to the Comhairle. The letter was located adjacent to an advertisement placed by MWT to highlight the issues raised by the LWF and to advise readers as to how to go about objecting. The advertisement also encouraged readers to use the text in the cut out letter to compose a more personalised letter to send to the Scottish Executive. A total of 45 stakeholders composed and submitted the more personalised letter. An alternative course of action suggested in the advertisement was the sending of a holding objection to allow the objector time to obtain more details about the LWF to strengthen

their case. As the personalised letters contained the same text as the 'cut out' letter I have included them in the total of 407 MSD 1 objections. Coincidentally(?) in the same edition of the Stornoway Gazette the intimation was published identifying the five locations for the LWF exhibitions; Stornoway Library, Stornoway Council Offices, Ness Development Centre, Barvas Taigh Ceilidh and Shawbost School Library.

Figures 9.7 and 9.8 illustrate the timing of the MSD 1 submissions to the Scottish Executive. This edition of the Gazette went on sale on Thursday December 2nd 2004. However, the number of submissions remained very low during Thursday 2nd (3), Friday 3rd (13), Saturday 4th (8) and 3 on Sunday 5th December. However, the number of submissions rose dramatically on Monday 6th from 3 to 63. It needs to be borne in mind however, that Sunday 5th December was the Sabbath and this is treated as a day of rest in Lewis and Harris. Momentum increased with 67 objections being sent on the Tuesday (7th), 80 on the Wednesday (8th), 64 on the Thursday (9th) and 40 on the Friday (10th). Momentum reduced over the subsequent weekend with 32 between Saturday 11th and Monday 13th December, the last day for submissions.

9.2.1 GEOGRAPHICAL ANALYSIS OF MSD 1 SUBSCRIBERS

Figure 9.1 illustrates the geographical distribution of the 407 stakeholders who subscribed to the MSD 1. Within Lewis the lowest number of subscribers came from stakeholders resident closest to the LWF development (L1) and the largest number came from the Stornoway area (L3) which has the largest proportion of the Western Isles population. The geographical pattern of MSD 1 subscribers in the southern islands in the Western Isles chain follows that for individual stakeholders with very low numbers from North Uist, Benbecula, South Uist and Barra. Outwith the Western Isles the number of MSD 1

submissions is low with the exception of Wales. Here the number of submissions is greater

than total submissions from the Western Isles outwith Lewis.

FIG. 9.1 DISTRIBUTION OF MSD 1 STAKEHOLDERS

■ NO. STAKS

131

108

57

12

0

3

3

0

10

10

13

11

7

34

1

2

2

3

0

L1 L2 L3 HARRIS N. UIST BENBEC S. UIST BARRA S1 S2 S3 S4 ENGLAND WALES N.IRELAND EU AM AUS AFR
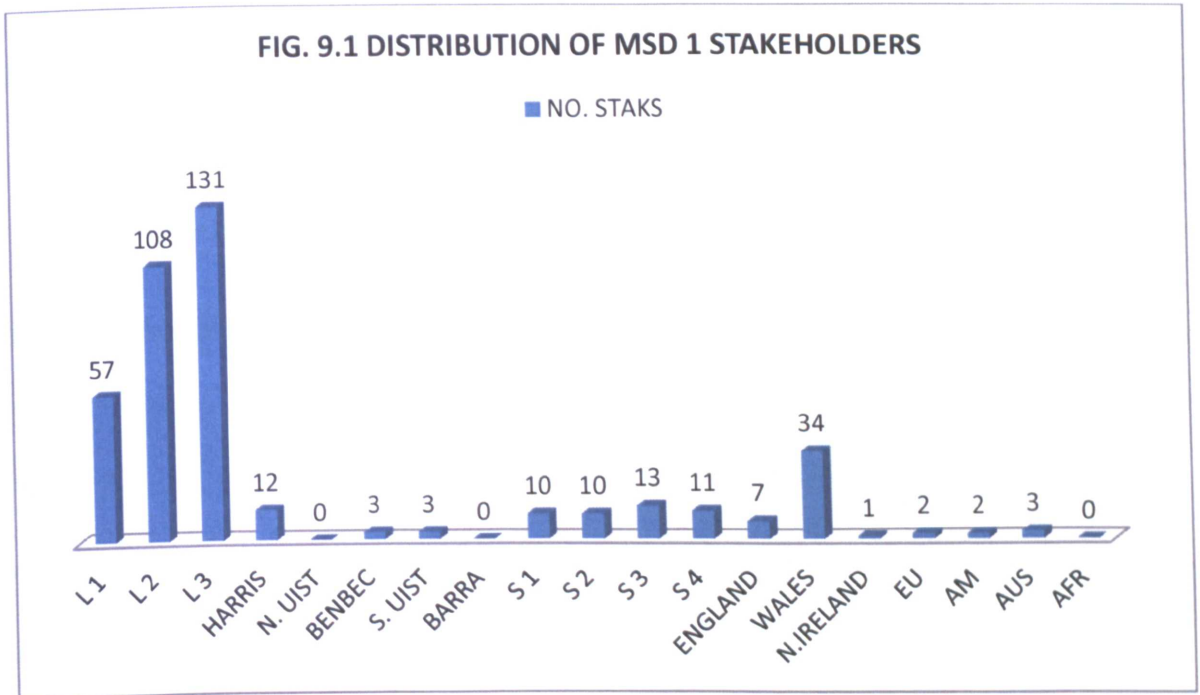
9.2.2 THEMATIC DISCOURSE ANALYSIS

The MSD 1 text covers each theme raised in five concisely composed paragraphs. An opportunity was afforded to the subscriber to add any comments and to indicate if anonymity was desired. The analysis of MSD 1 was carried out using the TDA discussed in Chapter 5.

9.2.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

Landscape – This theme formed the most substantial part of the submission discourse. Awareness of PA policies aimed at protecting the landscape is illustrated by the reference to the LWF proposal and stakeholders' assessment that it contravened National Planning Policy Guideline 6 (NPPG 6).

Habitats and Species – This part of the discourse referred to the importance of the biodiversity within the proposed LWF site with its importance acknowledgement by the references in the texts to the PAs concerned. However, no specific reference was made to ornithological issues in this MSD. Concern was expressed about the key stakeholders not having investigated the possible alternatives to the LWF:

"The LWF would be extremely damaging and evidence has not been presented proving there are no other ways of generating 702 MW of electricity"

In this part of the discourse there was also evidence of an awareness of PA legislation and policies. This is demonstrated by the statement that the LWF would be detrimental to the RAMSAR site, the SPA, the SAC and its purported contravention of NPPG 6.

Quality of Life – The impact of the LWF on the QOL of the local residents was recognised in MSD 1:

"The LWF would have a significant long-term detrimental impact on the amenity of the people living nearby".

To back up this statement reference was again made to what was perceived as the LWF's contravention of National Planning Policy Guideline (NPPG) 6.

9.2.2.2 THE UTILITY VALUE OF THE NATURAL HERITAGE

Traditional Land Uses – MSD 1 makes reference to LWP's disregard for the traditional land uses in the ES.

"Grazing, Peat cutting, visiting and using family shielings, fishing, walking and other land uses will be severely affected or lost if the proposal goes ahead".

The reference to the ES and its disregard for the impact of the LWF on the traditional land uses echoes the views expressed by some individual stakeholders (Chapter 8). The approved Structure Plan policy (SC8) and national policy NPPG 6 were also used to strengthen the points raised in this context.

9.2.2.3 HISTORICAL AND CULTURAL HERITAGE

There were no specific references to the historic and cultural theme in MSD 1. However, the reference to shielings and the linkages between the traditional land uses (9.2.2.2) and culture identified in the analysis of individuals' discourses, points to MSD 1 traditional land use discourses incorporating some elements of history and culture.

9.2.2.4 GOVERNANCE

Consultation - The views expressed about the lack of a local plan and the need for public consultation on appropriate land uses were very similar to those made by many individual stakeholders. MSD 1 argued that these opportunities would have allowed local communities to become involved in a land-use based assessment of the LWF proposal.

Accountability – The need for a Public Inquiry (The term Public Enquiry was used in all stakeholder texts) was also expressed in MSD 1. This is the same request made in many of the individual stakeholders' submissions. The perception of the governance weaknesses identified in individuals' discourses was strong enough to be expressed within discourses of communication between multiple stakeholders.

9.3 THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 2

A total of 87 stakeholders signed up to and submitted this discourse (see Appendix 2) to the Scottish Executive who subsequently copied them to the Comhairle. The settlements within which the subscribers' addresses were located were within a square mile area along the A857, the B8013 and the B8014. It is reasonable to assume communication between stakeholders and reaching a consensus about the text of MSD 2 text would have been facilitated by the close proximity of the settlements. The chronological analysis (Figs. 9.7 and 9.8) indicates an erratic timing of submissions with small peaks on the 27th November

(15% of the total) and the 29th November (15% of the total) and the 9th December (9% of the total). Why this occurred is unclear from the data.

9.3.1 GEOGRAPHICAL ANALYSIS OF MSD 2 SUBSCRIBERS

The distribution of MSD 2 subscribers is extremely localised. Some 90% of the stakeholders subscribing to MSD2 came from the settlements located in L1: Fivepenny Ness - 32%; Eorpie 33%; and Ness 25% which lie in close proximity to each other. Another feature of the distribution pattern is the low number of stakeholders from outwith the Western Isles. Only England with 7 submissions (8.5% of the total) registered significantly. An interesting feature concerning the English stakeholders' location is that all were resident in Nottingham, four in the same street, suggesting strongly that some collaboration had taken place between these subscribers.

FIG. 9.2 DISTRIBUTION OF MSD 2 STAKEHOLDERS
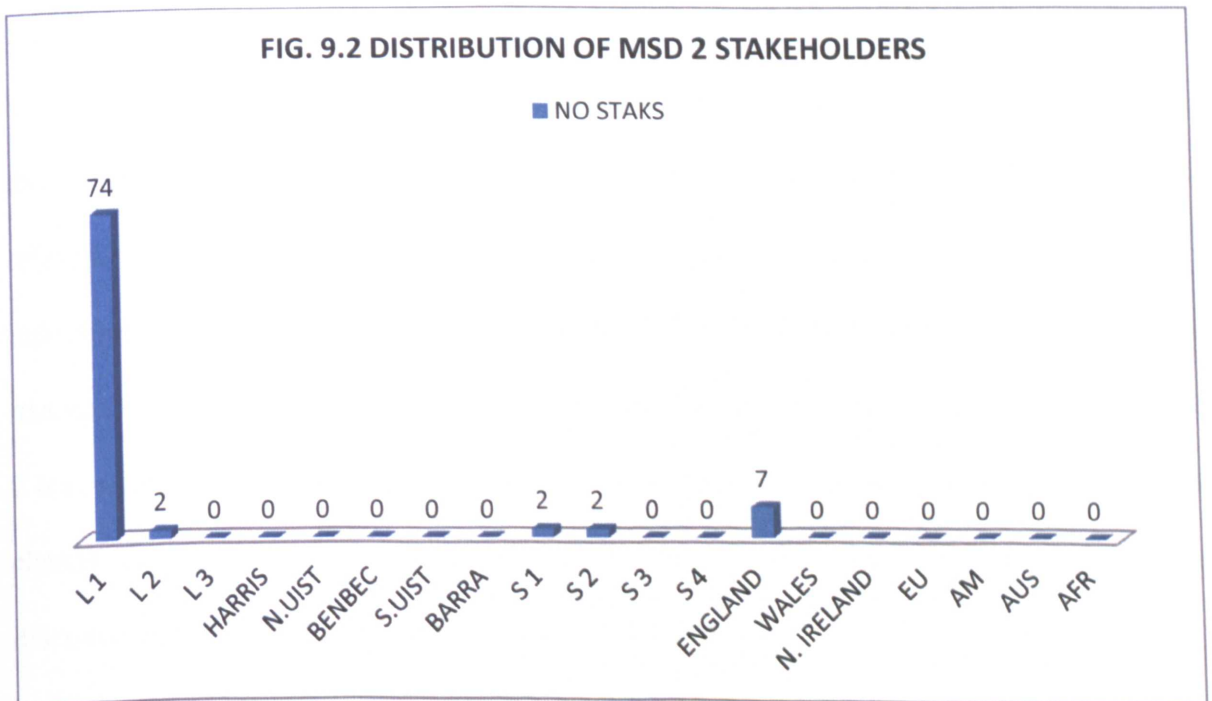
9.3.2 THEMATIC DISCOURSE ANALYSIS

Appendix 3 contains the text of MSD 2 and the TDA reveals that the text covers several themes with close and complex interrelationships between them. One example is the interlinking of landscape and habitats and species making the application of the TDA methodology more problematic than with the other MSDs.

9.3.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

Landscape – Strong views were expressed about the "destruction" and the "industrialisation" of the landscape echoing the comments made in many of the individual stakeholders' submissions:

> *"Here we are in the 21st Century about to turn one of the few remaining natural areas in the British Isles into an industrial landscape".*

Habitats and Species – Using similar examples of habitats as those in the individual stakeholders' discourses to strengthen the case for protecting the Lewis Peatlands comparisons were made with the threats to and attempts being made to save the Brazilian Rainforest, the Greenland Tundra and the Irish Peatlands. Further evidence of awareness of the international dimension of conservation in the MSD 2 text can be found in the reference to Wildlife International's statement that bird species are in decline as a result of industrial development on fragile environments. Thus, unlike in MSD 1, there is separate recognition of the ornithological value of the site. This international dimension of the MSD 2 text creates an arena for the conservation discourse similar in scale to the global climate change discourse used to support the LWF case. It also clearly raises the objection discourse above that of any accusation of NIMBYism.

Quality of Life – The text contained a prediction that the LWF would have negative impacts on communications, amenities and on health and safety. These impacts were considered to be greatest on the communities closest to the LWF. This conclusion is in

accord with that of the discourses of many individual stakeholders. The emphasis on visual impact and noise nuisance also accords with individual stakeholders' discourses:

> *"Islanders have to look at the turbines, listen to the howl of the blades, walk past the pylons hearing the endless hum of the power lines and suffer the health hazards they may transmit".*

The lack of information contained in the ES about the impact of 100 miles of road and quarrying on local communities was also criticised. This is an additional weakness in the ES to those identified by individual stakeholders.

9.3.2.2 THE UTILITY VALUE OF THE NATURAL ENVIRONMENT

Economic and community benefits - The validity of the economic and community benefits claimed by LWP was strongly criticised.

> *"What good will it be to the local communities? The company will make a profit and the Islanders will have to pay higher prices for electricity".*

The reference to the benefits going to LWP instead of to the local communities is another indication of stakeholders' scepticism about LWP's claims and distrust of their motives.

Support for/opposition to wind power - The text of the MSD expresses strong doubts about the extent to which the LWF would assist in achieving the goal of carbon reduction by stressing that carbon savings would be lower when transport and construction were taken into account. The perceived lack of realism in what LWP expected of the LWF is here combined with the weaknesses in the ES in relation to predicted carbon savings:

> *"Amec say that the LWF will generate around 6% of the UK green energy target which in reality is 0.624% of the total energy required".*

This is an attempt by the composers of MSD 2 to illustrate to the decision-makers, whose renewable targets the LWF is aimed at, LWP's unrealistic expectations of what the LWF could achieve. MSD 2 also raises the profile of the discourse above the 'local' and avoids

any criticism that the argument contained in it denies the climate change process is taking place (climate change deniers). MSD 2 also warned that the industrialisation of Lewis resulting from the LWF would open the door to other undesirable developments such as nuclear waste dumping:

> *"It is possible that in a few years when nuclear power comes back into fashion and they realise that wind farms turned out to be a white elephant and this Island being industrial may be you will allow the building of one or two nuclear stations, or use the Rocky Island west of Scotland as a dump for radioactive waste".*

The reference here to 'they' presumably refers to LWP and its change in economic focus and 'you' a reference to the Scottish Executive to whom the submission is addressed.

9.3.2.3 HISTORICAL AND CULTURAL HERITAGE

There were no specific references to this theme.

9.3.2.4 GOVERNANCE

Empowerment – This MSD called for a public debate to be followed by a referendum reflecting the view that the opportunities to engage in the LWF decision-making process had been inadequate.

Accountability – The need for a referendum was also a reflection of the perceived lack of the Comhairle's accountability already referred to in Chapter 8 and there is a questioning of the legitimacy of some members of the Environmental Services Committee becoming involved in the decision-making process:

> *"The ES Committee have to come to a fair decision but various councillors openly state that they are totally in favour of the project, how is it possible for the Committee to come to a non-biased judgement?"*

There is a perception here that democratic and transparent governance had been compromised by other influences and that this could result in a decision that would not

represent stakeholders' views. It was clear from this MSD that the legacy left for future generations was considered unacceptable and that it was made clear to them that it was unrepresentative of the vast majority of Islanders:

"In years to come if this project goes ahead and future generations ask of those who destroyed the Isle of Lewis, I hope records are kept or maybe a plaque in the centre of Stornoway, listing their names".

FIG. 9.3 DISTRIBUTION OF MSD 3 STAKEHOLDERS
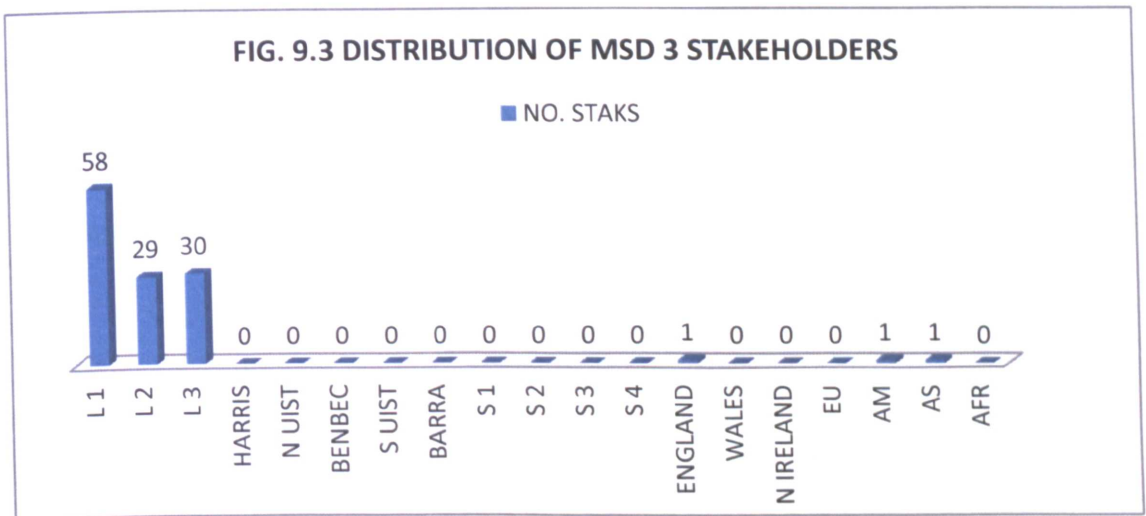
9.4. THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 3

A total of 120 MSD 3 submissions were received by the Scottish Executive and subsequently copied to the Comhairle. MSD 3 appears to have originated from South Bragar, Lewis but there is no identifiable communication system to explain how subscribers were recruited. The chronological analysis of the submission dates (Figs. 9.7 and 9.8) show that they were received by the Scottish Executive over a period of time between December 1 and December 13 with 72% of the submissions having been made between the 6th December and the 10th December. There were no submissions in November during the first part of the period allowed for submissions. The concentration of

the submission dates between the 6th and the 10th December indicates a very concerted effort by the instigating stakeholder(s) to attract subscribers to this discourse.

9.4.1 GEOGRAPHICAL DISTRIBUTION OF MSD 3 SUBSCRIBERS

The geographical distribution of individual subscribers to MSD 3 (Fig. 9.3) indicates that they were almost all resident in Lewis. There is a bias towards L1, the communities closest to the LWF from where 48% originated. The number of submissions from L2 and L3 were comparable in number. There were no submissions from the other parts of the Western Isles or Scotland. However, for no obvious reason, England (London), Canada (Ontario) and Australia (Victoria) each registered one submission.

9.4.2 THEMATIC DISCOURSE ANALYSIS

The text of MSD 3 is contained in Appendix 4 and its structure is formed around National Planning Policy Guidelines (NPPGs) 14 (5), (16) and (80), NPPG 6 (22) and (16), NPPG 18 (26) and the local authority planning policy contained in the Western Isles Structure Plan (SC9). The text indicates a detailed knowledge of these policies and their relevance to the LWF development and this enables a relatively straightforward TDA of this MSD submission.

9.4.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

Landscape - References were made in the MSD to NPPG 14 (16), NPPG 6 (6) – The Guiding Principles, and Structure Plan (SC9) in the context of what was perceived as a 'unique' Lewis landscape. These references clearly indicate some knowledge of the relevant PA guidelines. Emphasis was also placed on the wild land character of the landscape and the need to safeguard this for both residents and visitors. The links made in this text between this landscape and the natural heritage and culture is another example of

the importance attached to the links by the local communities. The argument for the protection of the landscape and the associated natural heritage and culture was supported in MSD 3 by the highlighting of NPPG 6 (6) where reference was made to the LWF development breaching the "Guiding Principles".

Habitats and Species - The point was made that LWP had disregarded its own findings:

> "*LWP has assessed that many aspects of this development would cause significant and irreversible damage to the natural heritage*".

MSD 3 also argued that LWP did not consider these to be an important enough reason not to proceed. In accordance with NPPG14 (80), the Precautionary Principle was highlighted and the conclusion reached by the stakeholders that this principle had not been applied adequately in the context of the LWF despite LWP acknowledging that there would be significant adverse environmental effects on the Ramsar site and the SPA. The MSD submission indicates a knowledge and understanding of PA policies and regulations by referring to NPPG6 (16) covering Ramsar sites, SPAs and SACs and their protection from renewable energy projects that would have an adverse impact on them:

> "*It has not been demonstrated that there is no alternative solution and further, no reasons for over-riding public interest have been demonstrated*".

QOL - The QOL issues identified were linked to the perception that the LWF would have an adverse impact on the natural environment and culture of the Islands (referred to in 9.4.2.3). Reference was also made to the importance of preserving the historic environment within the site because of its contribution to the QOL of the local community.

9.4.2.2 THE UTILITY VALUE OF THE NATURAL ENVIRONMENT

Tourism - The potential economic benefits created by the LWF were compared unfavourably with the importance of the tourist industry to the local economy. Tourism was considered a major employer in MSD 3 with the potential level of tourist jobs lost

considered to be in excess of any employment benefits from the LWF. This statement echoed many of those in individuals' submissions expressing scepticism about the claimed economic benefits of the LWF combined with an argument for the value of the natural environment to the success of the tourist industry and the danger posed to it by the LWF.

9.4.2.3 HISTORICAL AND CULTURAL HERITAGE

The MSD identifies what it considered to be another important weakness in the ES. This was that apart from underestimating the damage to the physical aspect of the landscape it had not made any references to the valued personal, historical or cultural attachments possessed by the population of Lewis to their landscape and heritage. The overall conclusion about the negative impact of the LWF on the natural and cultural heritage is expressed strongly:

> *"This development would have a catastrophic effect on the local communities and on the natural and historic environment".*

LWP's disregard of local communities in the drawing up of the plans for the LWF was criticised generally:

> *"the indigenous population have been shown little or no regard in the developer's assessment or in their proposals".*

The intergenerational repercussions of the LWF's impact were referred to in the context of the 'unique' historic and cultural heritage of Lewis. Referring to NPPG 18 (20) MSD 3 concluded:

> *"Approval to build one of the world's largest wind farm developments within this designated and cherished environment would make a mockery of this Guideline"*

9.4.2.4 GOVERNANCE

Consultation – The lack of community consultation was raised as an important issue. As with many of the individual discourses and other MSDs the lack of a Local Plan (LP) for

Rural Lewis was considered to be an important issue in this context. It was argued that a Local Plan would have enabled the community to have had an opportunity to take part in discussions on appropriate land uses within the LWF location.

9.5 THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 4

MSD 4 (text in Appendix 5) was sent to the Scottish Executive and subsequently copied to the Comhairle. A total of 55 submissions were received and an analysis of their geographical distribution is contained in Fig. 9.4. The chronological analysis indicates that submissions were made between 1st December and 13th December (Figs. 9.7 and 9.8) with 74% made between 7th December and 9th December, indicating a very intense period of stakeholder recruitment, and only 4 made between the 1st December and 6th December.

9.5.1 THE GEOGRAPHICAL ANALYSIS OF MSD4 SUBSCRIBERS

The first two subscribers to MSD 4 (submissions sent on the 1st December 2004) were resident in Newmarket an area close to Stornoway (L3). However, as Fig. 9.4 illustrates the vast majority (82%) of subscribers to MSD 4 were residents in the settlements of North and South Dell at the northern end of L1. Dell is a small community of less than 250 people adjacent to the A857 and situated 3 miles south of the area within which the majority of MSD 1 subscribers lived. The data available does not explain why the first two subscribers were residents of Stornoway and the remainder came from Dell. However, Fig. 9.4 indicates that there may be a strong link between the close-knit rural community environment and stakeholder recruitment and distribution patterns. Outwith Lewis three submissions were received from England and one from Wales. This compares with none from the remainder of the Western Isles and none from mainland Scotland and again the reason for the geographical pattern of these submissions is unclear.

Fig. 9.4 DISTRIBUTION OF MSD 4 STAKEHOLDERS

■ NO.STAKS

Values by category:
- L1: 45
- L2: 3
- L3: 3
- HARRIS: 0
- N. UIST: 0
- BENBECULA: 0
- S. UIST: 0
- BARRA: 0
- S1: 0
- S2: 0
- S3: 0
- S4: 0
- ENGLAND: 3
- WALES: 1
- N. IRELAND: 0
- EU: 0
- AM: 0
- AUS: 0
- AFR: 0
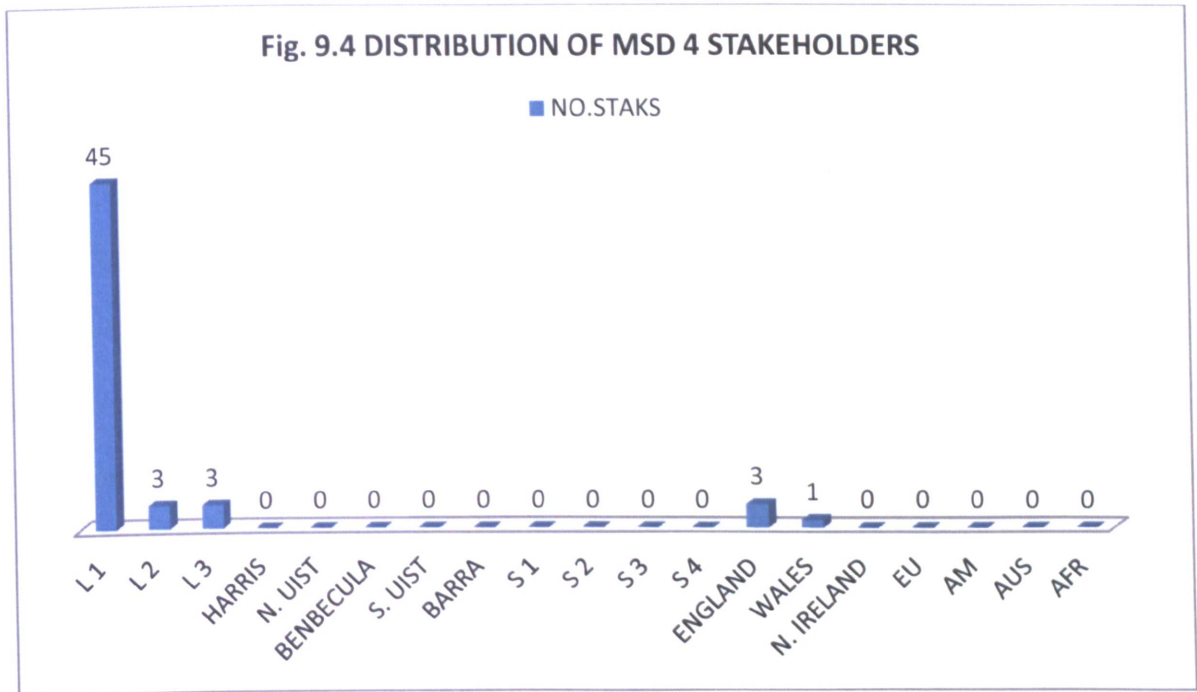
9.5.2 THEMATIC DISCOURSE ANALYSIS OF MSD 4

9.5.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

Landscape – The TDA reveals that the stakeholders' views about the impact of the LWF on the psychological and spiritual values attached to the landscape mirror those of many of the comments contained in individuals' submissions. Some individuals' discourses contained exactly the same text as MSD4 indicating the likelihood of some degree of collaboration between stakeholders. The following quotation contains the same wording as that found in some individual and other multiple stakeholder communication discourses:

> "Lewis is characterised by vast open views: the sky and the ocean dominate the landscape, creating a sense of space and tranquillity. The proposed wind farm would be visible from every village on the Island as well as from parts of Harris".

As in MSD 3 there is evidence of the importance attached to protecting the wild land character of the landscape.

Habitats and Species - The perceived impact of the LWF on habitats and species was covered comprehensively. The protection discourse was reinforced by stakeholders'

301

knowledge of PA designations and relevant national policies. For example in relation to the ornithological importance of the site several international designations were mentioned - UN Ramsar site (Wetlands of International Importance), SPA, the Birds Directive and IBA (Bern Convention). MSD 4 made the link between national and local policy with specific reference to NPPG 6 (incorporated into the Western Isles Structure Plan (RM8)). This prescribes the circumstances in which renewable energy developments that would have a detrimental impact on designated sites could be permitted. The wording stresses that permission should be given only "where there is no alternative solution and there is an overriding public interest including those of a social and economic nature". NPPG 14 was also referred to in the context of natural environments 'valued and cherished' (the Lewis Peatlands) should be protected. In MSD 4 it was argued that the case for overriding public interests had not been made and therefore neither NPPG 6 nor RM8 would have been complied with if the LWF were to be approved.

Quality of Life (QOL) – The impact of the LWF on amenities was emphasised strongly. It was claimed that neither the developer's assessment nor the guidance contained in NPPG 6 (Renewable Energy Developments) covering the need to mitigate the long-term detrimental impacts on people living nearby had been heeded:

> "Many of the turbines would be only 1.5 km from houses and the developers acknowledge that there will be an increase in background noise level and a long-term effect on visual amenity".

9.5.2.2 THE UTILITY VALUE OF THE NATURAL ENVIRONMENT

Tourism – The TDA results show that considerable emphasis is attached to the importance of tourism to the local economy. This was evident in MSD 4 from the reference to the £16M - £20M brought to the Lewis economy each year (£40M - £60M to the whole of the Western Isles) and the fact that the employment of 20% - 30% of the local population depended on tourism. The Macpherson Report (2003) was cited to strengthen the argument

302

that it was the natural environment, the peace, tranquillity, atmosphere, character, scenery, history and culture that was important to tourists and the tourist industry. Evidence of the LWF's potential impact on the tourist industry was contained in the reference in MSD 4 to the two studies that have quantified this impact. A Visit Scotland survey (2002) found that 25% of visitors would be less likely to return to an "area with turbines". A survey carried out by tourism operators in NW Lewis found that 90% of the respondents stated that they would be discouraged from visiting Lewis if the LWF was constructed (North West Lewis Tourism Operators 2004). These conclusions and the resulting scepticism about the overall economic benefits of the LWF were also contained in many of the individual stakeholders' submissions.

Traditional Land Uses - The ES weaknesses in its analysis of traditional land uses was another criticism that MSD 4 had in common with other submissions:

"The developers in their ES disregard the present land use of the area in question. It is used, as it has been for thousands of years, by the local population to graze stock, to cut peats for domestic use, and to visit family sheilings, many of which have been in occupation for generations".

Economic and Community Benefits - As was the case with MSD 3 and many individuals' submissions the claimed LWF net employment gains were questioned. Scepticism was also expressed about the potential community benefits because it was argued that these benefits would not necessarily go to the local communities. In order to emphasise this point it was argued that half of the rental money (£4M) would go to the Estate owners, some of whom lived off the Island.

9.5.2.3 HISTORIC AND CULTURAL HERITAGE

The MSD linked the importance of the traditional land uses to the Island's culture:

"The moorlands and sheilings are a precious part of the cultural heritage of the Island's people".

It concluded therefore that the development guidance contained in the Western Isles Structure Plan (ED2) had not been followed.

9.5.2.4 GOVERNANCE

Consultation – As with several of the individual discourses and MSDs, the absence of a Local Plan (LP) for Ness or the West Side was perceived to be a major weakness in the consultation process. This conclusion was reached despite the attempts at consulting communities within Lewis carried out by the key stakeholders referred to in Chapter 6. Therefore the conclusion reached by the stakeholders was either borne out of a lack of knowledge about these attempts or was an indication that they did not meet stakeholders' valuation of what level of consultation should have taken place:

> *"In direct contradiction of the local council and Scottish Office guidelines, no official community consultation has been undertaken to ascertain community opinion".*

Empowerment – This was perceived to be an issue because the Western Isles Structure Plan (SP) stated that members of the 'sustainable communities' should be afforded opportunities to play a full part in the decisions that affect them. This would have afforded communities a stance on a higher rung of Arnstein's (1969) ladder than was the case in the LWF decision-making process. It does however, also link in with comments made in relation to the absence of a Local Plan that would have allowed this level of participation to have taken place.

Accountability – The test of the Comhairle's accountability as perceived in MSD 4 was the extent to which Comhairle would take into account the outcome of the survey carried out

by the North Lewis Survey Group in 2004 which found that 88% of the 1400 residents surveyed were against the LWF.

9.6 THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 5

A total of 29 MSD5 submissions (text in Appendix 6) were sent to the Scottish Executive. The origin of MSD 5 is difficult to determine from the data available. Its genesis and distribution appear to occur spontaneously on the 7th of December within Stornoway and several small communities located close to the town: Tolsta, Knoc and Tong. The chronological analysis of the data (Figs.9.7 and 9.8) shows that all but four of the submissions were made during a very concentrated two day period between the 7th and 8th December. This suggests a very concerted attempt to persuade individuals to take ownership of this communication discourse. MSD 5 is notable for its brevity compared to all the other MSDs and the majority of individuals' submissions. It has a very narrow focus and with a total of 30 signatories it has the smallest number of subscribers.

9.6.1 GEOGRAPHICAL ANALYSIS OF MSD 5 SUBSCRIBERS

The geographical analysis of MSD 5 subscribers (Fig. 9.5) reveals a concentration of subscribers to this MSD located largely within two geographical areas. Some 42% were resident in Stornoway (L3) and 50% resident in communities within 5 miles of Stornoway. Only 2 stakeholders in the area closest to the proposed development (L1) subscribed to this MSD.

FIG. 9.5 DISTRIBUTION OF MSD 5 STAKEHOLDERS

■ NO.STAKS

Bar chart values:
- L1: 2
- L2: 14
- L3: 13
- HARRIS: 0
- N.UIST: 0
- BENBECULA: 0
- S.UIST: 0
- BARRA: 0
- S1: 0
- S2: 0
- S3: 0
- S4: 0
- ENGLAND: 0
- WALES: 0
- N.IRELAND: 0
- EU: 0
- AM: 0
- AUS: 0
- AFR: 0
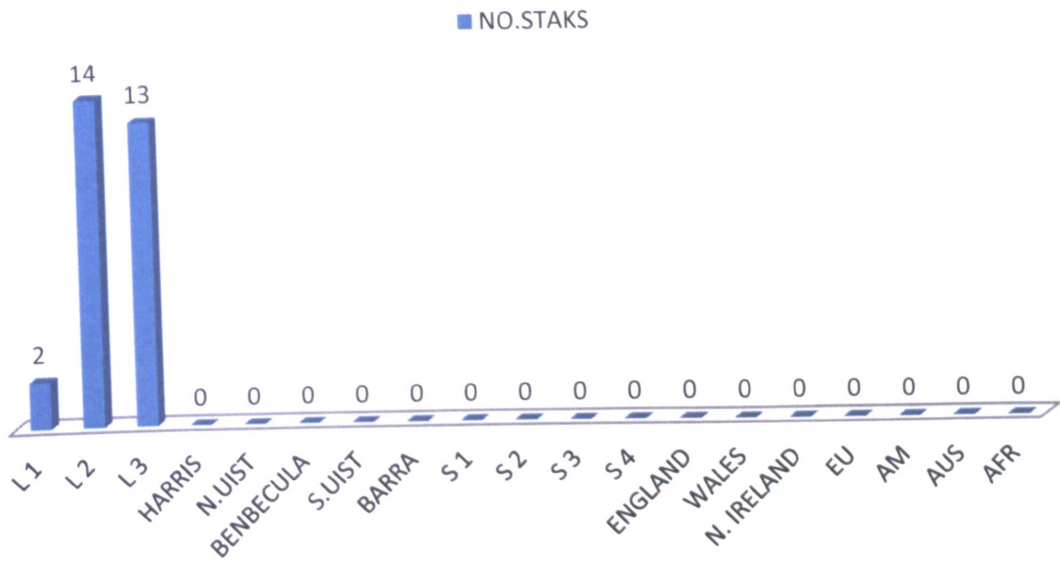
9.6.2 THEMATIC DISCOURSE ANALYSIS

9.6.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

There were no references to this theme.

9.6.2.2 THE UTILITY VALUE OF THE NATURAL ENVIRONMENT

There were no references to this theme.

9.6.2.3 HISTORIC AND CULTURAL ENVIRONMENT

There were no references to this theme.

9.6.2.4 GOVERNANCE

Consultation and Empowerment - This MSD was focussed solely on the absence of community consultation and empowerment which in the text were seen to be mutually reinforcing. This MSD also referred to the absence of a Local Plan for Rural Lewis as a reason for the lack of opportunity for communities being able to take part in discussions on appropriate areas of land use. This reflects the conclusions contained in many individual

discourses and MSDs about the inadequacy of the LWF consultation process and measures that could have been taken to improve it.

9.7 THE ANALYSIS OF MULTI-STAKEHOLDER DISCOURSE 6

The text of MSD 6 is contained in Appendix 7. A total of 35 submissions were received by the Scottish Executive. This MSD originated from Proact which describes itself as "a non-political, independent and voluntary organisation committed to coordinating and monitoring support for selected environmental campaigns in Europe and its periphery; and ultimately through our national and regional coordinators, worldwide". Proact's prime but not exclusive concern is the conservation of birds and their habitats. It is in effect an international internet-based pressure and lobby group providing support and assistance "when called in by local environmental groups and their allies". Therefore its campaigns may originate from environmental campaigning conducted at any geographical level. The effectiveness of this internet campaigning in the context of the LWF can be gauged by the global coverage of the objections and the large total of 846 stakeholders who signed up to the discourse. This comprised 594 from Europe, 96 from America, 42 from Africa and 80 from Australia. The chronological analysis of these submissions (Figs. 9.7 and 9.8) indicates that the main response to the campaigning activity took place between 3rd December and 6th December 2004. This is a relatively short time scale bearing in mind the global extent of coverage and the number of objections generated.

9.7.1 GEOGRAPHICAL ANALYSIS OF MSD 6 SUBSCRIBERS

The geographical analysis of the subscribers' distribution indicates that this was the only MSD where there was no response from Lewis. The only other subscriber to the discourse resident in the Western Isles was based in Benbecula. Within the UK one stakeholder came

307

from mainland Scotland, six from England and one from Wales. All the other subscribers

were resident outwith the UK with the largest percentage (70 %) based in Europe.

FIG. 9.6 DISTRIBUTION OF MSD 6 STAKEHOLDERS

■ NO. STAKS

A bar chart showing the distribution of MSD 6 stakeholders by location. The values are: L1 = 0, L2 = 0, L3 = 0, HARRIS = 0, N. UIST = 0, BENBECULA = 1, S. UIST = 0, BARRA = 0, S1 = 0, S2 = 0, S3 = 1, S4 = 0, ENGLAND = 6, WALES = 1, N. IRELAND = 0, EU = 605, AM = 110, AUS = 80, AFR = 42.
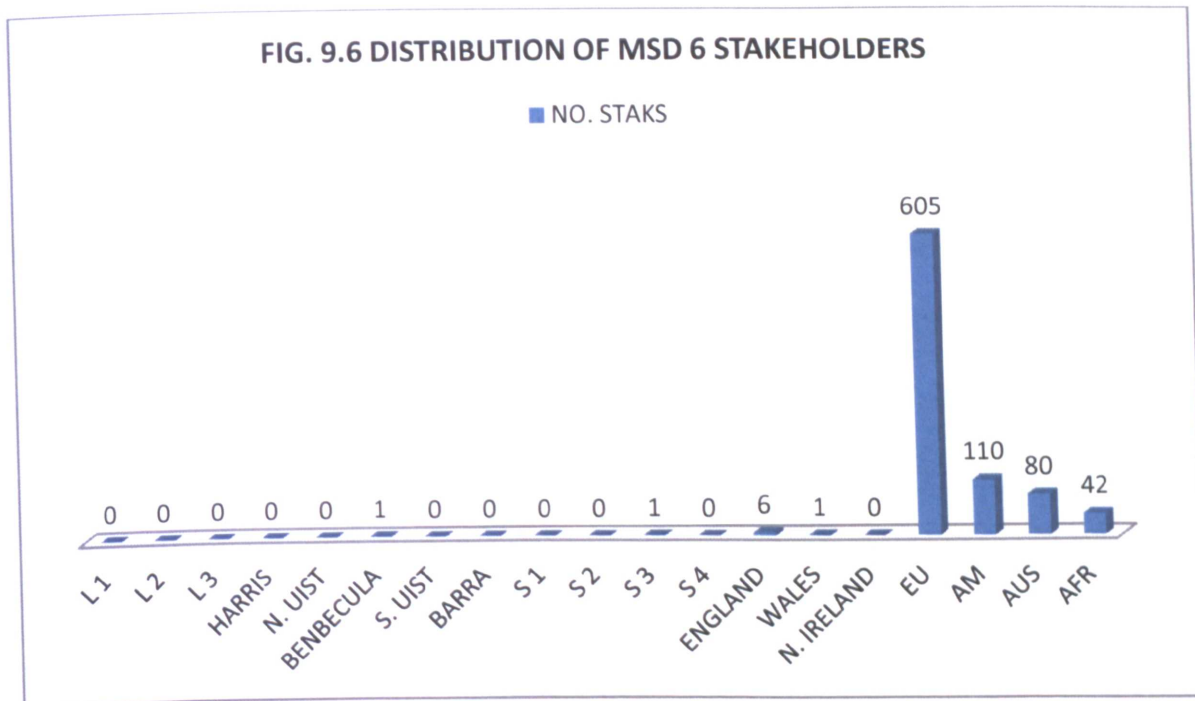
9.7.2 THEMATIC DISCOURSE ANALYSIS

9.7.2.1 THE INTRINSIC VALUE OF THE NATURAL ENVIRONMENT

Landscape – The MSD's main concern in relation to the impact of the LWF on the landscape was focussed on the protection of landscape's 'wildness' with the threat posed by the 'industrial development' brought about by the LWF being a particular concern. This mirrors many of the individuals' discourses which referred to the 'industrialisation' of the landscape. It also demonstrates an international dimension to the concern about this landscape's 'industrialisation' by the LWF.

Habitats and Species – Bearing in mind the main objective of Proact as a campaigning group it is not surprising that the submission concentrated on the negative impact of the LWF on the natural environment with the focus was on birdlife. The SPA and Ramsar designations were highlighted and the criticism of the LWF was that it did not pass any of

the environmental or legislative tests required before development on these PAs could be approved.

The bird species considered most at risk was the Golden Eagle because of its susceptibility to turbine blade strikes. The Altamont wind farm in California was cited as an example of "horrific" Golden Eagle casualties with 1,000 killed over the previous 20 years. The Altamont development has therefore been used in relation to the LWF to demonstrate the negative consequences of locating a wind farm in an ornithological inappropriate location. A lack of trust in LWP and its perceived desire not to heed conservation discourses and issues is evidenced by the statement:

> *"This consortium (LWP) has chosen to ignore consistent and repeated advice from concerned individual conservationists and organisations to avoid developing an area designated for their wildlife value".*

9.7.2.2 HISTORIC AND CULTURAL HERITAGE

There were no references to this theme.

9.7.2.3 GOVERNANCE

Accountability – The key stakeholders' lack of accountability was recognised in this MSD by the call for an urgent public inquiry to demonstrate accountability in the outcome of the LWF decision-making process.

9.8 DISCUSSION

This analysis of MSDs as the output from stakeholder reticulation and discourse coalitions has moved the focus of planning activity to some extent away from formal processes of land use mediation per se. Nevertheless, it was clear from the stakeholder discourses analysed in Chapter 8 and the MSDs analysed here that stakeholders still wished to participate in the more 'conventional' land use planning consultation mechanisms. An

illustration of this was the desire for stakeholder participation in the Local Plan preparation process and the call for a public inquiry into the LWF application. This they believed would have allowed a more meaningful input to the planning process. However, public consultation on the LWF through the Community Councils was perceived by some members of the public to have been ineffective. The LWF public exhibitions were perceived to have been merely publicity exercises or as exercises in educating the community about the benefits of the LWF. The MSD analysis has revealed that the alternative transient informal stakeholder alliances established by some individuals have been an attempt to overcome some of the perceived flaws in civic engagement and local governance. These alliances have utilised the available social relationships and community and virtual networks to enable stakeholders to have a more meaningful involvement in the decision-making process.

Formally constituted conservation bodies such as the Royal Society for the Protection of Birds (RSPB) and the Scottish Wildlife trust (SWT) represented the views of their members on the LWF indirectly through these bodies input to the planning process. The extent to which these organisations' views actually represented the opinions of their members, for example those in the Western Isles, is unknown. However, although voluntary conservation bodies represent their members on their behalf and this representation requires a level of responsiveness to members' interests this can be achieved without being subordinate to them (Derkzen and Bock 2009 p78). The RSPB and SWT were acting in this instance as advocacy coalitions (understood in the sense defined by Sabatier and Jenkins-Smith (1993)) formed around common policy beliefs and operating within what Olsson (Olsson 2009 p171) referred to as a policy sub-system. As was shown in Chapter 8 evidence from individual stakeholders' submissions revealed that the RSPB attempted to motivate their members to object to the LWF. Moorlands Without Turbines

(MWT) have been considered here to be campaigning agents because they have been proactive in recruiting stakeholders. However, in its campaigning literature MWT did make references to the objections being submitted by the RSPB and the SWT advocacy coalitions in order to strengthen the support for their own case for objecting to the LWF. Through communication discourses individual stakeholders have through their own volition or through the actions of the campaigning agents, been recruited to become members of transient informal alliances subscribing to a particular MSD. In this respect the views contained within the MSD are owned collectively by these stakeholders. This level of stakeholder coordination illustrates the conclusion reached by Szarka (2004) that it is not only wind farm supporters discourse coalitions that were well organised.

9.8.1 GEOGRAPHICAL DISTRIBUTION OF MSDs

The geographical distribution patterns of the MSD subscribers within the Western Isles vary significantly between each MSD and the data available allows for at least a partial explanation for this. For example within MSDs 2 and 4 almost all the subscribing stakeholders reside in the L1 settlements closest to the LWF. However, this distribution is not the case with MSDs 1 and 5 illustrating that proximity to the proposed development and the resulting degree of impact on local residents are not the only factors determining the number of subscribers to an MSD. Within MSDs 2 and 4 the closer proximity to the LWF may have had an influence in bringing together community members with similar views about the development, how the discourse was composed and the means by which the discourse was promulgated between individuals within a community and between adjacent communities. In addition both MSD 2 and MSD 4 (and possibly some of the other MSDs) may at least be partly the result of what was referred to in Chapter 3 as the goldfish bowl environment of rural society. In addition the targeting of potential stakeholders by campaigning agents has been a factor in communication discourse mobilisation. Evidence

311

of this can be found in the use of the internet in MSD 6. In MSD5 there was evidence of geographical targeting due to the fact that stakeholders resident in only two of the geographical categories (L2 and L3) subscribed.

One consistent feature of the geographical distribution of MSDs in the Western Isles (Figs 9.1 – 9.6) is the very low level of recruitment of stakeholders living outwith Lewis mirroring the situation with individual stakeholders and the reason for this is not clear from the data. This geographical distribution is inconsistent with the fact that other areas of the Western Isles share with Lewis many of the same socio-cultural values. These include the values attached to the historical and cultural heritage, the traditional land uses and their symbiotic relationship with the natural environment. The utility value of the natural environment for crofting and the success of the Western Isles tourist industry and the potential damage caused to this by the LWF is another common issue.

One important influence on the successful outcomes of networking flows was the media. This conclusion is in accordance with Smith's claim (2006 p83) that the media through the use of language are in a powerful position to influence and shape public perceptions. There is clear evidence from MSD 1 that a local newspaper such as the Stornoway Gazette can be instrumental in instigating and determining recruitment to an MSD within its circulation area. For example the Stornoway Gazette carried advertisements from Moorland Without Turbines (MWT) the campaigning agent attempting to mobilise opposition to the LWF. The Gazette also acted as a conduit for discourse dissemination by publishing articles and letters from members of the public containing a range of views about the LWF.

Other sections of the local and national media also played an important role in public discourse through the dissemination of information and in helping to formulate public opinion on the LWF. For example the local radio station based in Stornoway broadcast programmes and aired contributions from the public about the benefits and/or disadvantages of the proposed LWF. Regional newspapers such as the West Highland Free Press and the Press and Journal and newspapers with a more national coverage played the same role as the Stornoway Gazette but on a geographically wider scale and therefore to a larger but more dispersed audience. However, it is clear from the very low recruitment of stakeholders to MSDs from areas outwith the Western Isles, especially mainland Scotland, that the regional and national media referred to above were less effective in the MSD recruitment process outwith the Islands.

MSD 6 is anomalous in that almost all the subscribers are resident outwith the UK and thus least likely to have been influenced by the local, regional or national media. The level of interest in the LWF required to generate recruitment to MSD 6 has come about despite the stakeholders concerned being geographically much more distant from the proposed LWF development than the subscribers to other MSDs. The resulting communication discourses contained the environmental values that the instigating agency Proact, wished to promote. MSD 6 is an example of the importance and success of the internet as a networking tool which enables global communication discourse flows and facilitates the action deemed necessary to tackle what was perceived in the case of the LWF to be a globally important conservation issue. Proact also contains the elements of an advocacy coalition with a normative core being subscribed to by a global membership.

9.8.2 CHRONOLOGICAL ANALYSIS OF MSDs

The timing of the individual's 'transformative moment' (Hards 2010) is important in assessing the strength of 'energy flows' within stakeholders' informal networks at any point in time. The results of the chronological analysis of all MSDs are depicted in Figures 9.7 and 9.8. In order to make a more accurate comparison between the individual MSDs the statistics refer to the proportion of the total number of subscribers to an MSD and not the actual total. However, as was possibly the case in MSD 1 other factors such as the strongly held and valued religious beliefs referred to in many discourses and religious conventions (for example Sabbath observance) may have had some influence on the timing of MSD recruitment and MSD submissions. Therefore the timing/number of transformative moments may not have been the only influence on the recruitment to and the timing of an MSD's submission.

There is strong evidence that most stakeholders have had relatively late transformative moments. During November, the first half of the statutory 21 day period for submissions, the number of MSDs resulting from discourse communications and networking was extremely low (Fig. 9.7). The exception to this trend was MSD 2 and MSD 3 but the proportion of stakeholders involved was still relatively low. There is therefore little evidence that during November individual stakeholders were communicating with each other with the intention of expressing their views and values through networking and subscribing to MSDs.

In December during the second half of the statutory period the MSD output from communication discourse flows and stakeholder networking increased significantly and relatively quickly particularly between the 3rd December and the 10th December. This is most clearly illustrated in MSD 4 and MSD 5 and in the latter case the timing of

submissions is the most concentrated of all the MSDs. There are two possible reasons for the increase in the intensity of the activity. The publication of the Moorlands Without Turbines advertisement and 'cut out' letter in the Stornoway Gazette edition of 3rd December coincided with the beginning of the increase in all MSD submissions. The correlation between the date of the paper's publication and the increase in MSD 1 numbers is very close because this edition contained the text of MSD 1. Another important factor in relation to MSD chronology may be the intimation in the 3rd December edition of the Stornoway Gazette that exhibitions were to be held throughout Lewis to disseminate information about the LWF. Apart from MSD 3 which peaks on the 6th December, the other MSD submissions are more evenly spread between 3rd December and 10th December. Most of the discourse energy flows dissipate between 10th December and 13th December with only MSD 6 relying as it did on the internet for instant communication appearing in significant numbers on the last date stipulated for objections and representations.

FIG 9.7   MULTI-STAKEHOLDER DISCOURSES - %GE OF EACH MSD SUBMISSION MADE IN NOVEMBER 2004
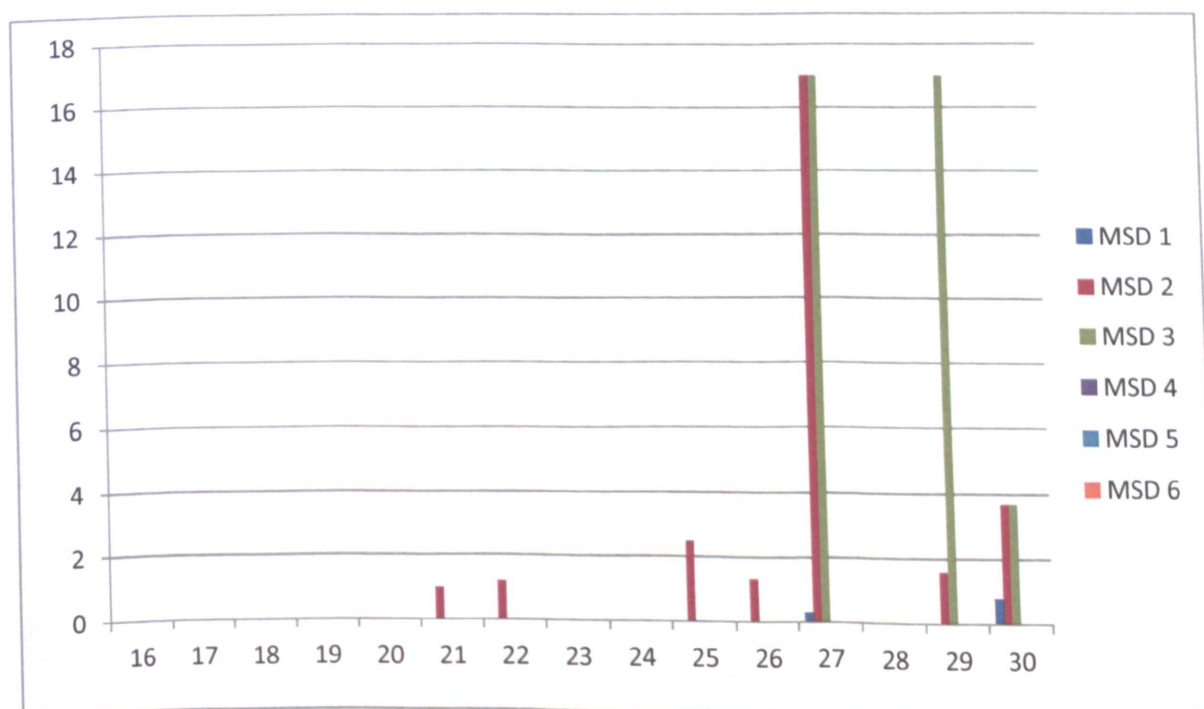
Fig. 9.8 MULTI-STAKEHOLDER DISCOURSES - %GE OF EACH MSD SUBMISSION MADE IN DECEMBER 2004
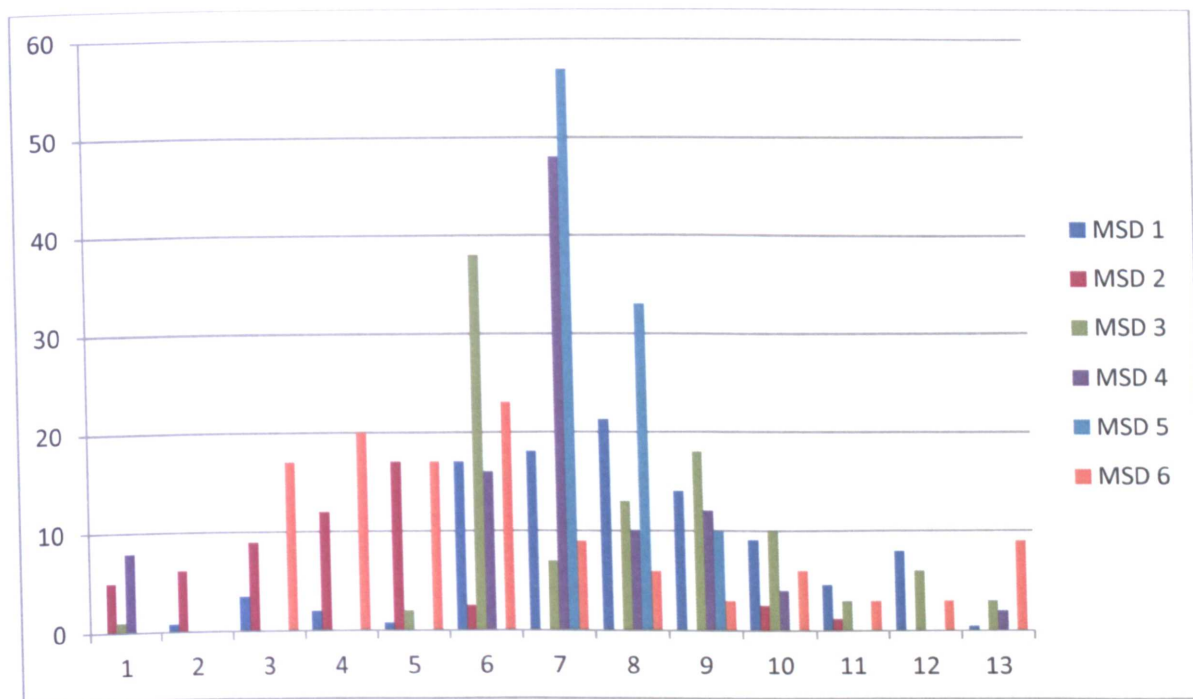
9.8.3 A THEMATIC DISCOURSE ANALYSIS OF MSDs

Figure 9.9 makes comparisons between the discourse induced themes covered by each of the six multi-stakeholder discourses (MSDs). The thematic discourse analysis (TDA) reveals that in each of the MSDs there are both similarities and significant variations in the themes covered. All MSDs (with the exception of MSD 5) highlight the values attached to the natural environment and the impact of the LWF on the landscape, habitats and species and (with the exception of MSDs 1 and 5) quality of life. However, one animal species, the Golden Eagle, was specifically referred to (in MSD 6) because it was considered by the authors to be an internationally important and iconic bird species in need of protection from the LWF development. It was also referred to in MSD 6 as a symbol of the international importance of the habitat within which the LWF would have been sited. References to Protected Area (PA) legislation and policies were used as a measure of natural environmental values illustrating the knowledge about and importance attached to

these by the stakeholders subscribing to the MSD. These references are as comprehensive in the MSDs as they were in the individual submissions and legitimise the MSDs in the context of international conservation values and not just the local values that might draw the criticism of the NIMBY label.

There are however, a number of differences between the MSDs and individuals' discourses. Individuals' discourses also placed a high value on protecting traditional land uses due largely to the recognition of the relationships between these and the natural environment and the historical and cultural traditions of the Islands. However, only two MSDs (MSD 1 and MSD 4) referred to traditional land use values. Another major difference is that only MSD 4 made any reference to the tourism theme. This again appears anomalous bearing in mind the importance attached by individual stakeholders in their submissions to tourism and its dependence on the quality of the natural environment. This also implies that the Macpherson Report (Macpherson Research 2003) and the local survey in the north of Lewis of tourist related businesses (North West Lewis Tourism Operators 2004) had not been considered when MSDs were being composed. The omissions also illustrate the limitation of theme coverage that can be imposed on potential subscribers to an MSD. This could be viewed in the context of a potential power relationship having developed resulting in the author(s) of the discourse having the editorial power over those subscribing to it.

The Lewis Wind Farm as a potential economic stimulus features in three of the MSDs (Fig. 9.9) and all express scepticism about the community benefits and the number of jobs forecast. Proximity to the development and its purported economic benefits appears not to be the only determining factor in making reference to this theme. For example in MSD 6 where almost all the subscribers are resident outside the UK, the scepticism surrounding

317

this theme is covered possibly because of the reference to employment generation as a common 'selling point' for wind farms internationally. Of the MSDs with the largest subscribers from Lewis, only MSDs 2, 3 and 5 cover this theme. This may be another illustration of stakeholders' willingness to accept theme coverage limitation in order to become involved in a discourse which is, despite its limited theme coverage, perceived to carry more weight in the decision-making process because of the number of subscribers.

Historical/archaeological and cultural themes were covered rather patchily in individual stakeholders' discourses. This pattern is reflected in the MSDs where coverage is confined to MSD 3. However, this may be an extreme example of the theme coverage limitation referred to above. The governance theme featured in all the MSDs except MSDs 4 and 6 and in MSD 5 indeed only governance issues were covered. As was the case with the individual discourses the weakness in local governance considered to be most important lay in the consultation with local communities during the decision-making process. It was claimed that a local plan for the area would have allowed some community participation in the determination of the appropriateness of the LWF as a land use. Accountability was referred to in MSDs 1, 2 and 6. It is again not clear why in almost all the MSDs consultation was perceived to be so important and accountability less so. One issue relating to governance totally absent from the MSDs was the amount of trust placed in the key stakeholders. This is in contrast to the individuals' discourses where trust in the key stakeholders was considered to be very important.

The community values that contributed to the promotion of what has been referred to as the sustainable and socially just rural futures of place (Mackenzie 2006 p579) are complex and may not always be consensual. The members of the transient stakeholder alliances, the subscribers to the MSDs with the exception of MSD 6, were resident predominantly in

318

communities within the Western Isles. The MSDs may be viewed therefore as one manifestation of consensual evaluations at least among some community members. An example of consensus is exhibited in Fig. 9.9 which illustrates the high value attached in each MSD, with the exception of MSD 5, to the value placed by communities on the natural environment. However, support was eventually given to the LWF by Comhairle nan Eilean, the local government body responsible to its constituents for promoting the socially just rural futures of the Western Isles' communities.

From the analysis of MSDs, a global dimension can be identified in the two competing LWF discourse coalitions. On the one hand AMEC was a key partner in LWP and a major global player in the renewables industry. On the other hand, some of the stakeholders subscribing to MSDs resided outwith the UK. The global dimension in this context was most evident in terms of the distribution of almost all of the subscribers to the MSD 6 initiated and promoted by the international campaigning organisation Proact. Both LWP and Proact were promoting their case on the basis of being concerned about the natural environment albeit with different emphases. Although LWP's view was supported by the Comhairle, the views expressed by the national and international conservation bodies opposing the LWF coincided with the values of the stakeholders within Western Isles communities. This case study has illustrated the interconnectedness of scales in the wind farm coalitions' discourses and that the actions required by residents in a particular rural community to achieve what is perceived to be a just and sustainable future is no longer influenced by local forces alone.

FIG 9.9 THE MULTI-STAKEHOLDER DISCOURSE INDUCED THEMES MATRIX

DISCOURSE INDUCED THEME	MSD 1	MSD 2	MSD 3	MSD 4	MSD 5	MSD 6
LANDSCAPE	■	■	■	■		■
HABITATS/SPECIES/ ORNITHOLOGY	■	■	■	■		■
QUALITY OF LIFE		■	■	■		■
TOURISM				■		
TRADITIONAL LAND USES	■			■		
EXOGENOUS DEVEL. - LWF		■	■			■
HISTORICAL/ ARCHAEOLOGICAL			■			
CULTURE			■			
CONSULTATION	■	■	■		■	
EMPOWERMENT			■		■	
ACCOUNTABILITY	■	■				■
TRUST						

CHAPTER 10   GENERAL DISCUSSION

10.1 INTRODUCTION

This chapter contains a general discussion of the research findings detailed in Chapters 7-9. And its structure is based on the themes that have emerged from the Thematic Discourse Analysis (TDA) of stakeholders' discourses. The level of interest in and the strength of opposition to the LWF was illustrated by 1159 submissions representing the views of 2007 individual stakeholders (of which only three were in favour) made prior to the Comhairle submitting its consultation response to the Scottish Executive.

- Family, household members, friends and the community

- Transient Stakeholder discourse coalitions

- Campaigning Groups e.g. Moorland Without Turbines and Proact

- Conservation Organisations e.g. Royal Society for the Protection of Birds (RSPB) and the Scottish Wildlife Trust (SWT)

- The Media

- The Internet.

Chapter 4 explored the relationships between the individual, community, physical place and place attachment and how these relationships influenced environmental values and determined environmental behaviour (e.g. Shumaker and Taylor 1983; Korpela 1989; Giuliani and Feldman 1993; Hay 1998; Bow and Buys 2003; Kyle et al 2004; Lewicka 2008; Livingston et al 2008; Devine-Wright and Clayton 2010; Hernandez and Hildago 2010; Hildago and Hernandez 2001; Raymond et al 2010; Scannell and Gifford 2010). Environmental citizenship was an important manifestation of this environmental behaviour (Marshall 1950; Smith 1998; Meppen 2000; Macgregor and Szerszynski 2003; Bell 2004;

Scannell and Gifford 2010; Devine-Wright 2011). It has been argued that an individual's relationship with the natural environment may become stronger with the length of residency (Livingston et al 2008; Hernandez and al 2010). However, there was no evidence from the TDA that implied this was relevant to the LWF application. As Devine-Wright and Clayton (2010 p267) put it succinctly "feared possibilities" (the LWF in this instance) of place can be the catalyst for generating a place identity incorporating personal roles and attributes, membership of social groups or categories and connectedness with geographical locations".

10.2 A VALUE LADEN NATURAL ENVIRONMENT

Stakeholders' appreciation of the natural environment reflected the philosophical tensions between ontologically positivist and materialist evaluations (e.g. Soper 1995; Johnson 1997) and discursively constructed social and cultural conceptualisations (e.g. Grundmann 1991; Katz and Kirby 1991; Graham 2002; Dingler 2005). The chronological changes in these constructions and conceptualisations added a further dimension (e.g. Haines 1973; Jones et al 1984; Mabey 1986; Smout 1991; Hunter 1995; Johnson and Parker 1995; Lorimer 1997; Strong 2011). Chapter 2 explored the publics' social constructions of nature and normative evaluations of landscapes, habitats and species in the UK have changed radically over the past fifty years (e.g. Haines 1973; Lovelock 1979; Jones et al 1984; Nature Conservancy Council 1984; Mabey 1986; Porritt and Winner 1988; Smout 1991; Harrison and Burgess 1994; Hunter 1995; Johnson and Rusker 1995; Lorimer 1997; Shoard 1997; O'Riordon 1999; Lovelock 2006; National Trust for Scotland 2006; Holdaway 2007; Strong 2011). These changes in public perception have influenced contemporary natural environment protection legislation. These factors were implicated in the views expressed in the discourses of individual stakeholders and environmental groupings and featured in 97% of the submissions received by the Scottish Executive.

Krebs (1996) and Weigleb (2002) defined eudemonic intrinsic values as the sentimental and religious values that humans' project onto the natural environment and moral intrinsic values, the moral obligations that humans have towards other species. The TDA revealed stakeholders' intrinsic valuation of the natural environment as having been conditioned by the interplay between the personal and community values, cultural norms (Gaelic culture) and historical events (e.g. the Highland Clearances). Therefore mental images of the past and physical artefacts such as shielings served to enhance the feeling of a natural environment that 'belonged' to the local communities. It was also evident that for some stakeholders the Gaelic culture of the Western Isles created the filter through which the natural world was perceived and valued and subsequently embedded in their communications and understandings. The strong views expressed about the impact of the LWF on the peatland habitat and iconic bird species illustrated a strongly held physical place value and conservation ethic.

There are some general factors that have a bearing on this analysis of stakeholders' valuation of the natural environment. Beardsley (1965) has cautioned that nothing is such that its value is wholly intrinsic and that what has intrinsic value also has extrinsic value. Stakeholders' discourses were also shaped to some extent by the planning legislation and protocols and MSD texts have circumscribed the value statement discourses of those stakeholders that subscribe to these texts. This situation has created what can be described as voluntary author-individual stakeholder hegemony in the sense that the discursive storylines and values must adhere to the text of the MSD. MSD 5 can be identified as an extreme example of this hegemony.

A dichotomy between many stakeholders' values of the natural environment and those determined through 'expert' methodologies were exemplified in the differences between their normative valuations of landscape. Landscape values may also be what Moore (1922), Ross (1930) and Zimmerman (2010) referred to as conceptual, chronologically complex and subjective. For example environmental values embedded in Western Isles Gaelic culture and the traditional crofting way of life can be seen as socially constructed and therefore potentially contestable, ethical and pluralistic. Therefore despite being highly valued locally the landscape in the vicinity of the LWF was not considered important enough to be protected by the National Scenic Area designation (NSA) because it did not fit the 'expert' criteria.

General conclusions about the relationship between stakeholders' length of residence and their value discourses cannot be determined from this TDA alone. Where in some discourses the author described himself as an incomer and where stakeholders have explicitly indicated that they had re-located to the Islands the natural environmental values they expressed did not differ significantly from those who may be considered as 'insider' stakeholders. These limited findings therefore contrasted with Warren's (2002) findings that an 'insider/outsider' friction existed in environmental controversies with locals favouring economic development and incomers attaching greater importance to environmental conservation.

10.3 STAKEHOLDERS' INTRINSIC VALUES - LANDSCAPES

LWP concluded in their Environmental Statement (ES) that the landscape type Boggy Moorland 1, had the greatest capacity for incorporating the LWF development of any of the landscape character types and as a result there was no other place in Lewis that would

be more suitable (LWP 2004 p41). The Council of Europe (2003) considered landscape to be an area perceived by people and whose character was the result of the interaction between natural and/or human factors. However, the references to 'landscape' analysed here are best understood through discursive constructs rather than external entities which can be described objectively. Therefore landscape embodies more than the 'visual' component referred to by LWP. Missing from LWP's assessment were the important cognitive relationship between landscape and the community and the cultural influences inherent in crofting recognised by authors such as Hunter (1976), Wills (1991), Devine (1994) and Mackenzie (2004). This 'democratic' landscape of perception, memory and judgement (Herring 2009) were detectable in stakeholders' landscape valued and landscape threatened discourses. Landscape could only be perceived in discourses which situated landscape within a given cultural and historical context (Hunter 1995; Dingler 2005 p214; McMorran et al 2006; Herring 2009; Foster 2010). Therefore Western Isles' landscapes can be perceived as 'cultural' landscapes, distinctive and symbolic of crofting practices (Commission of Inquiry into Crofting p26). However, Lorimer (2002) was sceptical about the 'treasured' cultural landscapes by describing them as degraded sporting estates.

Differences were evident in the views expressed in individual stakeholders' discourses and MSDs and between MSDs. For example the uniqueness of the Lewis landscape, its wildness and the links between culture and landscape were highlighted in MSD 3 and MSD 4 and the destruction and industrialisation of the landscape features strongly in MSD 2 and MSD 6. However in MSD 1 landscape issues did not feature strongly and in MSD 5 they did not feature at all. An important caveat in this discussion is that none of the stakeholders making reference to landscapes in their discourses lived within the actual location of the proposed LWF. Therefore all discourse value statements have to be considered as being made in the context of 'outside' observers.

The scale of the LWF and the size of the turbines and the flat blanket bog habitat involved led stakeholders to conclude that the LWF's visual intrusion into the landscape would be exacerbated and make it impossible to take effective mitigating action. The overall threats to the landscape were conceptualised in the references to the 'industrialisation' of a valued landscape. Stakeholders' also perceived that the ethereal properties important to society's wellbeing could be put at risk by the LWF. For example the landscape's wildness, openness, tranquillity, ethereal, experiential, spiritual and psychological qualities were referred to separately or in some combination. Discourses incorporating an intergenerational perspective, the ability of the present generation to pass on a valued landscape to future generations, can be identified in statements such as the landscape being affected for at least the 25 year lifespan of the LWF's existence.

Disillusionment with the quantitative analytical approaches to landscape evaluation have been well documented (Appleton 1975; Dunn 1974; Penning-Rowsell; Mather 1996; Crofts 2000; Scott 2006) with valued landscapes not being included in PAs despite being valued highly by communities (Linton 1968; Lawrie 1970; Countryside Commission for Scotland 1971; Falzon and Scott 2004). This is evident in this case study and because of the non-NSA status of the landscape where the LWF would be situated, LWP in its ES concluded that its only significant visible impact on landscapes would be confined to the Lews Castle designed landscape and historic garden and the tops of the highest hills in the NSA (LWP 2004 p9). Even where the more objective measure of the carrying capacity of the landscape has been used (Swanwick and LUC 2002; Herring 2009) there was disagreement between stakeholders and LWP as to the ability of the relatively flat peatlands to accommodate the LWF. Although contrasting methods of landscape evaluation were not specifically referred to in discourses it was clear that the 'myth' of

objectivity (Dunn 1974; Penning-Roswell 1974; Appleton 1975; Mather 1996; Scott 2006) had resulted in a landscape which had local value but no NSA legislative protection.

10.4 STAKEHOLDERS' INTRINSIC VALUES - HABITATS AND SPECIES

The concept of biodiversity is in part socially constructed and value laden with the meaning of the term comprising both anthropocentric and biocentric elements (Wilson 1988; Noss 1990; Norton 1994; Woods 2003; Faith 2007). Nevertheless, the positivist approach to biodiversity was adopted in the Rio Earth Summit and in the drafting of the Convention on Biological Diversity (1992, Article 2), the Scottish Biodiversity Strategy (Scottish Executive 2004c) and the Local Biodiversity Action Plans (LBAPs). Although these documents were based on the positivist evaluation of biodiversity the TDA indicated that they had sufficient authority for stakeholders to use them to support their case. However, because of biodiversity's multiple meanings the term habitats and species has been used here for analytical purposes.

Fig. 8.6 contains a summary of the habitats and species valued discourses and the only discourse where the importance of habitats and species was not referred to was MSD 5. Individual stakeholders and those subscribing to MSDs 2 and 3 emphasised the international importance of the Lewis Peatlands by making comparisons with the Amazon Rainforest, the Greenland Tundra, and its status as a RAMSAR site. Values reflecting those attributed to the landscape were encapsulated in terms such as 'wonderfully wild' and 'unspoilt rare environment'. Stakeholders in their discourses claimed 'ownership' of the Islands' habitats and species, a claim supported by the Gaelic names given to some plants and animals (Macilleathain 2007). This 'ownership' illustrated the relevance and importance of dutchas in the context of this case study in helping to understand the

inseparability of people and the natural environment and the intergenerational role of crofters as custodians of the natural environment (Hunter 1976; Mackenzie 2006). A summary of the habitats and species threatened discourses is contained in Fig. 8.6. The peatland habitat did not however, feature in the Scottish public top ten habitats (Wilson 2005; Stewart 2006) (Fig 1.1) illustrating that there were regional differences in public habitats and species priorities and that conservation activities were rooted primarily in ethics, values and advocacy (Roebuck and Piffer 1999)

Stakeholders' selection of threatened species was limited to specific references to salmon, several species of birds, otters and bats. However, somewhat surprisingly no references made to the plants or insects for which the peatland habitat is especially important. The arguments relating to the threats posed by the LWF to birds were strengthened by references to the Golden Eagle with its iconic status and the threats posed to migrating wildfowl. Links between the IVE and UVE themes were revealed in discourses relating to the threats posed to angling as a recreation and field sports through watercourse pollution and peatslides. The significance attached to habitats and species in LWF objection discourses contrasted with the greater emphasis placed by objectors on the impacts on landscape in other wind farm research (Warren et al 2005 p872). Specific examples of this emphasis were found in wind farm research in the North West of England (Mander 2008) and at the Cefn Croes wind farm in Wales (Woods 2003). The prevalence of landscape concerns in these case studies led the two authors to label objectors to wind farms respectively as 'landscape protectors' or 'landscape preservationists'.

10.5 QUALITY OF LIFE

Analysing the LWF's impact on quality of life (QOL) was complicated by the concept's nebulosity and the assessment of human needs being based on personal beliefs and values (Disgupta 2001; Marans 2003; Audit Commission 2005; Distaso 2005; Zidansek 2007; Costanza et al 2008; Kazakilis 2009). Four QOL sub-themes emerged from the QOL valued and QOL threatened discourses: intangible and tangible amenity; health and safety; infrastructure; and property values. Stakeholders identified long-term threats posed by the LWF to QOL despite LWP's reassuring comments about safeguarding amenities. Stakeholders' main concerns arising from the LWF's operation related to light pollution, especially the flickering effect caused by the turbine blades and noise pollution particularly noise pollution from the construction works and in the longer term from the wind farm itself. The concerns about noise pollution mirrored the findings of a study of several wind farms in Sweden which found that the level of noise annoyance was closely correlated with residence in a rural environment where ambient noise levels were lower than in more urbanised areas (Pedersen and Waye 2007). The Swedish study also found that turbine visibility was implicated in the perception of noise as a nuisance. These findings may be one of the reasons for the large number of objectors from rural Lewis (L1 and L2) where residents experienced relatively low ambient noise levels and where the LWF would have high visibility.

The perceived level of risks to health and safety posed by the LWF during its construction and operation was evident in stakeholders' references to the danger and inconvenience resulting from construction traffic, the danger of ice flying off rotating turbine blades and the perception that the electro-magnetic fields resulting from electricity distribution would harm health. Most objections on health and safety grounds came from L1 (Fig 8.8) indicating that closer proximity to the LWF site may also be an important factor in

329

assessing potential impacts on QOL. An attempt at a quantitative but still subjective stakeholder measure of the impact of the LWF on QOL was their assessment that property would be devalued and house prices lowered. However, the level of subjectivity involved in predicting house prices was illustrated by the minority view that house prices might actually rise due to the greater demand resulting from an influx of workers.

Among the quantifiable criteria widely used by governments to attempt to measure QOL is the extent of economic development and the corresponding benefits it brings (Zidansek 2007). Chapter 6 highlighted that economic development is needed to address the Islands' weak economy and to reduce emigration. It was in the context of economic regeneration that LWP promoted the LWF as a contribution to the rural communities' sustainability and QOL through the distribution of community benefits and the creation of employment opportunities. However, there was a total absence of references to any positive impact of the LWF on human well-being illustrating the level of stakeholders' scepticism of LWP's economic forecasts. In fact emigration was considered by several stakeholders to be more likely as a consequence of the perception that the LWF would have a negative impact on QOL. This reflected the conclusions of Tognoli (1987), Manzo (2003) and Pedersen and Waye (2007) that people choose environments that harmonise with their self-concept and needs but when a new environmental sensor (the LWF) is introduced into their 'place' this relationship and harmony and the sense of residential continuity is damaged.

10.6 STAKEHOLDERS' UTILITY VALUES - TOURISM

The high level of concern felt about the negative impact of the LWF on tourism can be assessed by the references made to this by 60% of individual stakeholders and those subscribing to MSD 1 (453 stakeholders), MSD 2 (94 stakeholders), MSD 3 (107

stakeholders) and MSD 4 (51 stakeholders). The geographical analysis of individual stakeholders indicates that proximity to the LWF heightened these concerns (Fig. 8.10). Bearing in mind the Western Isles-wide dependence on tourism it is anomalous that it was predominantly the stakeholders based in Lewis that have objected to the LWF on this basis. This distribution can be contrasted with the number from outwith the Islands objecting on the grounds that the LWF would have a detrimental impact on a fragile natural environment that *they* perceived important to the tourist industry. For example the number of objections from England equalled the number from Stornoway (L3) with most of the former objecting as 'consumers' of a natural environment that from their perspective was a common good.

The Scottish Tourist Strategy listed Scotland's unspoilt natural environment and cultural distinctiveness as the key strengths of the Scottish tourist sector (McMorran et al 2006). This conclusion was reflected in stakeholders' discourses in the context of tourism in the Western Isles. The natural environment valued discourses linked the importance of the peace, tranquillity, wildness, scenery and wildlife to the success of recreation activities such as angling and hill walking and field sports. These findings were contrary to those of some studies which showed that tourists associated wind farms with clean energy rather than environmental damage implying that tourism in Scotland could actually be promoted on the basis that it was a green environmentally-friendly country (Warren et al 2005 p857). It was the natural environment in this case study that was valued by stakeholders as the 'green' infrastructure on which sustainable tourism depended. It is not surprising therefore that UVE threatened discourses mirrored IVE threatened discourses through the expression of deep concern about the threat of the LWF to the tourist industry through the 'industrialisation' of the landscape.

There was strong evidence in this case study of 'non expert' stakeholders using 'expert' evidence as the rationale behind their case and for challenging the 'expert' evidence put forward by LWP. Several individual stakeholders used the Macpherson Report (2003) to support their argument about the LWF's negative impact on the local tourist industry. MSDs 3 and 4 also referred to the Macpherson Report (2003), the Visit Scotland Survey (2002) and the NW Lewis Tourist Operators Survey (2004) to support the same argument.

There was also evidence of the economic implications of the LWF within the discourses of the owners of the 19 small businesses which commodified the IVE and now depend wholly or partly on tourism for their viability. Quantitative evidence for the scale of the perceived threat was contained in the NW Lewis Tourist Operators Survey (2004) which revealed that 90% subscribed to the view that the LWF would pose a threat to their business's economic viability. In the context of the tourism related businesses the Western Isles' natural environment had also become a common good, a 'green' marketing tool for selling their 'product' and a driver for the local tourist industry. However, there was no evidence from the data that businesses that did not rely as heavily on tourism shared the views of the relatively small number of tourist-dependent businesses represented. For example the much larger number of retail and service businesses based in Stornoway were not concerned enough to formally object to the LWF. It could be argued that businesses providing goods and services within an island setting with a relatively small and declining population were at least partly dependent on visitors for their viability.

10.7 STAKEHOLDERS' UTILITY VALUES – TRADITIONAL LAND USES

The relationships between crofting and biodiversity are well documented (e.g. Bryden and Shucksmith 2000; Angus 2001; Powell et al 2002; McMorran et al 2006). With 77% of the

land area held under crofting tenure (CIC 2008) this relationship is important in the Western Isles. More specific issues such as the impact of the LWF on the efficacy of the fiscal measures relevant to the role of the creation of 'our' natural environment (Marshall 1988; Mowle 1988; Shucksmith 1988; Lloyd et al 1989; Potter and Lobley 1998; Birnie and Hulme 1990; Hubacek and Van den Berg 2006; RSE 2008) were not covered stakeholders.

Crofting provides important social, economic and cultural links between contemporary Western Isles society and the historic past shaped by the Highland Clearances (and the resultant famine, poverty, social dislocation and emigration), the Highland War of 1881-1896, the hard won legal status and security of tenure arising from the Napier Commission and community and crofting lands held in common (Mackenzie 2001). This was reflected in stakeholders' references to the role of crofting in engendering a strong sense of community, the transmission of skills and traditions through generations and helping to support and preserve the Gaelic language and culture (CIC 2008 p19). Stakeholders' discourses also revealed a fear that the 'industrialisation' and commercialisation of crofting land by a multi-national capitalist developer posed a threat to the crofting way of life, the crofting legacies of family histories, family shielings and the communal peat gathering and also to crofters as the guardians of the environment. The important role of crofting, despite it being a part-time activity, in keeping people 'on the land' can be compared with agriculture on the mainland which had had the opposite demographic effect (CIC 2008 p6). Stakeholders were concerned that the impact of the LWF would be to attract labour away from this part-time agricultural activity and this in turn would make the crofting way of life even more vulnerable. Some of the most vitriolic comments in individuals' discourses and MSDs 1 and 4 concerned LWP's ES with what was assessed to be an inadequate coverage of traditional land uses and an absence of insight into the crofting/natural

environment/culture interface. This perceived indifference towards crofting values may be seen as an example of a 'green' discourse schism between communities which place a value on crofting and its contribution to the rural communities and the environment and the 'expert' values used by LWP when promoting the 'green' credentials of the LWF.

The evidence from one of the Grazings Committees located in relatively close proximity to the LWF indicated that 36% of the Committee's shareholders had voted in favour and 64% had voted against the LWF. This level of opposition existed despite the crofters standing to gain through compensation payments if the LWF went ahead. This can be seen as an indication of the values attached to crofting land and the perceived threats posed by the LWF to the crofting way of life.

10.8 EXOGENOUS DEVELOPMENT – THE LWF

The LWF was promoted as helping to counteract global warming through its contribution to Scottish and UK renewable energy targets, the "invitation from the Department of Trade and Industry in 2001 to review the potential for the redevelopment of the Arnish Point fabrication facility which closed in 1999" and more generally the socio-economic benefits the LWF would bring to an economically disadvantaged area (LWP 2004). Despite LWP promoting the LWF as a driver for the local economy a total of 81 individual stakeholders (19% of the total) made critical references to the employment forecasts and 56 individual stakeholders (13% of the total) made critical references to the forecast level of community benefits. The majority of those criticising employment and community benefits forecasts resided in Lewis (73% and 70% respectively) and provided further evidence of the strength of opposition in Lewis as it would have been these communities that would have benefitted most. Evidence of a more widespread scepticism of LWP's forecasts (MSD 2, MSD 3 and MSD 4) lay in the perception that jobs in the tourism sector would be lost. Scepticism was

also fuelled by views about the non-availability locally of the necessary skills, the short duration of the jobs and the number of jobs that would go to incoming workers rather than local people. In summary the role of the LWF in assisting the Western Isles economy and demographic stabilisation was compared unfavourably with that of crofting.

Stakeholders' assessments of economic benefits contained in the ES were that they were misleading and 'hype'. MSDs 2 and 4 also made negative comparisons between what economic benefits the local communities would get and what would go to multi-national companies and estate owners, some of whom lived outwith the Western Isles. This echoed the views expressed about past events such as the Clearances where community sustainability had been sacrificed for corporate capital and profit. Toke (2002 p940) illustrated how with other wind farm developments promised community benefits had been used to influence the public in their favour. However, this analysis of stakeholders' discourses indicated that this had been unsuccessful in the case of the LWF.

10.9 STAKEHOLDERS' PROTECTION OF PROTECTED AREAS

Land management (e.g. crofting) plays an important role in determining the success of the relationship between environmental protection and land use (Convention of Biological Diversity 1992; Leitman 1998; Schelhas et al 2001; MacFarlane 2002; Woods 2003; Hubacek and van den berg 2006) and consequently PAs should be able to transcend the 'preservation' ethos (Powell et al 2002; Grandos 2007). However, disagreements between community landscape values and NSAs (10.3) were rooted in the divergence between community intrinsic landscape values and the valuation methodologies used by 'experts'. This case study illustrates that the latter had overlooked what Carlson (1997) considered to be expressive and other kinds of aesthetic qualities. Therefore stakeholders' connections with a valued landscape were strong and it was the absence of any legal protection that was

335

a concern. This case study therefore exemplified where the focus of resources and attention had been on iconic and designated landscapes at the expense of the local landscapes which had been disregarded by the influential few (Shoard 1982; Scott 2006; Jones 2007; Fairclough 2007 pp187-190 cited in Herring 2009 p63).

The LWF was proposed within an area of natural heritage protected for its international importance (RAMSAR, SAC and SPA). There was no evidence from the TDA that stakeholders expressed the same degree of criticism about the effectiveness of the PA system that some authors observed in their analysis of PAs (e.g. Bishop et al 1995; Cichowski 2000; Scott 1998; Baker 2001; Boothby 2004; Crofts 2004). These criticisms have included the negation of a holistic approach to conservation, the problem of diminishing returns as PAs proliferate, that PAs were too defensive a concept and that the PA system created geographical and functional separation. These latter points of criticism were refuted by stakeholders' references to the symbiosis between the natural environment and crofting and its socio-cultural values. Another criticism referred to in the literature was the relevance of scale with the natural environment being progressively destroyed on a large scale by agricultural activities whereas development resulted in a smaller area of the natural environment being affected (Goodier 1984). This is not supported in the LWF case study where it was claimed that small scale agriculture (crofting) was in harmony with the natural environment whereas large scale development (LWF) was against it.

The relationship between the public and PAs in general has been described by some authors as problematic. For example criticisms of a perceived imbalance in power relations resulting from a top-down designation approach with little public input (Ball 2002; Warner et al 2007), the reliance on scientific expertise at the expense of local knowledge and interests (Ball 2002), the biocentric approach to conservation thereby excluding the public

336

(Brown 2002), the diminution of the power of land owners and land managers by 'technocrats' (Ball 1985; Grando 2007) and the elitism of the PA designation (Selman 1998). PAs have therefore been described by some authors in the context of rural Scotland as an instance of environmental colonialism or as a political tool rationalised through a positivist framework to legitimise the claims of conservationists and statutory bodies (for example Mather 1993 p 374; Mackenzie 2004; Mackenzie 2006). This has led to the accusation that PAs in Scotland have in the past been planned and managed against people, run by central government, set aside for conservation and established for scenic preservation. Landscapes have also been seen as still evocative of privilege and managed for visitors and tourists disregarding the interests of local people (Selman 1998; Phillips 2003; Crofts 2004). In the LWF case study the opposite view prevailed. Stakeholders' goals were to protect a protected natural environment in the case of habitats and species and what was perceived to be a valuable but unprotected environment in the case of the landscapes. As Mackenzie (2006 p594) pointed out nature is "part of the everyday, not divorced from it – in practice and principle".

This Case Study has revealed that some of the claims concerning a general negative public perception of PAs are too simplistic. Both the objective, positivist evaluation of habitats and species at the centre of this PA debate and the stakeholders' own subjective evaluation appeared to be in harmony. Fig.7.8 shows clearly that stakeholders can be willing to embrace the legislative PA framework where a perception exists that 'their' constructions of nature and 'their' intrinsic evaluation of the natural environment are being put at risk by a proposed major development. There is also evidence of the non-UK stakeholders recognising the potency of these internationally important PAs by using them to support their objection discourses. Therefore despite the criticism that the PA top-down designation process does not involve the local community, stakeholders objecting to the

337

LWF have in the case of habitats and species embraced the outcome of a positivist methodology.

Stakeholders concluded that the sustainability of tourism and crofting depended on a protected and well managed natural heritage. From this viewpoint it could be argued that the local communities have 'colluded' pragmatically with what has sometimes been referred to pejoratively as an elitist scientific discourse. If protection measures have created a top-down framework as some critics claim then this Case Study has illustrated that protection measures can also be used as a solid foundation for stakeholders to promote their own interests. This reflects Foucault's observation that power is enabling as well as constraining (Foucault 1979 p194). Claims about widespread public negativity towards PAs do not take into account the ability and willingness of communities to deconstruct scientific evidence and then re-construct it to achieve their own objectives and protect 'their' valued natural environment. Thus the PA and planning framework can be used to empower rather than disempower stakeholders an issue that appears to have been underestimated in the literature.

10.10 WESTERN ISLES PLACE ATTACHMENT AND STORYLINES OF BELONGING

What Devine-Wright and Howes (2010 p278) referred to as the frequency of behavioural response to a proposed development, is reflected in patterns of stakeholder distribution. Although the methodology used in this research was essentially qualitative the data gathered did enable some quantitative analysis of stakeholder location by using a geographical typology based on Community Planning Units. The discourses analysed were those of environmental citizens who became stakeholders in the LWF decision-making

process and not those of environmental citizens who did not become stakeholders. An analysis of the latter may have resulted in a different geographical pattern. Nevertheless, the community polls taken within Lewis supported the findings of this stakeholder-based research that there was widespread concern about the impact that the LWF would have on some of the local communities in the Western Isles.

The geography of the Western isles may have had an influence on the pattern of stakeholder distribution. For example mainland Highland region with the closest cultural affinities to the Western Isles lies approximately 60 miles from Lewis across the Minch. The Island of Barra (with no stakeholders) lies approximately 91 miles (148 km) and the Island of South Uist (3 stakeholders) approximately 75 miles (120 km) south of the proposed development. To illustrate the geographical scales involved these distances are equivalent on the mainland to approximately the distance from Inverness to Perth and Inverness to Aberdeen respectively. It is not certain that in a similar mainland wind farm/conservation conflict involving individuals living 91 or 75 miles from a proposed wind farm that they would become stakeholders in the decision-making process.

Within Lewis the number of stakeholders and their numbers as a proportion of the total population decrease from L1 to L3 (Chapter 8). The rural communities in Categories L1 and L2 lie closest to the LWF and it is here that residents perceive their place values to be under most threat. Place attachment values may differ between rural areas and more urbanised areas (Cloke and Goodwin 1992; Marsden et al 1993; Shucksmith 1993; Pacione 1996; Boyle 1997; Thomas 1999; DEFRA 2001; Roberts et al 2002; Marans 2003; Beer 2004; Woods 2003; Scott 2008; Scottish Government 2009). This differentiation was also present in the Western Isles (Hall Aitken 2007; Scottish Office 1995) with the Stornoway area (L3) having the most urban characteristics. This may be an indication as to why there

is a difference in the number of objectors between the Stornoway area (L3) and rural Lewis (L1 and L2). In the rest of the Western Isles outwith Lewis the number of stakeholders decreased rapidly. This is despite a shared socio-cultural/economic/traditional land use bonding with the natural environment.

Two possible motivations for wind farm objections have been identified by Campbell and Marshall (2000) and these may be relevant here. The first presupposes the adoption of an egocentric perspective by stakeholders who participate instrumentally to attain self-interested ends. The second motivation has its roots in communitarian perspectives which lead to stakeholders' participation in order to prioritise collective well-being. The TDA revealed that some stakeholders were more purposively responding in the context of what Healey and Gilroy (1990) described as socially embedded people. These findings vindicated a choice of qualitative methodology such as DA which avoids the quantitative 'statistical abstractions' that may have overlooked stakeholders' subjective and qualitative beliefs, value rationalities and positioning within a crofting socio-cultural context.

Themes such as community, place, environmental values of place, place attachment and unifying governance played important roles in the composition of what Brown and Perkins (1992), Hajer and Versteeg (2005) and Stratford (2009) referred to as storylines of belonging. Individuals related to developments through the authorship of their own story of place (Sandercock 2003) and it was within this context that LWF discourses were composed. The TDA illuminates which storylines of belonging in planning related to what Sandercock (2003 p13) called the 'Golden Age Lost' with its moral ordering of storylines. In the context of the storylines woven by stakeholders the moral struggle was manifested by casting LWP perceived as representative of multinational capital and to an extent the Comhairle as the 'villains' of the storyline plot. Sandercock (2003) also claimed that

storylines could be isolating. Another problem is that isolation may be further exacerbated by the geographical boundaries that islands bring to 'belonging'. This isolating factor may create a climate which results in some individuals and some communities becoming so locally focussed that they become unaware of or disregard what is happening elsewhere (Sandercock 2003 p18). This was illustrated in stakeholders' LWF discourses by the absence of any reference to the Lingarabay Superquarry planning application in Harris. Although this application raised many of the same place related value issues as the LWF the planning arguments and protection policies used to guide objections and actions successfully in the rejection of the Superquarry application were not used by LWF stakeholders. Therefore it could be argued that storylines can focus but they can also isolate stakeholders in local planning campaigning.

The number and geographical distribution of stakeholders could be perceived as reflecting the strength of opposition by local residents wishing to maximise their own utility in the context of a sometimes irrational and selfish parochialism (the sometimes pejoratively referred to 'not in my back yard' or NIMBYs syndrome) (Bosley and Bosley 1998 p87; Wolsink 2000 p52). The TDA indicated higher levels of objections closer to the LWF which implied that it was the 'back yards' closest to the LWF that were perceived by their owners to be most at risk. This evidence contradicted what has been described as inverse NIMBYism (Warren et al 2005) where support for a development increased rather than dissipated with proximity to the development. However, the concept of NIMBY has been criticised for not taking into account both the way in which the perception and interpretation of environmental threats were filtered through the perceiver's 'web of beliefs' and the extent to which the perceiver regarded the threats as a disruption to place identity rather than just his or her interests (Devine-Wright 2005; Wolsink 2007; McClymont and O'Hare 2008; Devine-Wright 2009; Devine-Wright and Clayton 2010;

341

Scannell and Gifford 2010; Devine-Wright 2011). In this case study stakeholders' perception of place and place disruption happened within the context of the intrinsic and utility values attributed to the natural environment, the social and symbolic dimensions of place, the storylines of belonging and the disruption of social networks. This conclusion accords with those arising from other studies into the relationship between major wind farm developments and the disruption to place attachments (Devine-Wright 2005: Devine-Wright 2007; Devine-Wright 2009; Devine-Wright and Clayton 2010; Devine-Wright 2011). On balance therefore the conflation of proximity and the NIMBY hypothesis is invalid in providing a full explanation of stakeholder distribution patterns because of the general absence of evidence implicating ego-centrism in the LWF objection discourses,

10.11 STAKEHOLDER RETICULATION

Planning activity takes place within complex processes and relationships which include a myriad of networks of people which shape and are shaped by socio-dynamics (Healey 2007; Booher 2008). In this context Mander (2008 p285) identified a wind farm supporters coalition which was represented almost exclusively in this case study by the key stakeholders referred to in Chapter 6. Mander (2008 p285) also identified an anti-wind farm coalition classed as the 'landscape' protectors' coalition. However, it was evident that within the context of the LWF Case Study, Mander's (2008) reference to wind farm opponents as 'landscape protectors' was too restrictive. Issues such as biodiversity which were central to LWF discourses did not carry the same weight in Mander's analysis of the discursive storylines animating opposition to wind farms in North West England or in Woods' discursive analysis which centred on a case study of a wind energy proposal at Cefn Croes in Wales. While the TDA showed in relation to the LWF case study that the values attached to landscapes and the threat to them posed by the LWF formed a very

important constituent of objectors' discursive story lines many of them also incorporated other issues such as the perceived threat to biodiversity, culture and history.

It was evident in the research findings that stakeholder reticulation had been an important factor in both the formulation and dissemination of values and the storylines of belonging. There was evidence for this in the almost identical discourses composed by stakeholders at addresses clustered within a relatively compact geographical area (such as streets in settlements located on the mainland). This pointed to the likelihood of some collaboration or information sharing having taken place. However, the output of collective action by environmental citizens can sometimes be facilitated or circumscribed by the politics of groups (Ostrom 1990; Selman 2001; Futemma et al 2002). For example textual similarities can be detected between the RSPB's campaign discourse and some of the individual stakeholders' discourses. The similarities in the wording of individuals' discourses and common interest groups such as MWT and the Save Lewis Peatlands Campaign pointed to successful campaigning by these groups in mobilising objections.

MSDs provide the most convincing evidence of effective stakeholder reticulation by making up 65% of the total number of submissions. The MSDs provided further evidence opposing the view that objectors to wind farms are NIMBYs who possess ignorant, irrational and/or egocentric beliefs and values with the sole intention of maximising personal utility (Bosley and Bosley 1998; Wolsink 2000). MSDs were the outcome of a collective attempt to protect the valued physical and psychological resources of the environment as perceived through what Shumaker and Taylor (1983) and Lewicka (2008 p212) identified as the influences of friends and family bonds and personal experiences. The MSD therefore signified the affirmation of shared environmental values and a consensual acknowledgement of the threat posed to them by the LWF. The co-ordinated

stakeholder interaction leading up to the submission of an MSD was also evidence that Seidl et al's (2002) conclusion that environmental protectionists were less well organised in their activities than developmentalists was a generalisation that was not borne out in the LWF case study.

The close proximity of subscribers and their communities to each other and to the proposed LWF may have created the circumstances and the motivation for stakeholders with compatible views to subscribe to MSDs, particularly in the case of MSDs 2 and 4. This illustrates how the cohesiveness and 'goldfish bowl' of rural society can provide the opportunity for the creation of social capital and the production of a shared norms/values/trust discourse (Urry 1990; Cloke and Goodwin 1992; Marsden et al 1993; Philo and Parr 2004; Scott 2008). The role of the local media in facilitating reticulation may be inferred from the inclusion of the MSD 1 text in the local newspaper the Stornoway Gazette and the more widespread distribution of MSD 1 subscribers within the Western Isles.

MSD 6 was the output of the campaigning conservation organisation Proact and illustrated the increasing globalisation of stakeholder reticulation. The subscribers to MSD 6 included individuals attached to five academic institutions based in Italy (University di Parma), Austria (University of Natural Resources and Applied Science), Belgium (the Institute of Nature Conservation), Canada (University of Alberta, Edmonton) and the US (Harvard Medical School) and 2 funding organisations based in Hungary (Birdlife Hungary) and Germany (European Nature Heritage Fund). This international 'sub-networking' reflected what Wagner (2008 p 23-26) referred to in the context of academic research as a 'new invisible college' built on the foundation of international collaboration. However, no UK academic institutions were recruited and the reasons for this are not clear. As only one

subscriber to MSD 6 was based in the Western Isles the outcome of this reticulation process has little relevance to place attachment but has significant relevance to the issues surrounding Western Isles place association discussed below.

10.12 WESTERN ISLES PLACE ASSOCIATION

The large number of stakeholders (26% of the total submissions and 54% of the total number of individual stakeholders) located outwith the Western Isles had by becoming stakeholders in the LWF case study, developed an 'association' with the Western Isles. The typology outlined in Fig. 7.2 has helped to further analyse the geography of this place association by identifying four regions within Scotland, the rest of the UK, Europe and the other continents. One of the most important identifiable features of creating a place association was the close links between stakeholders and their having visited the Western Isles. Another was the correlation between the number and location of stakeholders and the distribution of the Western Isles Diaspora in Scotland. The cultural linkages between the Western Isles and Highland Region can also be viewed as potentially building a foundation for the development of a place association. The characteristics of place association provided further evidence questioning the importance and indeed the relevance of the NIMBY concept to this case study. These stakeholders' back yards' were clearly not directly affected by the 'imposition' of the LWF.

With the exception of MSD 1 there was no evidence that the local or national media played a role in creating place association. However, the subscribers to other MSDs living outwith the Western Isles clearly shared views with those based in the Western Isles. In contrast to the predominantly Western Isles and UK distribution of MSDs 1-5 the stakeholders recruited to MSD 6 were distributed world-wide. In this context there was evidence pointing to the crucial role played by the internet in overcoming any disadvantages

345

imposed by geographical and administrative boundaries to participating in the LWF debate. Although these stakeholders did not have a place attachment relationship with the Western Isles, when they were able to communicate their Western Isles' discourses they developed a place association relationship. The large number of MSD subscribers living outwith the Western Isles (especially in MSD 6) highlighted the importance and relevance of place association involvement in the LWF debate and provided quantitative evidence querying further the importance and relevance of the NIMBY based objection.

10.13 THE CHRONOLOGICAL DISTRIBUTION OF SUBMISSIONS

The only evidence available to analyse the chronology of stakeholders' transformative moments (Hards 2010) was the date given on stakeholders' submissions. One 'visible' stimulus for these moments was the statutory notice in the press which created the time frame within which submissions had to be made. Other potential 'visible' stimuli were the public exhibitions and meetings promoted by LWP although there was no firm evidence from the TDA to indicate a chronological relationship. There was strong evidence in the TDA that the opportunity to examine the planning application and the weaknesses identified in the ES played an important role in generating objections. This finding contrasted with other case studies where the findings indicated that the ES had limited significance as a stimulus either because there was an assumption that the meta themes had been addressed by the developer or because the ES was too technical and complex (e.g. Bell et al 2005; Mander 2009). Other possible stimuli for transformative moments and submissions have been identified as the stakeholder reticulation (discussed in Chapter 9) and stakeholders' interactions at family, community, island, UK and international level.

10.14 PLANNING FOR SUSTAINABILITY: RECONCILING GREEN ON GREEN

A primary objective of the planning system is to achieve what Mackenzie (2006 p579) referred to as socially just rural futures of place. In this case study planning played an important role within a rural setting of attempting to reconcile the potentially conflicting aims of constructing an on-shore wind farm and the protection of the natural environment. Stakeholders in both the wind farm supporters' coalition and the anti-wind farm coalitions used sustainability (despite it being a problematic and vague concept with multiple and sometimes competing definitions and conceptions such as weak and strong) to justify their viewpoints, actions and discourses. This echoed Warren's (2002 p120) observation about the Lingarabay development in Harris that the sustainability paradigm had such authority that it became appropriated by stakeholders for their own ends.

Environmental conflicts between development and the environment have traditionally revolved around reconciling the socio-economic benefits the development can bring and the biological and socio-cultural values of the natural environment. The 'green' lobby was typically associated unambiguously with those involved in the conservation of the natural environment (Warren et al 2005 p854). However, wind energy debates often have 'green' arguments on both sides with the use of wind power to sustainably generate electricity being another instance of 'green'. Therefore the viewpoints of the two 'greens' can have the backing of many environmentalists and environmental organisations (e.g. Friends of the Earth and RSPB). Where a wind farm proposal also results in environmental costs this creates for the 'greens' supporters a green on green dilemma.

Relative scales, e.g. local, national and global have been central to determining what constitutes the 'green on green' debate (Warren et al 2005 p 869). It was evident from the TDA that some members of the anti-LWF coalition used the local scale, that of protecting the local environment, in their green discourse. This was countered by the LWF supporters' argument about the need to use renewables to counter global climate change. However, individual discourses and MSDs also used the national and global scale in the context of the importance of the Lewis Peatland habitat both as a natural environment with intrinsic value and in terms of its utility value as an important carbon sink in the context of addressing climate change. The distribution of both anti-LWF and pro-LWF coalition members also had an international dimension. This pointed to decisions on the "rural futures of place" (Mackenzie 2006 p579) being no longer determined by local forces alone.

Stakeholders' submissions made no references to climate change scepticism. This may support Szarka's (2004) assertion that the legitimacy of climate change discourse has now been acknowledged by both pro and anti wind farm discourse coalitions. What was apparent from the LWF objectors' arguments was that apart from the need to reduce greenhouse gasses, there was no consensus about the most appropriate technologies for tackling anthropogenic climate change. The views expressed about wind farms and their role in tackling climate change illustrated a wide range of opinions. These included: scepticism about the effectiveness of wind farms in reducing greenhouse gasses; the subsequent rise in electricity prices; the negative impact on local businesses; the obsolescence of the turbine structures in a 'few years'; doubts about its reliability; dependence on subsidies; and the cost of laying cables to the mainland. However, some stakeholders in the anti-LWF coalition still claimed to be in effect what Wolsink (2000 p57) claimed to be 'qualified supporters' of wind farms with their support dependent upon the specific location, nature of wind farm ownership and a subjective assessment of scale.

Therefore although it was evident from their discourses that some stakeholders were hostile towards large wind farms they did give some support for small community and domestic schemes.

The case put forward by LWP to support the LWF was founded on rational scientific, technical and economic grounds. The ES had an important role to play in communicating this case to stakeholders although judging by the level of criticism of the ES this was not very successfully performed. Nevertheless, it has been argued that communication with the public should lie at the heart of the planning process and that citizen participation should be central to communicative planning (e.g. Forester 1989; Healey 1996). The opportunities made available for meaningful participation in the decision-making process has also been linked to satisfaction with governance (Best Value User Satisfaction Survey 2007). Meaningful participation in this context might have enabled a degree of reconciliation between conflicting views with some acceptance of the result and the retention of support for the decision-makers (Laurian 2009 p370-372; Lyons 2007). The salience of the perceived weaknesses in governance was evident in stakeholders' conclusion that the communication process initiated by the key stakeholders was flawed and that a local plan would have allowed them to put more effectively their views on land uses generally and the LWF in particular. In the absence of a local plan some stakeholders argued for a public inquiry which they felt would have enabled them to have had a more meaningful input into the decision-making process.

Key stakeholders established several participatory mechanisms that should have laid the foundations for communicative reasoning along Habermasian lines. However, Fagan et al (2006) found the LWF consultation process had flaws which lessened its effectiveness. In

addition Ellis (2004 p 1552) warned that although community participation represented the ideal of maximising citizen involvement in the planning process a number of recent studies had revealed that participatory practice often failed to live up to the theoretical ideal. If the effectiveness of the consultation process had been weakened it could as Lidscog et al (2005 p102) suggested, have resulted (in this case study) in the key stakeholders' own assumptions, definitions and translations of the 'public' and their concerns dominating. In any event the differences between stakeholders' value rationalities may have been so great that achieving any reconciliation through the planning process might have been difficult or unlikely.

Despite the level of opposition evident in the large number of objections from a wide range of individuals and from community polls support was eventually given to the LWF by Comhairle nan Eilean. Consequently some stakeholders perceived the Comhairle to be supporting LWP and the construction of the LWF despite the high level of opposition. The number of objectors increased to 6,131 (with 4,573 (75%) coming from the Western Isles) after the Comhairle had submitted its consultation response in support of the LWF (the Scottish Executive's response to a written question). Kemp (1990) posited the view that levels of objection were partly due to the low level of trust in those making the regulatory decisions. This is a conclusion that may be relevant here due to the low level of trust in the Comhairle referred to by objectors to the LWF.

The perceived weaknesses in participation opportunities, the failure to consult and communicate effectively with the public and the perception that elected representatives were acting in an unaccountable manner, created fertile ground for a lack of trust in the LWF decision-makers. Effective democratic governance requires trust, a complex and

350

multi-dimensional concept combining the competence to act and a willingness to take decisions as mutually agreed as the point at which stakeholders defer to the planning decision despite what may be their conflicting values and objectives (Laurian 2009). Habermas (1984) in his theory of communicative rationality identified the conditions for trust as being comprehensibility, truthfulness, sincerity, legitimacy, equal standing and respect for all forms of knowledge, inclusiveness, openness and transparency. What was clear from the stakeholders' discourses was that many stakeholders distrusted the Comhairle, the applicant (LWP) and some of the landowners concerned and therefore at least one of these conditions was perceived as being absent. Without the presence of trust any form of communication would have been unsatisfactory (Slovic 1996; Laurian 2009). Despite the criticisms of the council and its members, there were very few references to the planning officials. The reasons for this are not apparent but it may have been because they were considered to be professionally neutral in the decision-making process or perhaps because their role in the process was not transparent to stakeholders. This situation may have been different once the planning officer's report had been completed.

A weakness in the Comhairle's handling of the LWF application was the perceived lack of accountability, defined by Dowdle (2006 p3) as a belief that persons with public responsibilities should be answerable to the 'people' for the performance of their duties. A perception of a powerful council 'making things happen' and driving networks had the potential to create a sense of stakeholder powerlessness and generate a distrust and cynicism of the regulators (Dicken et al 2001; Hardin 2002). Therefore the number of calls for a public inquiry can be seen as an attempt to divert the Scottish Executive's attention away from the validity of the views of the Comhairle acting in their role as principle consultee. The public inquiry has been described as an arena enabling interested parties to come together, present arguments and evidence and examine a specific development

proposal (the LWF) in detail (Rough 2011 p24). It may be that within this more neutral arena stakeholders' felt that the 'truth' would emerge. However, the TDA of many stakeholders' discourses revealed that they perceived that the main ingredients of truth, factually correct information, honesty and integrity (McKay 2010 p118), were largely absent from the LWF planning process.

The research findings have shown that for anti-LWF stakeholders who had anticipated that the Comhairle would support the LWF application the planning system had not successfully fulfilled this role. There was only one stakeholder objection critiquing the planning system per se referring to planning as "serving itself". However, there were criticisms that the communicative planning process used had played a major part in the Comhairle not reaching the stakeholders' desired planning outcome. The research findings also revealed stakeholders' perception that a decision had been 'imposed' upon them and that the decision-makers had not acted in a manner that made them accountable and trusted. In effect they concluded that the planning process had failed because of weaknesses in governance. Consequently stakeholders' felt disempowered because of a perception that the natural environment value discourses that they had submitted for consideration in the planning process had not been adequately taken into account.

CHAPTER 11 CONCLUSIONS

11.1 INTRODUCTION

This chapter contains the research findings, offers some methodological reflections, highlights the contribution this research has made to determining the social acceptability of onshore wind farms and suggests where further research would take forward some of the main issues raised.

The research question posed was:

What are the values that motivate members of the public acting within the public sphere to object to a major wind farm development in a protected area?

The Lewis Wind Farm (LWF) was chosen as a case study in an attempt to find an answer to this question. The data used was contained in the planning submission discourses of stakeholders in the planning decision-making process. The theoretical lens chosen to analyse this data was a Thematic Discourse Analysis (TDA) using a combination of meta themes and discourse induced themes which were based on the three dimensions of the sustainability paradigm (environmental; economic; and socio-cultural).

11.2 THE RESEARCH FINDINGS

11.2.1 STAKEHOLDER GENESIS

A catalyst for citizen involvement in the planning process was what Devine-Wright and Clayton (2010 p267) referred to as 'feared possibilities'. As only three stakeholders

supported the proposed LWF it was evident that the overwhelming perception among stakeholders was that the LWF would generate for them 'feared possibilities'. Stakeholders' discourses can evolve from within complex networks and power relationships including a myriad of networks of people (Foucault 1991; Hillier 2000; Healey 2007; Booher 2008). There was evidence from the findings that individual stakeholders' objection discourses did not necessarily occur spontaneously but through engagement with family, community members, conservation organisations and the media. Stakeholder reticulation at local, national and international levels played an important role in the genesis of shared values and the composition of the discursive storylines of stakeholders acting as individuals or as participants in groups of like-minded stakeholders. Multi-Stakeholder Discourse (MSD) 6 provided an excellent example of an output from stakeholder synergy at an international level.

Constituting 65% of the total submissions the composition of the mutually agreed discourses of transient and informal voluntary alliances of stakeholders (MSDs) formed a major component of the total number of LWF discourses. This output emerged from voluntary stakeholder collaboration at a variety of geographical scales and illustrated that individual stakeholders had the ability to become 'organised publics' and engage in the planning decision-making process. The MSD texts revealed differences in thematic content (some of which were significant) between each other and also between MSDs and some individual stakeholders' submissions. The predominantly international recruitment of stakeholders to MSD 6 provided strong evidence to suggest limitations concerning the relevance of the NIMBY and proximity hypotheses in explaining wind farm objection discourses in this case study. Apart from the statutory notice which set the time-frame for all submissions and the length of time taken for stakeholder reticulation to produce an

MSD the importance of any other factors influencing submission chronology were uncertain.

11.2.2 STAKEHOLDERS' INTRINSIC AND UTILITY VALUES OF THE NATURAL ENVIRONMENT

Stakeholders' evaluation of the natural environment was examined using intrinsic (IVE) and utility (UVE) values as analytical tools (Moore 1992; Ross 1930; Brennan and Lo 2009; Zimmerman 2010) despite the 'purity' of such value distinction being queried (e.g. Beardsley 1965). The findings showed that these values had been influenced by both positivist scientific rationality and post-positivist social and cultural traditions. The historical past of the Western Isles (e.g. The Clearances), the Gaelic culture and the social structures embedded in crofting were central to stakeholders' social constructions of nature, their perceptions and experience of the natural environment. In this contextualised evaluation of the natural environment the absence of National Scenic Areas (NSAs) within the location of the proposed LWF illustrated a gap between stakeholders' subjective measurements of this landscape's value and the more rational quantitative methodologies used in the delineation of NSAs (Linton 1968; Turner 1975). This schism was also evident in stakeholders' critique of LWP's landscape assessment methodology which they believed had wrongly concluded that the proposed LWF location was acceptable from a landscape perspective. Stakeholders' perception therefore was that the values inherent in 'their' intrinsically valued landscapes had been given inadequate consideration in the PA designation process and by the developer. As a consequence 'their' landscape would be 'enclosed', reconfigured and desecrated by the LWF and transformed instead into an industrialised landscape. This absence of a methodological consensus as to which landscapes should be valued and protected could make it more difficult for stakeholders' to defend their landscape value discourse in the planning decision-making process.

Despite there being no consensual 'expert/non-expert' methodological approaches to landscape valuation a consensus was more apparent in the evaluation of habitats and species. Although stakeholders' assessment of ecosystems assigned anthropocentric values to them comprising socio-cultural, historical and utility values they also assigned significant biocentric components to ecosystems. Rational and positivist evaluative methodologies were used by statutory bodies to determine which habitats and species were suitable for statutory designations such as SPAs, SACs and RAMSAR sites, designations which reflected the international importance of the IVE of the LWF site. Stakeholders' references to and choice of international PAs and threatened species and habitats weakened any claim by the pro-LWF discourse coalition that a scientific knowledge deficit existed in stakeholders' discourses and maximised the strategic value of their conservation discourses. For example the Golden Eagle was chosen, especially by stakeholders based outwith the UK, because of its iconic status and the legal protection also afforded to it and the Lewis Peatlands habitat because of its recognised international importance and its designated statutory protection. In comparison with the divergence over landscape values there was convergence between 'experts' and 'non experts' on the value of the habitats of the location of the proposed LWF. This enabled stakeholders' to strengthen their case for protecting 'their' valued habitats from threats posed by the LWF.

As indicated above the findings revealed that there was a consensus on the importance of habitats and species within the LWF site and the need for their protection. Consequently instead of resenting an 'imposition' of PAs on the natural environment stakeholders used the results of the rational evaluation and positivist PA designation methodology for their own strategic ends. This stakeholders' support for PA designations contrasted with other literature (e.g. Mather 1993; Ball 2002; Mackenzie 2004; Mackenzie 2006) which

indicated that strong community opposition to PA designations was more likely to be the norm. This support also illustrated that the relationships that individuals and communities have with PAs can be complex. In other case studies the focus on visual amenity has been the principal concern and this has led researchers to largely disregard threats to biodiversity as the basis for objection to wind farms (e.g. Woods 2003; Warren et al 2005; Mander 2008). However, this lack of focus on biodiversity as a basis for objections in other analyses was not borne out in this case study.

The 'feared possible' impact of the LWF on the IVE extended to its perceived detrimental impact on the QOL of local residents. The emphasis by many stakeholders on visual and noise pollution mirrored the findings of some other wind farm studies (e.g. Pederson and Waye 2007 in relation to noise pollution). However, in addition to these concerns QOL issues such as turbine shadow flicker and road traffic safety were raised by stakeholders in the LWF case study. Some stakeholders attempted to quantitatively assess the LWF's impact on their QOL through references to the likely devaluation of their property as a consequence of the LWF's construction. The attempt by LWP to put forward a case that the LWF's employment and community benefits would improve the well-being of islanders was met with scepticism by stakeholders. This was due to some extent to an inherent absence of trust in the developer (LWP) and doubts over the accuracy of their employment calculations.

Stakeholders' perception of a close IVE and UVE interrelationship was evident in the discourses of both Western Isles residents and non residents. The findings showed that potential damage by the LWF to tourism was an important example of this. The commodification of the IVE and therefore its importance to the local economy was also

evidenced by the number of small business owners objecting to the LWF on the basis that it would jeopardise the viability of their business through damage to the IVE. The need for a cohesive approach to marketing and promoting Western Isles tourism was evident in the existence of a single Western Isles tourist board to carry out this task. However, within the Western Isles the discourses indicating concerns about the LWF's threats to tourism were largely restricted to rural Lewis. This illustrated the insularity of some threat perceptions within the context of a group of physically and culturally similar islands. The importance of an approach to evidence gathering and presentation governed by considerations of economic rationality and objective argument was revealed in stakeholders' use of the statistical data available for the composition of their commercially focussed discourses.

Another major finding concerned the perceived threats posed by the LWF to traditional land uses and particularly crofting, the most extensive traditional land use with its dual role in rural demographic stability and the one most embedded in the socio-cultural fabric of the Islands and the islanders' way of life. The large divergence between stakeholders' evaluation of crofting and the low priority given to crofting by LWP was evident in some stakeholders' criticisms of LWP's Environmental Statement. Crofters emphasised the important symbiosis between crofting and the natural environment and highlighted the importance attached by them to their role as sustainable users (and in effect guardians) of the land. These discourses also enabled PA designations to be used by stakeholders to strengthen their case against the LWF showing once again how conservation and crofting discourses which were often regarded as conflicting in environmental politics (e.g. Mather 1993; Macdonald 1998; Mackenzie 2006) married together in this case study. However, despite the importance of traditional crofting practices throughout the Western Isles there was more evidence of insularity in the public reaction to the LWF by the dearth of submission discourses on this topic from within the Western Isles outwith Lewis.

11.2.3 PLACE ATTACHMENT AND PLACE ASSOCIATION

Western Isles geography and issues relating to stakeholder place attachment played an important role in understanding stakeholder distribution and discourse patterns. The findings revealed that elements of both IVE and UVE were present in the strong sense of place attachment and storylines of belonging possessed by stakeholders. Where stakeholders lived in relatively close proximity to the LWF disruption to place attachment and associated communitarian values rather than the 'irrational and selfish parochialism' of NIMBYism motivated objections and influenced stakeholders' discourse value statements. For example concerns about the LWF's negative impact on the natural environment incorporated stakeholders' fears about the threat to crofting with its guardianship of community values and cultural norms. Stakeholders' fears that their emotional investment in physical and social attachments to place would be disrupted by the LWF were made concrete in their references to the 'industrialisation' of an unspoilt natural wilderness and the sense of enclosure that they perceived would result from what was described as a 140 mile fence. The importance of stakeholders' perception of potential 'place disruption' concurred with the findings in other objections to wind farm research (e.g. Devine-Wright 2005; Devine-Wright 2007; Devine-Wright 2007; Devine-Wright and Clayton 2010; Devine-Wright and Howes 2010; Devine-Wright 2011). The similarities in discourses between stakeholders who emphasised the impact of the LWF on their place attachment values (Western Isles residents) and place association values (stakeholders living outwith the Western Isles) provided further evidence to suggest the reduced relevance of the NIMBY hypothesis to this case study.

11.2.4 STAKEHOLDERS' PERCEPTION OF THE LWF AND SUSTAINABILITY

Issues relating to scalar and temporal dimensions of sustainability have been important in fully understanding the stakeholders' discourses. The anti-LWF coalition adopted a local scalar dimension to justify their positions on what they regarded as the inappropriately large scale of the LWF in the context of 'their' natural environment, the negative impact on local social, cultural and historic narratives and on tourism, crofting and local economic sustainability. The pro-LWF coalition also advanced their argument on a local scale by forecasting that the LWF would help in stabilising the local economy. At a national and international level the anti-LWF coalition stressed the international importance of the Lewis Peatlands as a habitat (SAC, SPA and RAMSAR site) and as a carbon sink that would be disturbed by the LWF's construction. The importance of this international perspective was reflected in the support given to it by the MSD 6 stakeholders. The LWF supporters' national and international perspectives on the value of the LWF were orientated towards its perceived contribution to meeting the Scottish Government's renewable energy targets and its role in helping to reduce the use of fossil fuels implicated in global climate change.

A temporal dimension to issues surrounding the sustainability of the LWF was incorporated within both pro and anti-wind farm discourses. For example in the context of the LWF's feared negative impacts on both the IVE and the UVE some stakeholders perceived these as short term e.g. in relation to the spontaneous impacts on the landscape, or as long term e.g. in relation to the negative impact on the overall bequest value of the natural environment which stakeholders wished to bequeath to future generations. However, LWF supporters were more focussed on the dangers posed to the natural environment by climate change thereby also adopting a longer time frame. Nevertheless, the perception of LWP by some in the anti-wind farm coalition was not of an organisation

with the long term aim of ensuring environmental sustainability by tackling global climate change but of a multi-national company motivated towards generating short-term profits. This replicates the findings of Barry et al (2010) that objectors to wind farms often present supporters as disingenuous by claiming that they obscured their true motive – making profits, behind rhetoric of saving the environment. In the process of generating these profits the stakeholders judged that LWP would damage what stakeholders perceived as a valued natural environment of local, national and international importance.

Warren et al (2005) claimed that in debates over wind energy the issues of environmental sustainability became polarised as a result of advocates and opponents adopting diametrically opposed spatio-temporal dimensions. However, this was not borne out in the findings of this case study. The absence of a dispute between supporters of and objectors to the LWF over the legitimacy of global climate change discourse tended to support Barry et al's (2010) point that each side of the wind farm debate had 'an intimate' awareness of the other's argument. The findings of this case study were also in accordance that of Wood's (2003) discourse argument that an anti-wind farm coalition used both local and global scales in their objection discourses. The interconnectivity between temporal and spatial frameworks was evident in both anti- and pro- LWF coalitions' discourses suggesting that the use of dichotomies such as local landscape protectors versus global environmentalists failed to explain fully their LWF positions.

Where can stakeholders and their LWF discourses be positioned within the sustainability paradigm illustrated in Fig. 5.2 that constructed the basic framework for this research's methodology? The stakeholders whose discourses focussed on the IVE can be positioned primarily within the environmental sphere as they embodied a more environmentalist

concept of sustainability (see Fig. 4.1). Stakeholders whose IVE discourses incorporated the UVE e.g. tourism and crofting encompassed both environmental and economic spheres and can be positioned at the intersection of these spheres. However, because of crofting's important role in supporting the cultural heritage of the Western Isles crofters can be perceived as being incorporated into all three components of the sustainability paradigm. The pro-LWF coalition can also be located within the economic/environment sustainability overlaps based both on the LWF's relationship with the UVE (the commercial utilisation of the wind) and the IVE (the role of the LWF in tackling climate change). Almost all stakeholders took issue with LWP's claim to both environmental and social sustainability by placing the LWF exclusively within the economic sphere of sustainability because in their view environmental values were being compromised by the LWF. Some stakeholders considered that the LWF was not even worthy of this placement because the wind farm was considered the economic benefits promised were illusory. However, although stakeholders' used sustainability themes to support their anti-LWF narratives there were no specific references to the term sustainability in their discourses. This finding may reflect the difficulty of incorporating into their planning discourses such a multi-faceted concept or that the public's comprehension of sustainability as a paradigm was low (e.g. Owens 1994; Scottish Executive 2005a).

For the conservation organisations and stakeholders who believed strongly in the environmental benefits of wind energy but also valued the natural environment there could arise what Warren (2005) referred to as the 'green on green' dilemma. This had its origins in the paradox that the requirement to protect the natural environment sustainably required a reduction in the use of unsustainable fossil fuels by constructing potentially environmentally damaging onshore wind farms. This dilemma was illustrated in the findings of this case study where those stakeholders who supported wind farms in principle

(qualified supporters) also recognised the potential of the LWF to result in negative environmental consequences. For some stakeholders however, the LWF debate was simply perceived as positioning the green objective (the need to protect a valued natural environment) against a commercially motivated large wind farm development legitimised by the developer under the guise of greenness. Stakeholders' negative perception of LWP was evident in the LWF being portrayed as a product of profit orientated corporate capitalism. In this context the value conflicts and perspectives involved were more akin to the 'traditional' environmental conservation versus the economic rationality and development benefits debate rather than a conflict between two shades of green. This conclusion contradicted those of some researchers (e.g. Warren et al 2005) who claimed that the conservation versus development debate had been transcended in debates over renewable energy. Thus almost all the LWF stakeholders when faced with a choice between protecting a valued natural environment and supporting an on-shore wind farm (LWF) which its proponents claimed would bring economic benefits and 'sustainably' generate electricity, chose overwhelmingly to object to the wind farm.

11.3 THE WORKING HYPOTHESIS

A working hypothesis was used to guide the research process. This stated that:

Stakeholders' intrinsic and utility valuations of the natural environment play an important role in their motivation to participate in the wind farm planning process and in the composition of the discourses contained within the submissions made.

The hypothesis proved to be accurate with 97% of the stakeholders' submissions received by the Scottish Executive making reference to these values. However, the research also revealed that the hypothesis was incomplete with a large proportion of the stakeholders (88% of the total) also emphasising the theme of governance. These stakeholders

expressed the concern that a democratic deficit existed and that the local governance involved in the LWF adjudication process was inadequate. This perception of a democratic deficit can be seen as an inversion of the 'democratic deficit' hypothesis which depicted objectors to wind farms as being the unrepresentative minority with too much power (Wolsink 2000; Bell et al 2005). The most often quoted weaknesses related to the perceived dearth of consultation opportunities and the inadequacy of the means whereby stakeholders' values could be given consideration within the planning decision-making process. Environmental justice which required opportunities for all affected by environmental decisions to be heard (Scottish Executive 2006 p113) can therefore be perceived not to have been achieved. This finding reflected Todd and Zografos (2005) conclusion that the negative impact of wind farms on rural areas can be perceived as an example of environmental injustice. In this case study stakeholders had also concluded specifically that the communicative planning process had failed because of the perception of a top-down approach to decision-making and that the Comhairle had become unaccountable to its electorate. The evidence here for the sense of environmental injustice and the reasons for it came from the members of the public who had become stakeholders in the planning process. Consequently the extent to which these views were representative of those of the wider public cannot be determined.

11.4 METHODOLOGICAL REFLECTIONS

The primary data for this research comprised the 1159 submission discourses representing the views of all 2007 individual stakeholders thereby creating a 100% 'gold standard' data set. The large number of objections to the LWF made the systematic management of the volume of research data crucial and this was aided by giving each submission a unique number reference. The use of stakeholders' own discourses as units of analysis helped to reduce any direct involvement by the researcher in collating data or in any potential

researcher bias for example resulting from the use of questionnaire methodologies and the interpretation of the responses. Quotations from stakeholders' discourses were used where appropriate to add greater validity to the analysis. Quotations also provided a 'reality check' and helped to reduce further any potential researcher bias. Consequently the robustness, validity and transferability of the findings were maximised. The historical nature of the data and the resultant time lapse made it inappropriate to use validity checks based on follow-up stakeholder interviews. This would be essentially comparing stakeholders' views held at the time of the LWF debate and those currently held, an interesting but irrelevant comparison in the context of this research. Comparing the views of the stakeholders with those of the non-stakeholders identifiable from other sources such as the media would again have been interesting but irrelevant in finding an answer to the research question. The use of more quantitative methodologies for triangulation would have been inappropriate for the reasons given in Chapter 5 as to why the qualitative methodological approach was chosen. However, the meta-thematic methodology used here had some element of quantification built into it and this has enabled some triangulation of the Thematic Discourse Analysis (TDA) results.

The TDA methodology employed a combination of thematic and discourse analysis which created an analytical tool capable of examining stakeholders' submissions at both macro and micro levels. The working hypothesis was important in helping to navigate through a complex landscape of stakeholders' discourses and in focussing the research on answering the research question. In contrast to reductive methodologies such as Content Analysis (CA) the use of TDA enabled the interpretation of texts through adopting a post-positivist in-depth deconstructive reading of them and a contextual analysis able to reveal the underlying assumptions behind their composition. The TDA also facilitated a textual analysis that provided a non-definitive insight into the important socio-cultural

understandings, power relationships and also the significance of the values stakeholders attached to 'place'. Qualitative approaches such as TDA can also reveal the richness of the textual data obtainable from stakeholders' planning submissions. The use of a geographical typology to map the distribution of planning submissions enabled issues such as place attachment, place association and the relevance of the 'proximity hypothesis' to be analysed in the context of the LWF case study.

The methodological framework was constructed using the most widely accepted sustainability paradigm as a basis for identifying meta themes. This thematic framework was reinforced by using discourse induced themes (DITs) scoped from the data. The structured methodology proved effective in analysing stakeholders' discourses. The thematic approach also enabled some basic quantitative analysis of submissions to discover the frequency of stakeholders' references to individual themes. The use of intrinsic and utility values to assess stakeholders' valuation of the natural environment proved to be an important and successful part of the methodological approach used to deconstruct stakeholders' texts. Where this intrinsic/utility value differentiation became less clear it illustrated the blurring of the distinction predicted by Beardsley (1965). However, rather than being a weakness this 'blurring' of values illustrated that there had been a convergence between stakeholders' IVE and UVE (as illustrated by crofting) and revealed the breadth of the anti-LWF discourse coalition.

The results of positivist approaches to planning research involving quantitative methodologies have tended to be more descriptive and consequently deficient in fully understanding the value conflicts surrounding wind farms (Ellis et al 2007). Reflecting the recent more discursive turn in planning research the use of the qualitative context-sensitive

case study methodology applied here has demonstrated how effective it can be in the analysis of stakeholders' value systems and in revealing the subtle nuances embedded in their wind farm discourses. Islands (such as those in the Western Isles) can be regarded as 'natural laboratories' possessing a geographic uniqueness differentiating them from non-island environments (Quiroga 2009; Stratford 2009). Therefore this context-sensitive case study proved to be successful in facilitating an in-depth analysis of the wide range of complex and often contentious issues surrounding onshore wind farms. However, the Western Isles has faced the same environmental, economic and demographic issues as many remote rural areas on the Scottish mainland (Beer 2004). Consequently the methodological approach taken in this case study to investigate the social acceptability of an onshore wind farm could have the potential for a wider application in other rural contexts.

11.5 THE MAIN FINDINGS AND SUGGESTIONS FOR FURTHER RESEARCH

Wind farms and the controversies surrounding them have increased significantly as national renewable energy targets are set and met. However, reaching a consensus on methodological approaches to ascertaining the social acceptability of wind farms is unlikely due to the wide variation in wind farm sizes, the physical and social milieu within which they are to be located and the different theoretical assumptions and units of analysis used by researchers. For example other research into the conflicts surrounding the LWF was undertaken by Fisher and Brown (2009) using semi-structured interviews and Q methodology. However, their research was centred on key stakeholders in the wind farm coalitions. For example Comhairle nan Eilean Siar and LWP within the LWF supporters' coalition and representative groups such as the RSPB and Moorlands Without Turbines within the anti-wind farm coalition. By contrast the focus of the current research has been

entirely on the planning submissions of individual stakeholders and their informal groupings.

As was indicated in Section 11.4 a value-based TDA has been successful in this case study in identifying and analysing the motives and narratives involved in the composition of stakeholders' submission discourses. Consequently this methodological approach has the potential to be utilised more generally in the complex and often contentious issues relevant to major onshore wind farm developments. The main research findings listed below may also be regarded as a pointer to where the social acceptability of major wind farms could be addressed by additional more focussed further research:

- The increasing influence of complex interpersonal, community, national and international relationships in the composition and dissemination of mutually agreed wind farm discourses (MSDs)

- The insularity of threat perceptions in relation to a major wind farm and its impact on the integrity of environmental values despite residence on proximate and culturally similar islands

- Stakeholders' discourses contained both a plurality and hybridity of values as noted by Jessup (2010) in his own DA of wind farm disputes. This plurality and hybridity were exhibited in the perceived symbiosis between the intrinsic and utility values of the natural environment and challenged the conclusions of some researchers (e.g. Woods 2003)) that objections to wind farms were motive largely by intrinsic and aesthetic values with little attention being paid to the utility values of the natural environment

- The complexity of the relationship between stakeholders' evaluation of the natural environment and Protected Areas (PAs). Stakeholders' support for rather than opposition to statutory designations was invoked to bolster their environment/wind farm discourses

- The importance of aesthetic, experiential, spiritual, socio-cultural and communitarian narratives and local historical legacies in shaping stakeholders' place attachment and place association values and the importance of these values in the reduction of the relevance of the NIMBY hypothesis as a motivating factor in objection discourses

- The radically different cognitive and evaluative perceptions of anti-wind farm and pro-wind farm coalitions concerning whether a major wind farm development was environmentally, socially and economically sustainable despite the adoption of similar spatio-temporal parameters

- The implication contained in some stakeholders' wind farm discourses that there was a lack of trust in the developers, that there were local governance weaknesses and that the communicative planning process had been unsuccessful potentially leading to an environmental injustice outcome from the planning decision-making process.

Planning submissions have tended to be ignored as a source of data in wind farm research. This research has revealed that these submissions can provide a rich source of 'uncorrupted' data (from a researcher's perspective) with the potential to obtain important insights into public attitudes towards the social acceptability of wind farms. In addition wind farm research generally has tended to be focused on a relatively limited number of issues e.g. visual amenity and NIMBYism. The value-based qualitative methodology used here illustrated how understanding environmental and 'place' values and their disruption

and the role of perceived power inequalities in this disruption, benefitted from contributions from disciplines such as history, geography, politics and environmental psychology. More of the research into the plurality and hybridity of the values contained in planning discourses (Jessup 2010) for example those relevant to rural land use conflicts involving the construction of onshore wind farms, could therefore be better informed by taking a more interdisciplinary approach.

.

BIBLIOGRAPHY

Aitken M, McDonald S and Strachan P (2008) Locating 'Power' in the Wind Power Planning Process: The (not as) Influential Role of Local Objections. *Journal of Environmental Planning and Management*, Vol 51, No 6, pp777-799.

Albrechts L (2002) The Planning Community Reflects on Enhancing Public Involvement. Views from Academics and Reflective Practitioners. *Planning Theory and Practice*, Vol 3, No 3, pp331-347.

Alexander A (2008) Public Participation in Planning - A Multidimensional Model: The Case of Israel. *Planning Theory and Practice*, Vol 9, No1, pp57-80.

Allanson P and Whitby M (1996) *Prologue: Rural Policy and the British Countryside* in P Allanson and M Whitby (Eds) *The Rural Economy and the British Countryside*. London: Earthscan, pp1-18.

Amin A and Hausner J (1997) *Beyond Market Hierarchy: Interactive Governance and Social Complexity*. Edward Elgar, Cheltenham.

Anderson CJ and Paskeviciute A (2006) How Ethnic and Linguistic Heterogeneity Influence the Prospects for Civil Society: A Comparative Study of Citizenship Behaviour. *The Journal of Politics*, Vol 68, No 4, pp783-802.

Angus S (1997) *The Outer Hebrides, Moor and Machair*. The White Horse Press, Cambridge.

Angus S (2001) *The Outer Hebrides - The Shaping of the Islands*. The White Horse Press, Cambridge.

Antaki C, Billig M, Edwards D and Potter J (2003) Discourse analysis means doing analysis: A critique of six analytic shortcomings. *Discourse Analysis Online*. *http://extra.shu.ac.uk/daol/articles/v1/n1/a1/antaki2002002-paper.html*

Angileri V and Toccolini A (1993) The Assessment of Visual Quality as a Tool for the onservation of Rural Landscape Diversity. *Landscape and Urban Planning*, Vol 24, Nos 1-4, pp105-112.

Appleton J (1975) Landscape Evaluation: The Theoretical Vacuum. *Transactions of the Institute of British Geographers*, Vol 66, No 1, pp120-123.

Arnstein S (1969) A Ladder of Citizen Participation. *Journal of the American Institute of Planners*, Vol 35, No 4, pp216-224.

Audit Commission (2005) *Local Quality of Life Indicators-Supporting Local Communities to become Sustainable.* Audit Commission, London. *http://www.audit-commission.gov.uk/SiteCollectionDocuments/AuditCommissionReports/NationalStudies/Q ofL2005.pdf*

Ayres RU, van den Bergh JCJM and Gowdy JM (2001) Strong versus Weak Sustainability: Economics, Natural Sciences and 'Consilience'. *Environmental Ethics*, Vol 23, No 2, pp155-168.

Baker H (2001) The UK Special Protection Area Network". *Wetland Bird Survey*. No 14, pp4-5.

Baker S (1997) (Ed) *The Politics of Sustainable Development. Theory, Policy and Practice within the European Union*. London: Routledge.

Ball DF, Dale J, Sheail J and Heal OW (1982) *Vegetation Change in Upland Landscapes*. Institute of Terrestrial Ecology, Grange-Over-Sands.

Ball J (2002) Towards a Methodology for Mapping 'Regions for Sustainability' using PPGIS. *Progress in Planning*, Vol 58, No 2, pp81-140.

Ball SN (1985) Sites of Special Scientific Interest. *Journal of Planning and Environment Law*, November pp767-777.

Barry J, Ellis G and Robinson C (2008) Cool Rationalities and Hot Air: A Rhetorical Approach to Understanding Debates on Renewable Energy. *Global Environmental Politics*, Vol 8, No 2, pp67-98.

Bately SL, Colbourne D, Fleming PD and Unwin P (2001) Citizen versus Consumer: Challenges in the UK Green Power Market. *Energy Policy*, Vol 29, No 6, pp479-487.

Beardsley MC (1965) Intrinsic Value, *Philosophy and Phenomenological Research*, Vol 26, No 1, pp1-17.

Beedell J and Rehman T (2000) Using Social-Psychological Models to Understand Farmers' Conservation Behaviour. *Journal of Rural Studies*, Vol 16, No 1, pp117-127.

Beer S (2004) Information Flow and Peripherality in Remote Island Areas of Scotland. *Libri*, Vol 54, No 3, pp148-157.

Bell D, Gray T and Haggett H (2005) The 'Social Gap' in Wind Farm Siting Decisions: Expectations and Policy Responses. *Environmental Politics*, Vol 14, No 4, pp460-477.

Bell DR (2004) *Justice, Democracy and the Environment: A Liberal Conception of Environmental Citizenship*. Paper Presented at the PSA Annual Conference. April 2004. *http://www.psa.ac.uk/journals/pdf/5/2004/Bell.pdf*

Bell J (1993) *Doing Your Research Project*. Buckingham: Oxford University Press.

Bennett RJ (1985) *Quantification and Relevance in* RJ Johnstone (Ed) *The Future of Geography*. London: Methuen, pp211-224.

Benson JF, Scott KE, Anderson C, Macfarlane R, Dunsford H and Turner K (2004) *Landscape Capacity Study For Onshore Wind Energy Development in the Western Isles*. SNH Commissioned Report No. 042 (ROAME No F02L C04). *http://www.snh.org.uk/pdfs/publications/commissioned_reports/ReportNo042A.pdf*

Berkeley G (1979) *Three Dialogues*. Indianapolis: Hackett.

Best Value User Satisfaction Survey (2007) *General Survey National Report.* *http://www.communities.gov.uk/documents/localgovernment/pdf/324639.pdf*

Birnie RV and Hulme PD (1990) Overgrazing of Peatland Vegetation in Shetland. *Scottish Geographical Magazine*, Vol 106, No 1, pp26-36.

Birnie RV, Sharman P and Schwartz G (2007) *Trends, Patterns and Environmental Consequences of Land Use across the Crofting Counties*. A Report Commissioned by the Committee of Inquiry on Crofting. *http://www.croftinginquiry.org/Resource/Doc/0/0000303.pdf*

Bishop KD, Phillips AC and Warren LM. (1995) The Protected Areas in the UK: Time For New Thinking. Regional Studies, Vol 29, No 2, pp192-207.

Blackburn S (1999) *Think*. Oxford: Oxford University Press.

Blaikie N (2000) *Designing Social Research: The Logic of Anticipation*. Cambridge: Polity Press.

Blake K (2005) *The Scottish Biodiversity List: Part 2 - Technical Report*. Scott Wilson, Edinburgh. *http://www.snh.gov.uk/docs/B277674.pdf*

Blaxter L, Hughs C and Tight M (2001) *How to Research*. Buckingham: Open University Press.

Blowers A (Ed) (1993) *Planning for a Sustainable Environment*. A Report by the Town and Country Planning Association. London: Earthscan.

Booher DE (2008) Civic Engagement and the Quality of Urban Spaces. *Planning Theory and Practice*, Vol 9, No 3, pp383-394.

Boothby J (2004) Lines, Boundaries and Ontologies in Planning. *Planning Practice and Research*, Vol 19, No 1, pp67-80.

Bosley P and Bosley K (1988) Public Acceptability of California's Wind Energy Developments: Three Studies. *Wind Engineering*, Vol 12, No 5, pp311-318.

Botkin DB (1990) *Discordant Harmonies: A New Ecology for the 21ˢᵗ Century*. New York: Oxford University Press.

Bovens M (2003) *Public Accountability: A Framework for the Analysis and Assessment of Accountability Arrangements in the Public Domain*. Draft, made for Connex Research Group 2: Democracy and Accountability in the EU.

Bovens M (2005) 'The Concept of Public Accountability' in E Ferlie, L Lynne and C Pollitt (Eds) *The Oxford Handbook of Public Management*. Oxford: Oxford University Press, pp182-208.

Bow V and Buys L (2003) *Sense of Community and Place Attachment: The Natural Environment Plays a Vital Role in the 21ˢᵗ Century*. Paper Presented to the Social Change

in the 21st Century Conference. Centre for Social Change Research, Queensland University of Technology, 21 November 2003. *http://eprints.qut.edu.au/115/1/Bow%26Buys.pdf*

Boyle P (1997) Contrasting English and Scottish Residents in the Scottish Highlands and Islands. *Scottish Geographical Magazine*, Vol 113, No 2, pp98-104.

Brennan AA (1987) 'Ways of Thinking about the Environment' in A Vlavianos-Arvanitis (Ed) *Proceedings of the First BIO International Conference*, May 1987. BIO Publications Athens. *http://www.biopolitics.gr/HTML/PUBS/VOL1/brennan.htm*

Brennan A and Yeuk-Sze-Lo (2009) Environmental Ethics. *The Stanford Encyclopaedia of Philosophy*. *http://plato.stanford.edu/entries/ethics-environmental/*

Breukers S and Wolsink M (2007) Wind Energy Policies in the Netherlands: Institutional Capacity-Building for Ecological Modernisation. *Environmental Politics*, Vol 6, No1, pp92-112.

Brooks N, Grist N and Brown K (2009) Development Futures in the Context of Climate Change: Challenging the Present and Learning From the Past. *Development Policy Review*, Vol 27, No 6, pp741-765.

Brown B and Perkins P (1992) *Disruption in Place Attachment*. In I Altman and S Low (Eds) *Place Attachment, Human Behaviour and the Environment*, New York: Plenum, pp279-304.

Brown K (2002) Innovations for Conservation and Development. *The Geographical Journal*, Vol 168, No 1, pp6-17.

Brown K (2006) New Challenges for Old Commons: The Role of Historical Common Land in Contemporary Rural Spaces. *Scottish Geographical Journal*, Vol 122, No 2, pp109-129.

Brown TC (1984) The Concept of Value in Resource Allocation. *Land Economics*, Vol 60, No 3, pp231-246.

Braun D and Busch A (1999) *Public Policy and Political Ideas*. Northampton Mass: Edward Elgar.

Bryden JM and Hart JK (2003) *Why Local Economies Differ? The Dynamics of Rural Areas in Europe*. T New York: The Edwin Mellon Press.

Bryden JM and Shucksmith M (2000) *The Concept of Sustainability in Relation to Agriculture and Rural Development in the European Union*. In Van Den Bor, W Holen, P Wals and WL Filho (Eds) *Integrating Concepts of Sustainability into Education for Agriculture and Rural Development*. Frankfurt: Peter Lang Publishers, pp21-40.

Bryman A (1988) *Quantity and Quality in Social Research*. London: Unwin Hyman.

Bryman A (2001) *Social Research Methods*. Oxford: Oxford University Press.

Bryman A (2004) *Research Methods* 2nd Edition. Oxford: Oxford University Press.

Burman E (2003) *"Discourse Analysis Means Analysing Discourse: Some Comments on Antaki, Billig, Edwards and Potter 'Discourse Analysis Means Doing Analysis*: A Critique of Six Analytical Shortcomings"*. Submission to Discourse Analysis Online. *http://extra.shu.ac.uk/daol/articles/open/2003/003/burman2003003.html*

Busch C, De Maret PS, Flynn T, Kellum R, Le, S Myers, Saunders M, White R and Palmquist M (2005) *Content Analysis*. Colorado State University. *http://writing.colostate.edu/guides/guide.cfm?guideid=61*

Cairns C (1999) Government 'Failure' over Protection of Wildlife Sites. *Scotsman* 06/09/99. *http://www.highbeam.com/doc/1P2-18709887.html*

Callicott JB (1986) *On the Intrinsic Value of Non-Human Species* in BG Norton *The Preservation of Species: The Value of Biological Diversity*. Princeton NJ: Princeton University Press, pp138-172.

Callicott JB, Crowder LB and Mumford K (1999) Current Normative Concepts in Conservation. *Conservation Biology*, Vol 13, No 1, pp22-35.

Callon M (1986) *Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay* in J Law (Ed) *Power, Action and Belief: A New Sociology of Knowledge*. London: Routledge and Kegan Paul pp196-233.

Cameron J (1999) *The Precautionary Principle: Core Meaning, Constitutional Framework and Procedures for Implementation* in R Harding and E Fisher (Eds) *Perspectives on the Precautionary Principle*. Sydney: The Federation Press pp29-58.

Cameron J and Aboucher J (1996) *The Status of the Precautionary Principle in International Law* in D Freestone and E Hey (Eds) *The Precautionary Principle and International Law: The Challenge of Implementation*. Cambridge Mass: Kluwer Law International pp2-53.

Campbell DT and Fiske DW (1959) Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix. *Psychological Bulletin*, Vol 56, No 2, pp81-105.

Campbell H (2001) Planners and Politicians: The Pivotal Relationship? *Planning Theory and Practice*, Vol 2, No 1, pp83-100.

Campbell H and Marshall R (2000) Moral Obligations, Planning and the Public Interest: A Commentary on Current British Practice. *Environment and Planning B*, Vol 27, No 2, pp297-312.

Campbell S (1996) Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association*, Vol 62, No 3, pp296-312.

Cardinal D, Hayward J and Jones G (2004) *Epistemology-The Theory of Knowledge*. London: John Murray.

Carlson AA (1977) On the Possibility of Quantifying Scenic Beauty, *Landscape Planning*, Vol 4 No 2, pp131-172.

Carlson AA (2007) 'Environmental Aesthetics', *Stanford Encyclopaedia of Philosophy*. *http://plato.stanford.edu/entries/environmental-aesthetics/*

Carson R (1962) *Silent Spring*. Boston: Houghton and Muffin.

Carr S and Tait J (1991) Differences in the Attitudes of Farmers and Conservationists and Their Implications. *Journal of Environmental Management*, Vol 32, No 3, pp281-294.

Carter B (2008) Knock, Knock: Where is the Evidence for Dangerous Human Caused Global Warming? *Economic Analysis and Policy*, Vol 38, No 2, pp177-202.

Chalmers AF (1999) *What Is This Thing Called Science?* Buckingham: OUP.

Chenail RJ (1997) Keeping Things Plumb in Qualitative Research. *The Qualitative Report*, Vol 3, No 3, pp2-5.

Chevenix-Trench H and Philip LJ (2001) Community and Conservation Land Ownership in Highland Scotland: A Common Focus in a Changing Context. *Scottish Geographical Magazine*, Vol 117, No 2, pp139-16.

Cichowski RA (2000) *European Legal Integration and Environmental Protection*. Policy Paper 53. Institute on Global Conflict and Cooperation. *http://escholarship.org/uc/item/799928k5#page-3*

Clerk G, Darrall J, Grove-White R, MacNaughton P and Urry J (1994) *Leisure Landscapes- Leisure, Culture and the English Countryside: Challenges and Conflicts*. London: CPRE.

Cloke PJ (1997) Country Backwater to Rural Village. *Journal of Rural Studies*, Vol 13, No 4, pp367-375.

Cloke P and Goodwin M (1992) Conceptualising Countryside Change: From Post-Fordism to Rural Structured Coherence. *Transactions of the Institute of British Geographers*, Vol 17, No 3, pp321-336.

Clout HD (1972) *Rural Geography: An Introductory Survey*. Oxford: Pergamon Press.

Collados and Duane T (1999) Natural Capital and Quality of Life: A Model for Evaluating the Sustainability of Alternative Regional Development Paths. *Ecological Economics*, Vol 30, No 3, pp441-460.

Comhairle nan Eilean Siar (2004a) *Minutes 31st August 2004*. Comhairle nan Eilean Siar, Stornoway.

Comhairle nan Eilean Siar (2004b) *Sustainable Community Areas Operational Definition: A Summary*. Comhairle nan Eilean Siar, Stornoway. *http://www.cnesiar.gov.uk/factfile/documents/Socio%20Economic%20Update%2010.pdf*

Comhairle nan Eilean Siar (2005) *Application under Sections 36 and 37 of The Electricity Act 1989, for a 702 Megawatt Windfarm and Associated Infrastructure, Isle of Lewis*. Report by Head of Development Series to the Environmental Services Committee. 28 June 2005. Comhairle nan Eilean Siar, Stornoway.

Comhairle nan Eilean Siar (2006) Contaminated *Land: Implementation of Part 2a of the Environment Protection Act*. Comhairle nan Eilean Siar, Stornoway. *http://www.cne-siar.gov.uk/contaminatedland/documents/section3.pdf*

Comhairle nan Eilean Siar (2008) *Electricity Act 1989- Lewis Windfarm Application and Related Matters*. Comhairle nan Eilean Siar, Stornoway.

Comhairle nan Eilean Siar (2010) Fact file - Economy. Comharlie nan Eilean Siar, Stornoway.

Commission on Social Justice (1994) *Social Justice: Strategies for National Renewal-* Report of the Commission on Social Justice.

Committee of Inquiry on Crofting (CIC) (2008) *Final Report*, Edinburgh. *http://www.croftinginquiry.org/Resource/Doc/0/0000405.pdf*

Congressional Budget Office (2005) *Uncertainty in Analysing Climate Change: Policy Implications*. The Congress of the US. *http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/60xx/doc6061/01-24-climatechange.pdf*

Connelly S (2007) Mapping Sustainable Development as a Contested Concept. *Local Environment*, Vol 12, No 3, pp259-278.

Convention on Biological Diversity (1992) *Impact Assessment and Minimising Adverse Impacts*. Article 14. New York: United Nations. *http://www.cbd.int/convention/articles/?a=cbd-14*

Coppock JT (1994) *Scottish Land Use in the Twentieth Century* in A Fenton and DA Gilmor (Eds) *Rural Land Use on the Atlantic Periphery of Europe: Scotland and Ireland*. Dublin: Royal Irish Academy, pp39-53.

Copus, AK, Chapman P, Gourlay D and Shucksmith M (1997) *Developing Typologies for Rural Areas*. SAC and University of Aberdeen.

Cosgrove D and Jackson P (1987) New Directions in Cultural Geography. *Area*, Vol 19, No 2, pp95-101.

Costanza R (1991) Ecological Economics: A Research Agenda. *Structural Change and Economic Dynamics*, Vol 2, No 2, pp335-357.

Costanza R and al. (2008) An Integrative Approach to Quality of Life Measurement, Research and Policy. *SAPIENS*, Vol 1, No1, pp17-21.

Cothern CR (1996) *An Overview of Environmental Risk Decision Making: Values, Perceptions and Ethics*. Boca Raton, Florida: Lewis Publishers.

Council of Europe (COE) (2003) European Landscape Convention, Committee of Ministers of the Council of Europe, Florence.
http://www.cidce.org/pdf/Landscape%20Convention.pdf

Counsell D (1998) Sustainable Development and Structure Plans in England and Wales. A Review of Current Practice. *Journal of Environmental Planning and Management*, Vol 41, No 2, pp177-194.

Counsell D (2002) Prudent Pessimism or Sitting on the Fence: Has the Precautionary Principle a Role in UK Development Plans? *Planning Policy and Research*, Vol 17, No 1, pp5-16.

Countryside Commission for Scotland (1971) *A Planning Classification of Scottish Landscape Resources*. Occasional Paper No 1. CCS, Perth.

Countryside Commission for Scotland (1978) *Scotland's Scenic Heritage*. CCS, Perth.
http://www.snh.org.uk/pdfs/publications/scotlandsscenicareas/Book_ScotlandsScenicHerit age.pdf

Courtney P, Hill G and Roberts D (2006) The Role of Natural Heritage in Rural Development: An Analysis of Economic Linkages in Scotland. *Journal of Rural Studies*, Vol 2, No 3, pp469-484.

Cowan E (1968) *Oil and Water-The Torrey Canyon Disaster*. Philadelphia: JP Lippincott.

Cowdray D (1998) Comment. *Habitat*,Vol 35, No 1.

Cowell R and Owens S (1998) Suitable Locations: Equity and Sustainability in the Mineral Planning Process. *Regional Studies*, Vol 32, No 9, pp797-811.

Cox G, Lowe P and Winter M (1985) Changing Directions in Agricultural Policy: Corporatist Arrangements in Production and Conservation Policies. *Sociologia Ruralis*, Vol 25, No 2, pp130-154.

Crabtree JR, Leat PMK, Santarossa J and Thomson KJ (1994) The Economic Impact of Wildlife Sites in Scotland. *Journal of Rural Studies*, Vol 10, No 1, pp61-72.

Cramb A (1996) *Who Owns Scotland Now?* Edinburgh: Mainstream.

Crofters Commission (2009) *Crofting Statutes*. Crofting Commission.

Crofts R (2000) *Scotland's Cultural Landscape. Conference on the Cultural Landscape: Planning for a Sustainable Partnership between People and Place*. Oxford, May 2000.

Crofts R (2004) Linking Protected Areas to the Wider World: A Review of Approaches. *Journal of Environmental Policy and Planning*, Vol 6, No 2, pp143-156.

Crombie A (1988) Designed in the Mind: Western Visions of Science, Nature and Humankind. *History of Science*, Vol 26, No 1, pp1-12.

Cronon W (1996) *The Trouble with Wilderness: Or Getting Back To the Wrong Nature* in Cronon (Ed) *Uncommon Ground: Rethinking the Human Place in Nature.* NY: WW Norton and Co.

Danks, JH (1970) Encoding of Novel Figures for Communication and Memory. *Cognitive Psychology*, Vol 1, No2, pp179-191.

Darling FF (1955) *West Highland Survey: An Essay on Human Ecology.* London: Oxford University Press.

Davies A (2001) Hidden or Hiding? Public Perceptions of Participation in the Planning System. *Town Planning Review*, Vol 72, No 2, pp193-216.

De Guess M and Doherty B (1996) *Democracy and Green Political Thought. Sustainability, Rights and Citizenship.* London: Routledge.

DEFRA (2001) *Digest of Environmental Statistics: Survey of Public Attitudes to Quality of Life and to the Environment 2001.* Department of Rural Affairs, London.

Denzin D (1978) *The Research Act: A Theoretical Introduction to Sociological Methods* (2nd Ed) New York: McGraw-Hill.

Department of the Environment (1990) *'Our Common Inheritance'. Britain's Environmental Strategy.* London, HMSO.

Derkzen D and Bock B (2009) Partnership and Role Perception, Three Case Studies on the Meaning of Being a Representative in Rural Partnerships. *Environment and Planning C: Government and Policy*, Vol 27, No 1, pp75-89.

Devine T (1994) *Clanship to Crofter's War: The Social Transformation of the Scottish Highlands.* Manchester: Manchester University Press.

Devine-Wright P (2005) Beyond NIMBYism: Towards an Integrated Framework For Understanding Public Perceptions of Wind Energy. *Wind Energy*, Vol 8, No 2, pp125-139.

Devine-Wright P (2007) *Reconsidering Public Attitudes and Public Acceptance of Renewable Energy Technologies: A Critical Review.* University of Manchester: School of Environment and Development.
http://www.sed.manchester.ac.uk/research/beyond_nimbyism/

Devine-Wright P (2009) Rethinking NIMBYism: The Role of Place Attachment and Place Identity in Explaining Place-Protective Action. *Journal of Community and Applied Social Psychology*, Vol 19, No 6, pp426-441.

Devine-Wright P (2011) Place Attachment and Public Acceptance of Renewable Energy: A Tidal Energy Case Study. *Journal of Environmental Psychology*, Vol 31, No 4, pp336-343.

Devine-Wright P and Clayton S (2010) Introduction to the Special Issue: Place, Identity and Environmental Behaviour. *Journal of Environmental Psychology*, Vol 30, No 3, pp267-270.

Devine-Wright P and Howes Y (2010) Disruption to Place Attachment and the Protection of Restorative Environments: A Wind Energy Case Study. *Journal of Environmental Psychology*, Vol 30, No 3, pp271-280.

Dewey J (1938) *Logic: The Theory of Inquiry*. New York: Holt, Reinhart and E Winston.

Dicken P, Kelly PF, Olds K and Wai-Chung Yeung H (2001) Chains and Networks, Territories and Scales: Towards a Relational Framework for Analysing the Global Economy. *Global Networks*, Vol 1, No 2, pp89-112.

Dickenson G (1988) *Countryside Recreation* in Selman P (Ed) *Countryside Planning in Practice: the Scottish Experience*. Stirling: Stirling University Press.

Dingler J (2005) The Discursive Nature of Nature: Towards a Post-Modern Concept of Nature. *Journal of Environmental Policy and Planning*, Vol 7, No 3, pp209-225.

Disgupto P (2001) *Human Well-being and the Natural Environment*. Oxford: Oxford University Press.

Distaso A (2005) *Local sustainable development and well-being/ quality of life. An application of the capability approach at regional level.* www.ideas.repec.org/p/ufg/qdsems/25-2005.html

Doak J and Karadimitriou N (2007) (Re) development, Complexity and Networks: A Framework for Research. *Urban Studies*, Vol 44, No 2, pp209-229.

Dowdle MW (2006) *Public Accountability: Conceptual, Historic and Epistemic Mappings.* in M Dowdle (Ed) *Public Accountability: Designs, Dilemmas and Experiences*. Cambridge UK, Cambridge University Press, pp1-26.

Dresner S (2002) *The Principles of Sustainability*. London: Earthscan.

Dunn MC (1974) Landscape Evaluation: A Further Perspective. *The Planner*, Vol 60, No 10, pp935-936.

Durkheim E (1897) *Suicide: A Study in Sociology* (J Spaulding and G Simpson Trans) New York: The Free Press.

Durland S (1987) Witness: The Guerrilla Theatre of Greenpeace. *High Performance*, Vol 10, No 40, pp30-35.

Duverger M (1972) *Party Politics and Pressure Groups- A Comparative Introduction*. London: Nelson.

Dyck R (1998) Integrating Planning and Sustainability Theory for Local Benefit. *Local Environment*, Vol 3, No 1, pp27-41.

Egglishaw H, Gardiner R, and Foster J (1986) Salmon Catch Decline and Forestry in Scotland. *Scottish Geographical Magazine*, Vol 102, No 1, pp7-61.

Ehrenclou K (2008) *The Wind Power Debate in the UK: Arguments, Strategies and the Challenge of Dealing with Local Opposition. Report No 3/08.* University of Oslo-Norway. *http://www.prosus.org/prosusFTP/prosusrep/publications/prosusrapport%203.08.pdf*

Ek K (2002) *Valuing the Environmental Impacts of Windpower: a choice experiment approach.* Licentiate thesis. Lulea University of Technology. *http://epubl.ltu.se/1402-1757/2002/40/LTU-LIC-0240-SE.pdf*

Ellis G (2004) Discourses of Objection: Towards an Understanding of Third Party Rights in Planning. *Environment and Planning A*, Vol 36, No 9, pp1549-1570.

Ellis G, Barry J and Robinson C (2007) Many Ways to Say 'No' Different Ways to Say 'Yes': Applying Q Methodology to Understand Public Acceptance of Wind Farm Proposals. *Journal of Environmental Planning and Management*, Vol 50, No 4, pp517-551.

Enzensberger N, Fichtner W, and Rentz O (2003) Evolution of Local Participation Schemes in the German wind market. *International Journal of Global Energy Issues*, Vol 20, No 2, pp191-207.

Etherington J (2009) *The Wind Farm Scam.* London: Stacey International.

European Environmental Agency (1999) *Environment in the European Union at the turn of the century*, European Assessment Report 2, Copenhagen. *http://www.eea.europa.eu/publications/92-9157-202-0*

Evan-Goldstein B (2007) Incommensurable Differences Between Sustainability Narratives in the Aftermath of the 2003 San Diego Cedar Fire. *Journal of Environmental Policy and Planning*, Vol 9, Nos 3-4, pp227-244.

Evans D (1992) *A History of Nature Conservation in Britain.* London: Routledge.

Fagan G, Menzies S, Milne I and Brady K (2006) NPP Spatial North Project-*Final Report.* Cadispa Project, University of Strathclyde. *http://www.cadispa.org/docs/NPP_SpacialNorth.pdf*

Fairclough G (2006) Our *Place in the Landscape? 'An Archaeologist's Ideology of Landscape Perception and Management'* in T Mier (Ed) *Landscape Ideologies.* Budapest: Archaeolingua, pp177-197.

Fairclough N (1995) *Critical Discourse Analysis: The Critical Study of Language.* London: Longman.

Fairclough N (1989) *Language and Power.* London: Longman.

Faith DP (2007) Biodiversity. *Stanford Encyclopedia of Philosophy*, Stanford, US. *http://plato.stanford.edu/entries/biodiversity*

Farhar BC (1999) Willingness to Pay for Electricity from Renewable Resources: A Review of Utility Market Research. *National Renewable Energy Laboratory*, US Department of Energy. *http://apps3.eere.energy.gov/greenpower/resources/pdfs/farhar_26148.pdf*

Farming and Wildlife Advisory Group Scotland FWAG (2002) *FWAG Scotland's Mission Statement*. FWAG, Edinburgh.

Fearon JD and Laitin D (1996) Explaining Interethnic Cooperation. *American Political Science Review*, Vol 90, No 4, pp715-735.

Few R (2002) Researching Actor Power: Analysing Mechanisms of Interaction in Negotiations Over Space. *Area*, Vol 34, No 1, pp29-38.

Fischer F and Forester J (Ed) (1993) *The Argumentative Turn in Policy Analysis and Planning*. Durham: Duke University Press.

Fisher J and Brown K (2009) Wind Energy on the Isle of Lewis: Implications for Deliberative Planning. *Environment and Planning A*, Vol 41, No 10, pp2516-2536.

Flyvbjerg B (1998) *Rationality and Power*. Chicago: University of Chicago Press.

Flyvbjerg B (2004) Phronetic Planning Research: Theoretical and Methodological Reflections. *Planning Theory and Practice*, Vol 5, No 3, pp283-306.

Foley J (2004) (Ed) *Sustainability and Social Justice*. Institute for Public Policy Research, London: Institute for Public Policy Research.

Forester J (1989) *Planning in the Face of Power*. Berkeley: University of California Press.

Foster J (2010) Landscape Continuity: Ecology, Power and Social Order in Environmental Planning. *Planning Theory and Practice*. Vol 11, No 2, pp167-186.

Foucault M (1969) *The Archaeology of Knowledge*. (Trans. AM Sheridan Smith). London and New York: Vintage.

Foucault M (1979) *Discipline and Punish: The Birth of the Prison*. New York: Vintage Books.

Foucault M (1991) "*Governmentality*" in G Burchell, C Gordon and P Miller (Eds) *The Foucault Effect: Studies in Governmentality*. London: Harvester Wheatsheaf, pp87-104.

Fowke R and Prasad D (1996) Sustainable Development, Cities and Local Government. *Australian Planner*, Vol 33, No 2, pp61-66.

Frankena W (1967) *Value and Valuation* in P Edwards (Ed) *The Encyclopaedia of Philosophy* Vol 8 New York: Macmillan, pp229-232.

Frisbie R (1986) *The Use of Microcomputer Programs to Improve the Reliability and Validity of Content Analysis in Evaluation*. Paper Presented to the Annual Meeting of the American Education Research Association, San Francisco. *http://web.ics.purdue.edu/~rfrisbie/Professional/Dissertation/FrisbieDissertation0Intros.pdf*

Friends of the Earth (FOE) (2011) How Many Supporters Do You Have? *www.foe.co.uk/resource/faqs/fund_how_many.html*

Fuhrer U (1983) Oekopsychologie: Some General Implications from a Particular Literature. *Journal of Environmental Psychology*, Vol 3, No 3, pp239-252.

Futemma C, De Castro F, Silva-Forsberg MC and Ostrom E (2002) The Emergence and Outcomes of Collective Action: An Institutional and Ecosystem Approach. *Society and Natural Resources*, Vol 15, No 6, pp503-522.

Galbraith CKD (2006) Research Reported in the *Scotsman* 24.03.2006. *http://business.highbeam.com/136910/article-1P2-13080475/investors-sporting-estates-land-better-return-than*

Gauntlett FM (2003) Declining Farmland Birds. *British Birds*, Vol 96, No 1, pp46-48.

General Register Office Scotland (2005a) *Gaelic Report.* GROS, Edinburgh. *http://www.gro-scotland.gov.uk/files/gaelic-rep-english-commentary.pdf*

General Register Office Scotland (2005b) *Population Report.* GROS, Edinburgh. *http://www.gro-scotland.gov.uk/files2/stats/population-projections/2004-pop-proj-paper.pdf*

George Street Research (2007) *Survey of Rural Development and Crofting.* Study commissioned by the Committee of Enquiry on Crofting. *http://www.croftinginquiry.org/Resource/Doc/0/0000385.pdf*

Gibson JL and Gouws A (2002) Overcoming Intolerance in South Africa: Experiments in Democratic Persuasion. New York: Cambridge University Press.

Gilg A (1976) Assessing Scenery as a Natural Resource: Causes of Variation in Linton's Method. Scottish Geographical Magazine, Vol 92, No 1, pp41-49.

Gilg A (1996) *Countryside Planning.* London: Routledge.

Gilg A and Battershill M (1998) Quality of Farm Food in Europe: A Possible Alternative to the Industrialised Food Market and to Current Agri-Environmental Policies: Lessons from France. *Food Policy*, Vol 23, No 1, pp25-40.

Gilg A and Kelly MP (1997) The Delivery of Planning Policy in Great Britain: Exploring the Implementation Gap. New Evidence from a Case Study in England. *Environment and Planning C*, Vol 15, No 1, pp19-36.

Giuliani MV and Feldman R (1993) Place Attachment in Developmental and Cultural Context. *Journal of Environmental Psychology*, Vol 13, No 3, pp267-274.

Glacken CJ (1956) *Changing Ideas of the Habitable World* in WL Thomas (Ed) *Man's Role in Changing the Face of the Earth* Vol 1. Chicago: University of Chicago Press, pp70-92.

Glasby GP (2002) Sustainable Development: The Need for a New Paradigm. *Development and Sustainability*, Vol 4, No 4, pp333-345.

Golafshani N (2003) Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, Vol 8, No 4, pp597-606.

Goldman AJ (2001) Experts: Which One Should You Trust. *Philosophy and Phenomenological Research*, Vol 63, No 1, pp85-110.

Goldstein BE (2007) The Futility of Reason: Incommensurable Differences Between Sustainability Narratives in the Aftermath of the 2003 San Diego Cedar Fire. *Journal of Environmental Policy and Planning*, Vol 9, Nos 3-4, pp227-244.

Goodchild B and Cole (2001) Social Balance and mixed neighbourhoods in Britain since 1979: a review of discourse and practice in social housing. *Environment and Planning D*, Vol 19, No 1, pp103-121.

Goodier R (1984) Sites of Special Scientific Interest. *Scottish Planning Law and Practice*. Vol 13, No 1, pp68-71.

Goodland R (1995) The Concept of Environmental Sustainability. *Annual Review of Ecological Sustainability*, Vol 26, No 1, pp1-24.

Gottleib R (2001) *Environmentalism Unbound: Exploring New Pathways for Change*. London: MIT Press.

Graham EL (2002) *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture*. Manchester: Manchester University Press.

Grando S (2007) A Garden or a Laboratory? Conflicting Views about Nature Preservation and Local Development in the Aspromonte National Park, Italy. *International Planning Studies*, Vol 12, No 4, pp327-342.

Grant A (2006) Landscape/ Seascape Carrying Capacity for Aquaculture. SNH Commissioned Report FO4NC12.
http://www.snh.org.uk/pdfs/publications/commissioned_reports/Report%20No215.pdf

Grant IF and Cheape H (1997) *Periods in Highland History*. London: Shepheard Walwyn.

Grist N (2008) Positioning Climate Change in Sustainable Development Discourse. *Journal of International Development*, Vol 20, No 6, pp783-803.

Grober U (2007) Deep Roots - A Conceptual History of 'Sustainable Development' (Nachaltgikeit) Wissenschaftzentrum fur Sozialforschung Berlin.
http://skylla.wzb.eu/pdf/2007/p07-002.pdf

Grundmann R (1991) *Marxism and Ecology*. Oxford: Oxford University Press.

Guillem S M (2009) Argumentation, Metadiscourse and Social Cognition: Organising Knowledge in Political Communication. *Discourse and Society*. Vol 20, No 6, pp727-746.

Gundling L (1990) The Status in International Law of the Principle of Precautionary Action. *International Journal of Estuarine and Coastal Law*. Vol 5, No 3, pp23-30.

Haas P (1996) Is 'Sustainable Development' Politically Sustainable. *The Brown Journal of World Affairs*, Vol 3, No 2, pp239-247.

Habermas J (1962) *The Structural Transformation of the Public Sphere: An Enquiry into a Category of Bourgeois Society.* Cambridge: Polity Press.

Habermas J (1984) *The Theory of Communicative Action: Reason and Rationalization in Society.* (Trans. by McCarthy T) Boston MA: Boston Press (Vol 1).

Habermas J (1987) *The Theory of Communicative Action: Lifeworld and System: A Critique of Functionalist Reason.* (Trans. by McCarthy T) Boston MA: Boston Press (Vol 2).

Habermas J (1996) *Between Facts and Norms. Contributions to a Discourse Theory of Law and Power.* Cambridge: Polity Press.

Haggett P (1965) *Locational Analysis in Human Geography.* London: Edward Arnol.

Haggett P and Chorley R (1969) *Network Analysis in Geography.* London: Edward Arnol.

Haines GH (1973) *Whose Countryside?* London: JM Dent and Sons.

Hajer M (1993) '*Discourse Coalitions and the Institutionalisation of Practice: The Case of Acid Rain in Great Britain*' in F Fischer and J Forester *The Argumentative Turn in Policy Analysis and Planning.* Durham NC, Duke University Press, pp43-67.

Hajer M (1995) *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process.* Oxford: Oxford University Press.

Hajer M and Versteeg W (2005) A Decade of Discourse Analysis of Environmental Politics: Achivements, Challenges, Perspectives. *Journal of Environmental Policy and Planning.* Vol 7, No 3, pp175-184.

Hales R (2000) Land Use Development Planning and the Notion of Sustainable Development: Exploring Constraint and Facilitation within the English Planning System. *Journal of Environmental Planning and Management*, Vol 43, No 1, pp99-122.

Hall Aitken and National Centre for Migration Studies (2007) *Outer Hebrides Migration Studies: Final Report.* Isle of Lewis. Western Isles Enterprise and Communities, Scotland. *http://www.cne-siar.gov.uk/factfile/population/documents/OHMSStudy.pdf*

Halliday MKA (1978) *Language as Social Semiotic: The Social Iinterpretation of Language and Meaning.* London: Edward Arnold.

Hammersley M (1992) *What's Wrong with Ethnography?* London: Routledge.

Hansom JD and McGlashen DJ (2004) Scotland's Coast: Understanding Past and Present Processes for Sustainable Management. *Scottish Geographical Journal*, Vol 120, Nos 1-2, pp99-114.

Hanssen GS and Sagile I (2010) Cognitive Closure in Urban Planning. *Planning Theory and Practice*, Vol 11, No 4, pp499-521.

Happer W (2010) *Climate Science in the Political Arena.* Statement Before the Select Committee on Energy Independence and Global Warming. US House of Representatives. *http://globalwarming.house.gov/files/HRG/052010SciencePolicy/happer.pdf*

Hardin G (1968) The Tragedy of the Commons. *Science*, Vol 162, No 3859, pp1243-1248.

Hardin R (2002) *Trust and Trustworthiness.* New York: Russell Sage Foundation.

Hards S (2010) Winning Paths, Shifting Landscapes: Transitions in Sustainable Practices on the Individual and Social Scales. *Sustainable Futures: Planning and Environmental Research Futures*, Birmingham University.

Harre R, Brockmeier J and Mulhausler P (1999) *Greenspeak: A Study of Environmental Discourse.* London: Sage.

Harris N (2011) Discipline, Surveillance, Control: A Foucaultian Perspective on the Enforcement of Planning Regulations. *Planning Theory and Practice*, Vol 12, No 1, pp57-76.

Harrison CM and Burgess J (1994) Social Constructions of Nature: A Case Study of Conflicts Over the Development of Rainham Marshes. *Transactions of the Institute of British Geographers*, Vol 19, No 3, pp291-310.

Hart K and Wilson G (1998) UK Implementation of Agri-Environment Regulation 2078/92/EEC: Enthusiastic Supporter or Reluctant Participant. *Landscape Research*, Vol 23, No 3, pp255-272.

Harvey D (1996) *Justice, Nature and the Geography of Difference.* Oxford: Blackwell.

Hassan G (2002) Western Isles Renewable Energy Study part 2: Development Considerations. Scottish Executive and Comharlie nan Eilean Siar, Edinburgh and Stornoway. *http://www.scotland.gov.uk/Resource/Doc/1086/0041185.pdf*

Hauser G (1999) *Vernacular Voices: The Rhetoric of Publics and Public Spheres.* Columbia: University of South Carolina.

Hay R (1998) Sense of Place in Developmental Context. *Journal of Environmental Psychology*, Vol 18, No 1, pp5-29.

Healey P (2005) Editorial, *Planning Theory and Practice*, Vol 6, No 1, pp5-8.

Healey P (2007) *Urban Complexity and Spatial Strategies: Towards a Relational Planning for our Times.* New York: Routledge.

Healey P and Gilroy R (1990) Towards a People-Sensitive Planning. *Planning Practice and Research*, Vol 5, No 2, pp21-29.

Healey P and Shaw T (1994) Changing Meanings of 'Environment' in the British Planning System. *Transactions of the Institute of British Geographers*, Vol 19, No 4, pp425-438.

Heikkila EJ (2001) Identity and Equality. Race and Place in Planning. *Planning Theory and Practice*, Vol 2, No 3, pp261-275.

Heller M (2003) *Discourse and Interaction* in D Schriffin, D Tannen and HE Hamilton *Handbook of Discourse Analysis*. Oxford: Blackwell.

Hepburn RW (1996) Landscape and the Metaphysical Imagination. *Environmental Values*, Vol 5, No 3, pp191-204.

Hermelin B (2009) Spatial Strategic Planning in the Stockholm Region- Discourses on the Space-Economy and Growth Factors. *European Planning Studies*, Vol 17, No 1, pp131-148.

Hernandez B, Martin AM, Ruiz C and Hidalgo MC (2010) The Role of Place Identity and Place Attachment in Breaking Environmental Protection Laws. *Journal of Environmental Psychology*, Vol 30, No 3, pp281-288.

Herring PC (2009) Framing Perceptions of the Historic Landscape: Historic Landscape Characterisation (HLC) and Historic Land-Use Assessment (HLA). *Scottish Geographical Journal*, Vol 125, No7, pp61-77.

Heyd T (2001) Aesthetic Appreciation and Many Stories about Nature. *British Journal of Aesthetics*, Vol 41, No 2, pp125-137.

Hidalgo MC and Hernandez B (2001) Place Attachment: Conceptual and Empirical Questions. *Journal of Environmental Psychology*, Vol 30, No 3, pp273-281.

Hillier J (2000) Going Round the Back? Complex Networks and Informal Action in Local Planning Processes. *Environment and Planning A*, Vol 32, No 1, pp33-54.

Hoch G (2006) Emotions and Planning. *Planning Theory and Practice*, Vol 7, No 4, pp367-382.

Hoggart K (1990) Let's Do Away with Rural. *Journal of Rural Studies*, Vol 6, No 3, pp245-257.

Holdaway E (2007) *Origins and Intentions of 1949 Act Natural Beauty*. Report to the Countryside Council for Wales.

Holden M (2008) The Tough Minded and the Tender Minded: A Pragmatic Turn for Sustainable Development and Planning and Policy. *Planning Theory and Practice*, Vol 9, No 4, pp475-496.

Holling CS (2000) Theories for Sustainable Futures. *Conservation Ecology*, Vol 4, No 2, Article 7. *http://www.ecologyandsociety.org/vol4/iss2/art7/*

Holsti OR (1969) *Content Analysis for the Social Sciences and Humanities*. Massachusetts: Addison-Wesley.

Hornstein DT (1998) Self-Interest, Politics and the Environment - A Response to Professor Schroder. *Duke Environmental Law and Policy Forum*, Vol 9, No1, pp61-74.

House of Lords (1990) *The Future of Rural Society*. HMSO, London. *http://hansard.millbanksystems.com/lords/1990/nov/15/future-of-rural-society-ecc-report*

Hubacek K and Van Den Bergh J CJM (2006) Changing concepts of 'land' in economic theory: From single to multi-disciplinary approaches. *Ecological Economics*, Vol 56, No 1, pp5-27.

Hubbard P (2006) NIMBY By Another Name? A reply to Wolsink. *Transactions of the Institute of British Geographers*, Vol 31, No1, pp92-94.

Hulme M (2009) *Why We Disagree about Climate Change*. Cambridge: Cambridge University Press.

Hunter J (1976) *The Making of the Crofting Community*. Edinburgh: John Donald Publishers.

Hunter J (1991) *The Claim of Crofting*. Edinburgh: Mainstream Publishing.

Hunter J (1995) *On the Other Side of Sorrow: Nature and People in the Scottish Highlands*. Edinburgh: Mainstream Publishing.

Hutchinson J and Loukaitou-Sideris A (2001) Choosing Confrontation or Consensus in the Inner City: Lessons from a Community-University Partnership. *Planning Theory and Practice*, Vol 2, No 3, pp293-310.

Ifversen J (2003) *Text, Discourse, Concept: Approaches to Textual Analysis*. Kontur Kontur, No 7 pp60-69. *http://www.hum.au.dk/cek/kontur/pdf/kontur_07/jan_ifversen.pdf*

Intergovernmental Panel on Climate Change (IPCC) (2001) *Third Assessment Report*. *http://www.grida.no/publications/other/ipcc_tar/*

International Centre for Local Environment Initiatives (1996) *The Local Agenda Planning Guide*, Toronto.

IUCN (1994) *Guidelines for PA Management Categories*. IUCN Cambridge, UK. *http://data.iucn.org/dbtw-wpd/edocs/PAPS-016.pdf*

Jacobs K (1999) Key Themes and Future Prospects: Conclusion to the Special Issue. *Urban Studies*, Vol 36, No1, pp203-213.

Jacobs M (1991) *The Green Economy*. London: Pluto.

Jacobs M (1992) Sustainability and Locality: Looking Beyond the Green Plan in SEEDS (South East Economic Development Strategy). *The SEEDS green plan process*. SEEDS, Harlow, pp12-17.

Jacobs M (1997) *Environmental Valuation, Deliberative Democracy and Public Decision-Making Institutions* in J Foster (Ed) *Valuing Nature?* London: Routledge.

Jasanoff S (2005) *Designs on Nature: Science and Democracy in Europe and the US*. Princeton NJ: Princeton University Press.

Jepma CJ and Munasinghe M (1998) *Climate Change Policy: Facts, Issues and Analysis*. Cambridge: Cambridge University Press.

Jessup B (2010) Plural and Hybrid Environmental Values: A Discourse Analysis of the Wind Energy Conflict in Australia and the United Kingdom. *Environmental Politics*, Vol 19, No 1, pp21-44.

Johnson DN, Lamb P, Saul M and Winter-Nelson AE (1997) Meanings of Environmental Terms. *Journal of Environmental Quality*, Vol 26, No 3, pp581-589.

Johnson G and Scholes K (2002) *Explaining Corporate Strategy*. New Jersey: Prentice Hall.

Johnson JD and Raskar R (1995) The Role of Economic and Quality of Life Values in Rural Business Location. *Journal of Rural Studies*, Vol 11, No 4, pp405-416.

Joint Nature Conservation Committee (2008) *SACs and SPAs in Scotland*. Peterborough.

Jones CR and Eiser JR (2009) Identifying Predictors of Attitudes Towards Local Onshore Wind Development with Reference to an English Case Study. *Energy Policy*, Vol 37, No 11, pp4604-4614.

Jones CR and Eiser JR (2010) Understanding' Local' Opposition to Wind Development in the UK: How Big is a Backyard? *Energy Policy*, Vol 38, No 6, pp3106-3117.

Jones HR, Caird JB and Ford N (1984) A Home in the Highlands. *Town and Country Planning*, Vol 53, No 11, p326-327.

Jones M (2007) The European Landscape Convention and the Question of Public Participation. *Landscape Research*, Vol 32, No 5, pp613-635.

Jordan A and Riardon T (1997) Social Institutions and Climate Change: Applying Cultural Theory to Practice. CSERGE Working Paper GEC 97-15. *http://www.cserge.ac.uk/sites/default/files/gec_1997_15.pdf*

Joseph TL (1997) The Debate over Environmental Standards in the European Community: A Race to the Top Rather than a Race to the Bottom? *New York University Environmental Law Journal*, Vol 6, No 2, pp161-199.

Kahn J (2003) Wind Power Planning in Three Swedish Municipalities. *Journal of Environmental Planning and Management*, Vol 46, No 4, pp563-581.

Kant I (1956) *Critique of Practical Reason* (Trans. Beck LW). New York: Macmillan.

Katz C and Kirby A (1991) In the Nature of Things: The Environment and Everyday Life. *Transactions of the Institute of British Geographers*, Vol 16, No 3, pp259-271.

Kazana V and Kaaklis A (2009) Exploring Quality of Life Concerns in the Context of Sustainable Rural Development at the Local Level: A Greek Case Study. *Regional Environmental Change*, Vol 9, No 3, pp209-219.

Kemp R (1990) Why Not in My Backyard? A Radical Interpretation of Public Opposition to the Deep Disposal of Radioactive Waste in the United Kingdom. *Environment and Planning A*, Vol 22, No 9, pp1239-1258.

Khakee A, Barbanente A and Brri D (2000) Expert and Experimental Knowledge in Planning. *Journal of the Operational Research Society*, Vol 51, No 3, pp776-788.

King D and Stoker G (1996) (Eds) *Rethinking Local Democracy- Government Beyond the Centre*. London: Macmillan Press.

King G (1990) Patrick Geddes and the Art of Memory. *The Planner*, Vol 76, No 5, pp11-14.

Knight PG (1993) The Geography of Field Research in Iceland. *Scottish Geographical Magazine*, Vol 109, No 3, pp180-186.

Kocklemans J (1966) *Phenomenology and Physical Science*. Pittsburgh: Duquesne University Press.

Korpela KM (1989) Place-Identity as a Product of Environmental Self-Regulation. *Journal of Environmental Psychology*, Vol 9, No 3, pp241-256.

Krauss R and Fussell S (1991) *Constructing Shared Communicative Environments* in L Resnick, J Levine and S Teasley (Eds) *Perspectives on Socially Shared Cognition*, Washington DC: American Psychological Association, pp172-200.

Krebs A (1996) *Ich wurde gerne aus dem hause tretend ein par baume sehen "Philosophische Uberlegungen zum Eigenwert der Natur"*. In HG Nutzinger (Ed) *Naturschutz-Ethik-Okonomie: Theoretische Grundlagen und praktische Konsequenzen*, pp31-48. Marburg: Metropolis.

Kuhtz S (2008) Challenges Posed by Climate Change: Is Environmental Protection an Ethical Issue? *Environment, Development and Sustainability*, Vol 13, No 1 pp79-85.

Kyle G, Graefe A, Manning R and Bacon J (2004) Effects of Place Attachments on Users' Perceptions of Social and Environmental Conditions in a Natural Setting. *Journal of Environmental Psychology*, Vol 24, No 2, pp213-225.

Lacey A and Luff D (2001) Qualitative Data Analysis. Trent Focus for Research and Development of Primary Health Care.
www.trentfocus.org.uk/Resources/Qualitative%20Data%20Analysis.pdf

Larkham PJ (2003) The Place of Urban Conservation in the UK Reconstruction Plans of 1942-1952. *Planning Perspectives*, Vol 18, No 3, pp295-324.

Larkham PJ and Pendlebury J (2008) Reconstruction Planning and the Small Town in Early Post-War Britain. *Planning Perspectives*, Vol 23, No 3, pp291-321.

Laurian L (2009) Trust in Planning: Theoretical and Practical Considerations for Participatory and Deliberative Planning. *Planning Theory and Practice*, Vol 10, No 3 pp369-391.

Laurie IC (1970) Objectives of Landscape Evaluation. Landscape Research Group Conference 2.

Leigh R (2006) Cooperation without Trust: Overcoming Collective Action Barriers to Endangered Species Protection. *Policy Studies Journal*, Vol 34, No 1, pp37-57.

Leitmann J (1998) Options for Managing Protected Areas: Lessons from International Experience. *Journal of Environmental Planning and Management*, Vol 41, No 1, pp129-143.

Lewicka M (2008) Place Attachment, Place Identity and Place Memory: Restoring the Forgotten City Past. *Journal of Environmental Psychology*, Vol 28, No 3, pp209-231.

Lewis D (1983) Extrinsic Properties. *Philosophical Studies*, Vol 44, No 2, pp197-200.

Lewis J (2003) *Design Issues* in J Ritchie and J Lewis (Eds) *Qualitative Research Practice*. London: Sage.

Ley D (1981) Cultural/Humanistic Geography. *Progress in Human Geography*, Vol 5, No 2, pp249-257.

Libecap GD (1989) *Contracting for Property Rights*. Cambridge: Cambridge University Press.

Lidskog R, Soneryd L and Uggla Y (2005) Knowledge, Power and Control - Studying Environmental Regulation in Late Modernity. *Journal of Environmental Policy and Planning*, Vol 7, No 2, pp89-106.

Linton DL (1968) The Assessment of Scenery as a Natural Resource. *Scottish Geographical Magazine*, Vol 84, No 3, pp219-238.

Linton T (1947) *Cultural Background of Personality*. London: Kagan Paul.

Livingston M, Bailey N and Kearns A (2008) *People's Attachment to Place – The Influence of Neighbourhood Deprivation*. Joseph Rowentree Foundation, York. *http://www.jrf.org.uk/system/files/2200-neighbourhoods-attachment-deprivation.pdf*

Lockie S (2007) Deliberation and Actor-Networks: The "Practical" Implications of Social Theory for the Assessment of Large Dams and Other Interventions. *Society and Natural Resources*, Vol 20, No 9, pp785-799.

Lorimer H (1997) 'Happy hostelling in the Highlands': Nationhood, Citizenship and the Inter-War Youth Movement. *Scottish Geographical Magazine*, Vol 113, No 1, pp42-50.

Lorimer H (2002) Guns, Game and the Grandee: The Cultural Politics of Deer Stalking in the Scottish Highlands. *Ecumene*, Vol 7, No 4, pp403-431.

Lloyd MG, Rowan-Robinson J and Dawson J (1989) Policy Adaptation in Scotland: NPPG and Agricultural Land Resources. *Scottish Geographical Magazine*, Vol 105, No 1, pp19-24.

Lovelock J (1979) *Gaia: A New Look at Life on Earth*. Oxford: Oxford University Press.

Lovelock J (2006) *The Revenge of Gaia*. London: Allen Lane.

Lowe P, Cox G, MacEwan M, O'Riorden T and Winter M (1986) *Countryside Conflicts: The Politics of Farming, Forestry and Conservation.* London: Gower/ Maurice Temple Smith.

Lowe T, Marsden T and Whatmore S (1994) *Regulating Agriculture.* London: David Fulton

LWP (2004) *Lewis Wind Farm: A Non-Technical Summary of the Environmental Statement.* Vol 2. AMEC Wind Energy, Hexham. *http://www.cne-siar.gov.uk/windpower/lewiswindpower/documents/NTS%20final%20version.pdf*

Lyons M (2007) The Lyons Enquiry into Local Government: Place-Shaping: A Shared Ambition for the Future of Local Government. Stationery Office, London. *http://www.official-documents.gov.uk/document/other/9780119898552/9780119898552.pdf*

Mabey R (1986) *Gilbert White: A Biography of the Author of The Natural History of Selbourne.* Hamondsworth: Penguin Books.

Mac an Tailleir I (2004) *1901-2001 Gaelic in the Census.* Linguae Celticae. *http://www.linguae-celtica.org/dateien/gaelic_1901-2001ppt*

Macdonald D (2004) *Lewis – A History of an Island.* London: Steve Savage Publishers.

Macdonald F (1998) Viewing Highland Scotland: Ideology, Representation and the 'Natural Heritage'. *Area,* Vol 30, No 3, pp237-244.

Macfarlane R (2000) Achieving Whole Landscape Management across Multiple Land Management Units: A Case Study from the Lake District ESA. *Landscape Research,* Vol 25, No 2, pp229-255.

Macfarlane R (2002) Principles of Landscape Ecology and Management of the Conservation Estate: A Case Study from the Lake District Environmentally Sensitive Area in TP Burt, TBA Thompson and J Warburton (Ed) *The British Uplands: Dynamics of Change,* pp164-166. JNCC Report No 319. *http://jncc.defra.gov.uk/PDF/jncc319_web.pdf*

Macgregor S and Szerszynski B (2003) *Environmental Citizenship and the Administration of Life.* Paper Presented at Citizen and Environmental Workshop, Newcastle University, 4-6 September.

Macilleathain R (2007) Gaelic in the Landscape. SNH, Perth. *http://www.snh.org.uk/pdfs/publications/gaelic/Gaelic%20in%20the%20landscape.pdf*

Mackenzie AFD (2002) On the Edge: 'Community' and 'Sustainability' on the Isle of Harris, Outer Hebrides. *Scottish Geographical Journal,* Vol 117, No 3, pp219-240.

Mackenzie AFD (2004) Re-Imagining the Land, North Sutherland, Scotland. *Journal of Rural Studies,* Vol 20, No3, pp273-287.

Mackenzie AFD (2006) A Working Land: Crofting Communities, Place and Politics of the Possible in Post-Land Reform Scotland. *Transactions of the Institute of British Geographer,* Vol 31, No 3, pp383-398.

Mackenzie AFD (2006) "" S Leinn Fhein am Fearann" (The Land is Ours): Re-claiming Land, Re-creating Community, North Harris, Outer Hebrides, Scotland. *Environment and Planning D: Society and Space*, Vol 24, No 4, pp577-598.

Mackenzie AFD (2010) A Common Claim: Community Land Ownership in the Outer Hebrides, Scotland. *International Journal of the Commons*, Vol 4, No 1, pp319-344.

Macpherson Research (2003) Western Isles Tourism Facts and Figures Update: Review of 2002 season. *http://www.cne-siar.gov.uk/eds./tourism report2002.pdf.*

Maler K-G (1985) *Welfare Economics and the Environment* in AV Kneese and JL Sweeney (Eds) *Handbook of Natural Resources and Energy*, Vol 1. North- Holland, Amsterdam, pp3-60.

Mander S (2008) The Role of Discourse Coalitions in Planning for Renewable energy: A Case Study of Wind Energy Deployment. *Environment and Planning C: Government and Policy*, 2008, Vol 26, No 3, pp583-600.

Manzo LC (2003) Beyond House and Haven: Toward a Revisioning of Emotional Relationships with Places. *Journal of Environmental Psychology*, Vol 23, No 1, pp47-61.

Manzo LC and Perkins DD (2006) Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*, Vol 20, No 4, pp335-350.

Marans RW (2003) Understanding Environmental Quality through QOL: The 2001 DAS and its Use of Subjective and Objective Indicators. *Landscape and Urban Planning*, Vol 65, No 1, pp73-83.

Markland J (2000) *Nature Conservation in the Scottish Countryside*. Speech to the Royal Institute of Chartered Surveyors (RICS). 28/11/2000.

Maro P (2007) Ideas For Overcoming the Limitations of GDP as a Progress Indicator. European Environmental Bureau.
http://www.eeb.org/publication/documents/SDSprogressBriefing-1207.pdf

Marsden T, Murdoch J, Lowe P, Munton P and Flynn A (1993) *Constructing the Countryside*. London: UCL Press.

Marshall R (1988) Agricultural Policy Development in Britain: rural land use planning issues. *Town Planning Review*, Vol 59, No 4, pp419-428.

Marshall TS (1950) *Citizenship and Social Class and other Essays*. Cambridge: Cambridge University Press.

Mason J, (2002) *Qualitative Researching*. 2nd Edition. London: Sage.

Mason P (2004) *Amec Annual Report-Chief Executive's Review*, pp24-31. *http://www.amec.com/documents/investors/6.6_financial_reports/4dce71296d37471facabe c1423055fc2/annual_report_2004.pdf*

Mather AS (1992) Land use, Physical sustainability and Conservation in Highland Scotland. *Land Use Policy*, Vol 9, No 2, pp91-110.

Mather AS (1993) Protected Areas in the Periphery: Conservation and Controversy in Northern Scotland. *Journal of Rural Studies*, Vol 9, No 4, pp371-384.

Mather AS (1996) The Inter-relationship of Afforestation and Agriculture in Scotland. *Scottish Geographical Magazine*, Vol 112, No 2, pp83-91.

Matthews P and Satsangi M (2007) Planners, Developers and Power: A Critical Discourse Analysis of the Redevelopment of Leith Docks, Scotland. *Planning Practice and Research*, Vol 22, No 4, pp495-511.

McClymont K and O' Hare P (2008) "We're Not Nimbys!" Contrasting Local Protest Groups with Idealised Conceptions of Sustainable Communities. *Local Environment*, Vol 13, No 4, pp321-335.

McCreery A (1988) The Highland Board Reviewed: A Note on the Analysis of Social and Economic Change. *Scottish Geographical Magazine*, Vol 4, No 3, pp171-175.

McIntosh A (2004) *Soil and Soul: People versus Corporate Power*. London: Aurum Press.

McKay S (2010) In Pursuit of Parrhesia: An Investigation into Knowledge Selection in Inquisitorial Planning Practice. *Environment and Planning A*, Vol 42, No1, pp116-133.

McLaughlin B (1992) Agriculture and Rural Strategy: Diversification in the Farming Industry. *The Planner*, Vol 78, No 21, pp12-15.

McMahon SK (2002) The Development of Quality of Life Indicators - A Case Study from the City of Bristol, UK. *Ecological Indicators*, Vol 2 Nos 1-2, pp177-185.

Mcmorran R, Price MF and McVittie A (2006) *A Review of the Benefits and Opportunities attributed to Scotland's Landscapes of Wild Character*. Scottish Natural Heritage Commissioned Report 194.
http://www.snh.org.uk/pdfs/publications/commissioned_reports/Report%20No194.pdf

Meadowcroft J (2007) Who is in Charge Here? Governance for Sustainable Development in a Complex World. *Journal of Environmental Policy and Planning*, Vol 9, Nos 3-4, pp299-314.

Meppen T (2000) The Discursive Community: Evolving Institutional Structures for Planning Sustainability. *Ecological Economics*, Vol 34, No1, pp47-61.

Michaelson J, Abdallah S, Steur, N, Thomson S and Marks N (2009) *National Accounts of Well-Being: Bringing Real Wealth into the Balance Sheet*. New Economics Foundation, London. *http://cdn.media70.com/national-accounts-of-well-being-report.pdf*

Mitchell C and Connor P (2004) Renewable Energy Policy in the UK 1990-2003. *Energy Policy*, Vol 32, No17, pp1935-1947.

Mointeach gun Mhuileann (2004) Lewis - The Forty Mile Wind Farm? *http://www.mwtlewis.org.uk/*

Moore GE (1922) *The Conception of Intrinsic Value* in GE Moore *Philosophical Studies*. London: Routledge and Kegan Paul. *http://www.ditext.com/moore/intrinsic.html*.

Moore- Coyler R and Scott AJ (2005) From Elitism to Inclusivity: Temporal Change in Public Participation and Perception in Landscape. *Landscape Research*, Vol 30, No 4, pp501-523.

More, T, Averill JR and Stevens TH (1996) Values and Economics in Environmental Management: A Perspective and Critique. *Journal of Environmental Management*, Vol 48, No 4, pp397-409.

Morris C and Potter C (1995) Recruiting the New Conservationists: Farmers' Adoption of Agri-Environmental Schemes in the UK. *Journal of Rural Studies*, Vol 11, No 1, pp1-63.

Morris J, Mills J and Crawford IM (2000) Promoting Farmer Uptake of Agri-environment Schemes: The Countryside Stewardship Arable Options Scheme. *Land Use Policy*, Vol 17, No 3, pp241-254.

Moser G (2009) Quality of life and Sustainability: Toward Person-Environment Congruity. *Journal of Environmental Psychology*, Vol 29, No 3, pp351-357.

Mowle A (1988) Changing Countryside: Land Use Policies and the Environment. *Geography*, Vol 73, No 4, pp318-326.

Mulgan R (2003) *Holding Power to Account: Accountability in Modern Democracies*. Basingstoke: Pelgrave.

Munton R (2009) Rural Land Ownership in the United Kingdom: Changing Patterns and Future Possibilities for Land Use. *Land Use Policy*, Vol 26, No3, pp554-561.

Naess A (1984) A Defence of The Deep Ecology Movement. *Environmental Ethics*, Vol 6, No 3, pp265-270.

National Trust For Scotland (2006) Lighting the Way. *Scotland in Trust*, Spring 2006, Edinburgh.

Nature Conservancy Council (1984) *Nature Conservation in Great Britain*. Peterborough: Joint Nature Conservation Committee.

Neumayer E (2007) (3rd Ed) *Weak versus Strong Sustainability: Exploring the Limits of Two Opposing Paradigms*. Cheltenham: Edward Elgar Publishing.

Newman P (2002) *Sustainability, Urban Design and Transport*. Paper Submitted to the Online Conference In Search of Sustainability. *www.isoconference.org.au*

Nisbet JD and Watt J (1980) Case Study. Rediguide 26, University of Nottingham.

North West Lewis Tourism Concerns (2004) *Survey Conducted August/September 2004*.

Norton BG (1994) *On What We Should Save: The Role of Cultures in Determining Conservation Targets* in P Forey and al (Eds) *Systematics and Conservation Evaluation*. Oxford: Oxford University Press.

Noss RF (1990) Indicators for Monitoring Diversity: A Hierarchical Approach. *Conservation Biology*, Vol 4, No 4, pp355-364.

OECD (2011) *Better Life Index*. www.oecdbetterlifeindex.org.

Oelschlaeger M (1991) *The Idea of Wilderness*. New Haven: Yale University Press.

Olson M (1965) *The Logic of Collective Action*. Cambridge MA: Harvard University Press.

Olsson J (2009) The Power of the Inside Activist: Understanding Policy Change by Empowering the Advocacy Coalition Framework (ACF). *Planning Theory and Practice*, Vol 10, No 2, pp167-187.

O'Riordon T (1971) *Perspectives on Resource Management*. London: Pion.

O'Riordon T (1999) From Environmentalism to Sustainability. *Scottish Geographical Journal*. Vol 115, No 2, pp151-165.

Ostrom E (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.

Ottinger RL and Williams R (2002) Renewable Energy Resources for Development. *Environmental Law*, Vol 32, No 2, pp101-145.

Owens S (1994) Land, Limits and Sustainability: A Conceptual Framework and Some Dilemmas for the Planning System. *Transactions of the Institute of British Geographers*, Vol 19, No 4, pp439-456.

Owens S (2008) Keynote Lecture to the 2008 Planning Research Conference at Queen's University Belfast on Planning, Democracy and Public Policy.

Pacione M (1996) Rural problems and Planning for Real in Skye and Lochalsh. *Scottish Geographical Magazine*, Vol 112, No 1, pp20-28.

Pahl RE (1966) The Rural-Urban Continuum. *Sociologica Ruralis*, Vol 6, No 3, pp299-329.

Parsons G (2002) Nature Appreciation, Science and Positive Aesthetics. *British Journal of Aesthetics*, Vol 42, No 3, pp279-285.

Pearce D (2002) An Intellectual History of Environmental Economics. *Annual Review of Energy and the Environment*, Vol 27, No1, pp57-81.

Pedersen E and Persson Waye KP (2007) Wind Turbine Noise, Annoyance and Self-Reported Health and Well-Being in Different Living Environments. *Occupational Environmental Medicine*, Vol 64, No7, pp480-486.

Pedersen OW (2010) Environmental Principles and Environmental Justice. *Environmental Law Review*, Vol 12, No 1, pp26-49.

Peirce CS (1940) *Abduction and Induction* in J Buchler (Ed) *The Philosophy of Peirce: Selected Writings*. London: Routledge and Kegan Paul, pp150-156.

Penning-Rowsell EC (1974) Landscape Evaluation for Development Plans. *The Planner*, Vol 60, No 10, pp930-935.

Peterkin T (2001) Lairds Fear Worst over Right to Buy. *Daily Telegraph* 27/11/2001. *http://www.telegraph.co.uk/news/uknews/1363599/Lairds-fear-worst-over-right-to-buy.html*

Philip LJ (1998) Combining Quantitative and Qualitative Approaches to Social Research in Geography - An Impossible Mixture? *Environment and Planning A*, Vol 30, No 2, pp261-276.

Phillips A (2003) Turning Ideas on Their Head: A New Paradigm for Protected Areas. *George Wright Forum*, Vol 20, No 2, pp8-32.

Philo C (1992) Neglected Rural Geographies: A Review. *Journal of Rural Studies*, Vol 8, No 2, pp193-207.

Philo C and Parr H (2004) 'They Shut Them Out The Road': Migration, Mental Health and the Scottish Highlands. *Scottish Geographical Journal*, Vol 120, Nos 1-2, pp47-70.

Pitkin HF (1967) *The Concept of Representation*. Berkeley: University of California Press.

Popper K (1959) *The Logic of Scientific Discovery*. New York: Basic Books.

Porritt J and Winner D (1988) *The Coming of the Greens*. London: Collins Fontana.

Portugali J and Alfasi N (2007) An Approach to Planning Discourse Analysis. *Urban Studies*, Vol 45, No 2, pp251-272.

Potter C and Lobley M (1998) Landscapes and Livelihoods: Environmental Protection and Agricultural Support in the Wake of Agenda 2000. *Landscape Research*, Vol 23, No 3, pp223-237.

Powell J, Selman P and Wragg A (2002) Protected Areas: Reinforcing the Virtuous Circle. *Planning Practice and Research*, Vol 17, No 3, pp279-295.

Pryor F (2010) *The Making of the British Landscape*. London: Penguin Books.

Pykh IG and Pykh YA (2008) Quality of life Indicators at Different Scales: Theoretical Background. *Ecological Indicators*, Vol 8, No 6, pp854-862.

Quental N and al (2010) Sustainability: Characteristics and Scientific Roots. *Environment, Development and Sustainability*, Vol 13, No 2, pp257-276.

Quine W and Ullman J (1970) *The Web of Belief*. New York: Random House.

Quiroga D (2009) "Crafting Nature: the Galapagos and the Making and Unmaking of a 'Natural Laboratory'". *Journal of Political Ecology: Case Studies in History and Society*, Vol 16, No 1, pp123-140.

Raymond CM, Brown G and Weber D (2010) The Measurement of Place Attachment: Personal, Community and Environmental Connections. *Journal of Environmental Psychology*, Vol 30, No 4, pp422-434.

Rawls J (1971) *A Theory of Justice*. Cambridge MA: Harvard University Press.

Rennie A (2006) The Importance of National Parks to Nation-Building. Support for the Natural Parks (Scotland) Act 2000. *Scottish Geographical Journal*, Vol 122, No 3, pp223-232.

Retzlaff R (2008) Green Building Assessment Systems: A Framework and Comparison for Planners. *Journal of the American Planning Association*, Vol 74, No 4, pp505-519.

Richards J (1998) Western Isles Landscape Character Assessment, No92, SNH, Edinburgh. *http://www.snh.org.uk/publications/on-line/LCA/westernisles.pdf*

Richardson T (1996) Foucauldian Discourse: Power and Truth in Urban and Regional Policy Making. *European Planning Studies*, Vol 4, No 3, pp279-292.

Richardson T (2002) Freedom and Control in Planning: Using Discourse in Pursuit of Reflexive Practice. *Planning Theory and Practice*, Vol 3, No 3, pp353-361.

Rio Declaration on Environment and Development (1992) *The United Nations Conference on Environment and Development*. June 1992. *http://www.unesco.org/pv_obj_cache/pv_obj_id_F0F13F980F574500874587A888291351 6C0B0100/filename/RIO_E.PDF*

Ritchie J (2003) The Application of Qualitative Methods to Social Research in J Ritchie and J Lewis (Eds) *Qualitative Research Practice*. London: Sage.

Ritchie W (1976) The Meaning and Definition of Machair. *Transactions of the Botanical Society of Edinburgh*, Vol 42, No 4, pp431-440.

Ritchie J and Lewis J (2006) *Qualitative Research Practice*. London: Sage.

Roberts D and Thomson K (2003) Sources of Structural Change in Peripheral Rural Areas: The Case of the Western Isles, 1988-89-1997. *Regional Studies*, Vol 37, No 1, pp61-70.

Robinson GM (1994) *Agriculture as a Land Use* in A Fenton and DA Gilmour (Eds) *Rural Land Use on the Atlantic Periphery of Europe: Scotland and Ireland*. Dublin: Royal Irish Academy pp75-98.

Robinson J (2004) Squaring the Circle? Some Thoughts on the Idea of Sustainable Development. *Ecological Economics*, Vol 48, No 4, pp369-384.

Robinson SS (1990) *The Law of Game, Salmon and Freshwater Fishing in Scotland*. Edinburgh: Butterworths and the Law Society of Scotland.

Roebuck P and Pfiffer P (1999) The Persistence of Positivism in Conservation Biology. *Conservation Biology*, Vol 13, No 2, pp444-446.

Ross WB (1930) *The Right and the Good*. Oxford: Oxford University Press.

Rough E (2011) Policy Learning Through Public Inquiries? The Case of the Nuclear Energy Policy 1955-61. *Environment and Planning C: Government and Policy*, Vol 29, No 1, pp24-45.

Royal Society of Edinburgh (2008) *Committee of Inquiry into the Future of Scotland's Hills and Islands*. *www.rse.org.uk/cms/files/advice-papers/inquiry/hills/full_report.pdf*.

Royal Society for the Protection of Birds (1993) *Agriculture in Scotland: Farming for a Living Countryside*. Edinburgh: RSPB.

Sabatier P and Jenkins-Smith H (Eds) (1993) *Policy Change and Learning: An Advocacy Coalition Approach*. Boulder, Colorado: Westview Press.

Saito Y (1998) Appreciating Nature on its Own Terms. *Environmental Ethics*, Vol 20, No 2, pp135-149.

Sandercock L (2003) Out of the Closet: The Importance of Stories and Storytelling in Planning Practice. *Planning Theory and Practice*, Vol 4, No1, pp11-28.

Sanders RE (1987) *Cognitive Foundations of calculated speech: Controlling Understandings in Conversation and Speech*. Alban: SUNY Press.

Sandkjaer G and Sagile I (2010) Cognitive Closure in Urban Planning. *Planning Theory and Practice*, Vol 11, No 4, pp499-521.

Satsangi M (2006) 'The Best Laid Plans...?' An Assessment of Housing Association Provision in Rural Scotland. *Policy and Politics*, Vol 34, No 4, pp731-752.

Scannell L and Gifford R (2010) The Relations Between Natural and Civic Place Attachment and Pro-Environmental Behaviour. *Journal of Environmental Psychology*, Vol 30, No 3, pp289-297.

Schelhas J, Buck E and Geisler CC (2001) *Introduction: Challenge of Adaptive and Collaborative Management* in LE Buck, C Geiser, JW Schelhas, and E Wollenberg (Eds) *Biological Diversity: Balancing Interests through Adaptive Collaborative Management*. New York: CRC Press, pp19-31.

Schroeder CH (1998) Rational Choice versus Republican Moment-Explanations for Environmental Laws. *Duke University Environmental Law and Policy Forum*, Vol 9, No 1, pp29-59.

Scott A (2001) Contesting Sustainable Development: Low- impact development in Pembrokeshire Coastal National Park. *Journal of Environmental Policy and Planning*, Vol 3, No 4, pp273-287.

Scott A (2006) Assessing Public Perception of Landscape. *CAB Reviews: Past, Present and Future Perspectives. Perspectives in Agriculture, Veterinary Science Nutrition and Natural Resources.* Vol 1, No 041.

Scott A and Falzon C (2004) *Sustainable Landscape: Criteria and Indicators for Measuring and Characterising the Landscape of Wales.* Bangor: CCW.

Scott Committee (1942) *Report of the Committee on Land Utilities in Rural Areas.* London: HMSO.

Scott J (1998) *EC Environmental Law.* London: Longman.

Scott M (2008) Managing Rural Change and Competing Rationalities: Insights from Conflicting Rural Storylines and Local Policy Making in Ireland. *Planning Theory and Practice,* Vol 9, No 1, pp9-32.

Scottish Executive (2001) *Scotland's Renewable Resource.* Garrad Hassan and Partners Ltd. *http://www.scotland.gov.uk/Resource/Doc/47176/0014634.pdf*

Scottish Executive (2002) *Public Attitudes to the Environment in Scotland.* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/Resource/Doc/47007/0029685.pdf*

Scottish Executive (2003) *A Partnership for a Better Scotland,* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/Resource/Doc/47095/0025772.pdf*

Scottish Executive Environment Group (2003) *Legislating for the Nature of Scotland-Proposals to conserve and enhance Scotland's natural heritage.* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/consultations/environment/lnsp1.pdf*

Scottish Executive (2006) *Agricultural Census.* Scottish Government Publications, Edinburgh. *http://www.scotland.gov.uk/Publications/2006/10/agriccensus2006pdf*

Scottish Executive (2004a) *Guidance Pack on Crofting Community Right to Buy.* Scottish Government Publications, Edinburgh. *http://www.scotland.gov.uk/Publications/2004/06/19484/38643pdf*

Scottish Executive (2004b) *The National Planning Framework for Scotland.* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/Publications/2004/04/19170/35317pdf*

Scottish Executive (2004c) *Scotland's Biodiversity-It's in your Hands.* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/Resource/Doc/25954/0014583.pdf*

Scottish Executive (2005a) *Public Attitudes to the Environment in Scotland.* Scottish Executive Social Research, Edinburgh. *http://scotland.gov.uk/Resource/Doc/35596/0014292.pdf*

Scottish Executive (2005b) *Scotland's Renewable Energy Potential: Realising the 2020 Target.* Scottish Executive, Edinburgh. *http://www.scotland.gov.uk/Resource/Doc/54357/0013233.pdf*

Scottish Executive (2006) *Sustainable Development: A Review of International Literature.* Scottish Executive Social Research, Edinburgh.*http://www.scotland.gov.uk/Resource/Doc/123822/0029776.pdf.*

Scottish Government (2007*) Scotland's Biodiversity Indicators.* *http://scotland.gov.uk/Resource/Doc/202855/0054080.pdf.*

Scottish Government (2008) *Scottish Government Advisory Note.* Scottish Government, Edinburgh.

Scottish Government (2009a) *Climate Change Delivery Plan: Meeting Scotland's Statutory Climate Change Targets.* Scottish Government, Edinburgh. *www.scotland.gov.uk/Publications/2009/06/18103720/0.*

Scottish Government (2009b) *Scotland's People Annual Report: Results from 2009 Scottish Household Survey.* Scottish Government, Edinburgh. *http://www.scotland.gov.uk/Publications/2010/08/25092046/0*

Scottish Landscape Forum (SLF) (2007) *Scotland's Living Landscapes: Places for People.* The Scottish Landscape Forum Report to Scottish Ministers. SNH, Inverness. *http://www.snh.org.uk/pdfs/strategy/landscapes/ReporttoMinisters.pdf*

Scottish Office (1995) *Scottish Rural Life Update: A Revised Socio-Economic Profile of Rural Scotland.* SO, Edinburgh.

Scottish Office (1998) *People and Nature. A New Approach to SSSI Designations in Scotland.* SO, Edinburgh. *http://www.royalsoced.org.uk/477_PEOPLEANDNATUREANEWAPPROACHTOSSSIDES IGNATIONSINSCOTLAND.html*

Scottish Transport Statistics No 24 (2005) *Scottish Government Publication.* *www.scotland.gov.uk*

Scottish Transport Statistics No 25 (2006) *Scottish Government Publication.* *www.scotland.gov.uk*

Scottish Wildlife Trust (2011) *Annual Report and Financial Statements for the year ended 31ˢᵗ March 2011.* *www.scottishwildlifetrust.org.uk/docs/027_104_publications_Annual_Report_2010_10_13 13508110.pdf*

Seale C (1999) *The Quality of Qualitative Research.* Oxford: Blackwell.

Searle G (2004) Planning Discourses and Sydney's Recent Metropolitan Strategies. *Urban Policy and Research,* Vol 22, No 4, pp367-391.

SEERAD (2002) *WGS/FWPS Review.* Report of the Steering Group. Scottish Executive, Edinburgh.

SEERAD (2005) *Crofting and its Role in Population Retention, Income Generation and Environmental Conservation.* Analytical Services Division, 22 November.

Seidl I, Tisdell CA and Harrison S (2002) Environmental Regulation of Land Use and Public Compensation: Principles and Swiss and Australian Examples. *Environment and Planning C: Government and Policy*, Vol 20, No 5, pp699-716.

Selman PH (1998) Landscape and Wildlife in PH Selman (Ed) *Countryside Planning and Practice: The Scottish Experience*. Stirling: Stirling University Press.

Selman PH (2001) Social Capital, Sustainability and Environmental Planning. *Planning Theory and Practice*, Vol 2, No 1, pp13-30.

Senbel M (2006) Embracing Spirituality and Religion in Planning Practice. *Planning Theory and Practice*, Vol 7, No 1, pp95-97.

Setten G (2001) Farmers, Planners and the Moral Message of Landscape and Nature. *Ethics, Place and Environment*, Vol 4, No 3 pp220-225.

Sharp J and Howard K (1996) *Student Research Project*. Gower: Aldershot.

Sharp L and Richardson T (2001) Reflections on Foucauldian Discourse Analysis in Planning and Environmental Policy Research. *Journal of Environmental Policy and Planning*, Vol 3, No 3, pp193-209.

Sheail J (1975) The Concept of National Parks in Great Britain 1900-1950. *Transactions of the Institute of British Geographers*, Vol 66, pp41-56.

Sheail J (1976) *The History of Nature Conservation in Britain*. Glasgow and London: Blackie.

Sheail J (2000) The Countryside (Scotland Act 1967 Revisited. *Scottish Geographical Journal*, Vol 116, No 1, pp25-40.

Shields P and Tajalli H (2006) Intermediate Theory: The Missing Link to Successful Student Scholarship. *Journal of Public Affairs Education*, Vol 12, No 3, pp313-334.

Shoard M (1997) *This Land is our Land: The Struggle for Britain's Countryside*. London: Gaia Books.

Shoard M (1982) 'The Lure of the Moors' in J Burgess and J Gold (Eds) *Valued Environments*, London: Allen Unwin, pp55-73.

Shucksmith M (1988) Current Rural Land-Use Issues in Scotland: An Overview. *Scottish Geographical Magazine*, Vol 104, No 3, pp176-180.

Shucksmith M, Watkins L and Henderson M (1993) Attitudes and Policies Towards Residential Development in the Scottish Countryside. *Journal of Rural Studies*, Vol 9, No 3, pp243-255.

Shumaker SA and Taylor RB (1983) *Toward a Clarification of People-Place Relationships: A Model of Attachment to Place* in NR Feimer and ES Geller (Eds) *Environmental Psychology – Directions and Perspectives*. New York: Praeger, pp219-251.

Sidaway RM (1996) Outdoor Recreation and Nature Conservation: Conflicts and their Resolution. Unpublished PhD Thesis, Edinburgh.

Slater AM and Pedersen O (2009) Environmental Justice: Lessons on Definition and Delivery in Scotland. *Journal of Environmental Planning*, Vol 52, No 6, pp797-812.

Slovic P (1996) Perception of Risk from Radiations. *Radiations Protection Dosimetry*. Vol 68, Nos 3-4, pp165-180.

Smith M (1998) *Ecologism: Towards Ecological Citizenship*. Minneapolis: Minneapolis University Press.

Smith PM (2006) The Application of Critical Discourse Analysis in Environmental Dispute Resolution. *Ethics, Policy and Environment*. Vol 9, No1, pp79-100.

Smith RG (2003) World City Actor-Networks. *Progress in Human Geography*, Vol 27, No1, pp25-44.

Smout TC (1991) The Highlands and the Roots of Green Consciousness 1750-1990. *Proceedings of the British Academy*, Vol 76, pp237-263.

Smout TC (1997) *A Century of the Scottish People 1830-1850*. London: Collins.

Smout TC (1998) *A History of the Scottish People 1560-1830*. London: Fontana Press.

Snape D and Spencer L (2003) *The Foundations of Qualitative Research* in J Ritchie and J Lewis (Eds) *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Sage: London.

SNH (1994) *A Landscape Character Assessment for the Western Isles*. SNH, Battleby.

SNH (1999) *National Scenic Areas: Scottish Natural Heritage's Advice to Government*. SNH, Battleby. *http://www.snh.org.uk/pdfs/nsa/advicetogovernment.pdf*

SNH (2002) *Nature Conservation Designations and Land Values*. SNH, Edinburgh. *http://www.scotland.gov.uk/Publications/2002/07/15133/9012*

SNH (2003) *Wildness in Scotland's Countryside: A Policy Statement*. SNH, Battleby. *http://www.snh.gov.uk/docs/A150654.pdf*

Soper K (1995) *What is Nature? Culture, Politics and the non-Human*. Oxford: Blackwell.

Spencer L, Ritchie J and O'Connor W (2003) *Analysis: Practices, Principles and Processes* in J Ritchie and J Lewis *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage.

Stainton-Rogers W (2002) Logics of Inquiry in Potter S (Ed) *Doing Postgraduate Research*. Milton Keynes: The Open University.

Stamp D (1969) *Nature Conservation in Britain*. London: Collins.

Steele W (2011) Strategy making for Sustainability: An Institutional Learning Approach to Transformative Planning Practice. *Planning Theory and Practice*, Vol 12, No 2, pp205-221.

Stephenson J (2010) People and Place. *Planning Theory and Practice*, Vol 11, No 1, pp9-21.

Stewart D (2006) *Scottish Biodiversity List Social Criteria: Results of a Survey of the Scottish Population.* Research Findings No 26, Scottish Executive. *http://www.scotland.gov.uk/Resource/Doc/99806/0024169.pdf*

Stoll-Kleemann (2001) Opposition to the Designation of Protected Areas in Germany. *Journal of Environmental Planning and Management*, Vol 44, No 1, pp109-128.

Stornoway Gazette (2009) *Convener Still to Be Convinced on National Park Status for Harris.* Stornoway Gazette. 30/04/2009.

Stratford E (2009) Belonging as a Resource: The Case of Ralph's Bay, Tasmania, and the Local Politics of Place. *Environment and Planning A* 2009, Vol 41, No 4, pp796-810.

Strauss AL and Corbin J (1990) *Basics of Qualitative Research: Grounded Theory Procedures and Techniques.* Sage: Thousand Oaks.

Stringer LC, Dougill AJ, Fraser E, Hubacek K, Prell C and Reed MS (2006) Unpacking "Participation" in the Adaptive Management of Social- Ecological Systems: A Critical Review. *Ecology and Society*, Vol 11, No 2, Article 39. *http://www.ecologyandsociety.org/vol11/iss2/art39/*

Strong R (2011) *Visions of England.* London: The Bodley Head.

Sullivan H and Skelcher C (2002) *Working Across Boundaries: Collaboration in Public Services.* Basingstoke: Palgrave.

Swanwick C (2004) *Landscape Character Assessment: Guidance for England and Scotland. Techniques and Criteria for Judging Capacity and Sensitivity.* Topic Paper No 6. Countryside Agency and Scottish Natural Heritage. *http://www.naturalengland.org.uk/Images/lcatopicpaper6_tcm6-8179.pdf*

Swanwick C and Land Use Consultants (LUC) (2002) *Landscape Character Assessment: Guidance for England and Scotland.* Countryside Agency and SNH. *http://www.heritagecouncil.ie/fileadmin/user_upload/Planning/LCA_CPD/LCA_CPD_Sep _2011/Reports/LCA_Guidance_for_England_and_Scotland.pdf*

Swofford T and Slattery M (2010) Public Attitudes to Wind Energy in Texas: Local Communities in close proximity to wind farms and their effect on decision-making. *Energy Policy*, Vol 38, No 5, pp2508-2519.

Szarka J (2004) Wind Power, Discourse Coalitions and Climate Change: Breaking the Stalemate? *European Environment*, Vol 14, No 6, pp317-330.

Tait M (2002) Room for Manoeuvre? An Actor-Network Study of Central-Local Relations in development plan making. *Planning Theory and Practice*, Vol 3, No1, pp69-85.

Taylor J (2002) *Sustainable Development: A Dubious Solution in Search of a Problem.* Policy Analysis 449 August 2002. *http://www.cato.org/pubs/pas/pa449.pdf*

Thomas R (1999) *Refining Rural Development.* RSA Lecture, October 1999.

Thompson DBA, Stroud DA and Pienkowski M (1988) *Afforestation and Upland Birds: Consequences forPopulation Ecology* in MB Usher and DBA Thompson (Ed) *Ecological Change in the Uplands.* Oxford: Blackwell Scientific, pp237-260.

Thompson IB (1999) Sustainable Rural Development in the Context of a High Mountain National Park: The Parc National de la Vanoise, France. *Scottish Geographical Journal*, Vol 115, No 4, pp297-318.

Thompson N (2005) Inter-Institutional Relations in the Governance of England's National parks: A Governmentality Perspective. *Journal of Rural Studies*, Vol 21, No 3, pp323-334.

Thompson S, Abdallah S, Marks N, Simms A and Johnson V (2007) *The European (un) Happy Index: An Index of Well-Being and Carbon Efficiency in the EU.* New Economics Foundation, London. *http://www.neweconomics.org/sites/neweconomics.org/files/The_European_Happy_Planet_Index.pdf*

Thrift NJ and Johnston RJ (1993) The Futures of Environment and Planning A. *Environment and Planning A*, Anniversary Issue, Vol 25, pp83-102.

Tinker J (1972) Nature Conservancy on a Knife Edge. *New Scientist*, Vol 53, No 778, pp68-70.

Tippett J, Handley JF, Ravetz J (2007) Meeting the Challenge of Sustainable Development - A Conceptual Appraisal of a New Methodology for Participatory Ecological Planning. *Progress in Planning*, Vol 67, No 1, pp9-98.

Todd H and Zografos C (2005) Justice for the Environment: Developing a Set of Indicators of Environmental Justice in Scotland. *Environmental Values*, Vol 14, No 4, pp483-501.

Tognoli J (1987) *Residential Environments* in D Stokols and I Altman (Eds) *Handbook of Environmental Psychology* Vol 1. New York: Wiley, pp655-690.

Toke D (2002) Wind Power in UK and Denmark: Can Rational Choice Help Explain Different Outcomes? *Environmental Politics*, Vol 11, No 4, pp83-100.

Toke D, Breukers S and Wolsink M (2008) Wind Power Deployment Outcomes: How Can We Account for the Differences? *Renewable and Sustainable Energy Reviews*, Vol 12, No 4, pp 1129-1147.

Towers W and Futty DW (1989) *Land Capability for Forestry in Northern Scotland Including Orkney and Shetland.* Forestry Commission Field Book Vol 3. Edinburgh: Macaulay Land Use Research Institute.

Tracy K (2003) *Discourse Analysis in Communication* in D Schriffin, D Tannen and H Hamilton (Eds) *Handbook of Discourse Analysis*. Oxford: Blackwell, pp725-749.

Treanor P (1997) *Why Sustainability is Wrong.*
www.inter.nl.net/users/Paul.Treanor/sustainability.html

Treweek J (2009) *Scoping Study for the Design and Use of Biodiversity Efforts in an English Context*. Final Report to DEFRA.
http://archive.defra.gov.uk/evidence/economics/foodfarm/reports/documents/BiodiversityO ffsets12May2009.pdf

Truex DP (1996) *Text-Based Analysis: A Brief Introduction.* College of Business Administration, Georgia State University.

Turner JR (1975) Applications of Landscape Evaluation: A Planner's View. *Transactions of the Institute of British Geographers*, No 66, pp156-161.

Turnock D (1975) Small Farms in the North of Scotland: An Exploration in Historical Geography. *Scottish Geographical Magazine*, Vol 91, No 3, pp164-181.

Ullmann S (1962) *Semantics: An Introduction to the Science of Meaning.* Oxford: Blackwell.

UN Conference on Environment and Development (1992) *The Rio Declaration on Environment and Development.*
http://www.unesco.org/pv_obj_cache/pv_obj_id_C09115832266602DD3CE315A0216B938 5F1050100/filename/RIO_E.PDF

UN Framework Convention on Climate Change (UNFCCC) (1992) *UN Convention on Climate Change*. New York: United Nations.
http://unfccc.int/resource/docs/convkp/conveng.pdf

Urry J (1990) The Tourist Gaze: Leisure and Travel in Contemporary Societies. London: Sage.

Van Den Belt H and Gremmen B (2001) Between Precautionary Principle and "Sound Science": Distributing the Burdens of Proof. *Journal of Agricultural and Environmental Ethics*, Vol 15, No 1, pp103-122.

Van Den Bergh JCJM (1996) *Ecological Economics and Sustainable Development.* Cheltenham: Edward Elgar.

Van Dijk TA (2001) *Critical Discourse Analysis* in D Tannen, D Schiffrin and HE Hamilton (Eds) *The Handbook of Discourse Analysis*. Oxford: Blackwell pp352-371.

Van Dijk TA (2002) Media Contents: The Interdisciplinary Study of News as Discourse in KJ Bensen and N Jankowski A *Handbook of Qualitative Methodologies for Mass Communication Research.* London: Routledge pp108-120.

Van Dijk TA and Kintsch W (1983) *Strategies of Discourse Comprehension.* New York: Academic Press.

Verhagen FC (2008) Worldviews and Metaphors in the Human-Nature Relationship: An Ecolinguistic Exploration Through the Ages. *Language and Ecology*, Vol 2, No 3, pp1-19.

Views of Scotland (2003) *Wind Turbines and Rural Tourism, An Analysis of Data from VisitScotland.*
www.viewsofscotland.org/library/docs/Wind_turbines_and_rural_tourism.pdf

Visit Scotland (2002) NFO System Three: *Investigation into the Potential Impacts of Wind Farms on Tourism in Scotland.* Final Report. Prepared for Visit Scotland.
http://www.viewsofscotland.org/library/docs/VS_Survey_Potential_Impact_of_WF_02.pdf

VoB JP, Newig J, Kastens B, Monstadt J and Nolting B (2007) Steering for Sustainable Development: A Typology of Problems and Strategies with Respect to Ambivalence, Uncertainty and Distributional Power. *Journal of Environmental Policy and Planning*, Vol 9, Nos 3-4, pp193-212.

Vogel S (1996) *Against Nature. The Concept of Nature in Critical Theory.* Albany: State University of New York.

Wagner CS (2008) *The New Invisible College: Science for Development.* Washington DC: Brookings Institution Press.

Walker G and Shove E (2007) Ambivalence, Sustainability and the Governance of Socio-Technical Transactions. *Journal of Environmental Policy and Planning*, Vol 9, Nos 3/4, pp227-244.

Wallner A, Bauer N and Hunziker M (2007) Perceptions and Evaluations of Biosphere Reserves by Local Residents in Switzerland and Ukraine. *Landscape and Urban Planning*, Vol 83, Nos 2-3, pp104-114.

Warner M (1997) Consensus Participation: An Example for Protected Areas Planning. *Public Administration and Development*, Vol 17, No 4, pp413-432.

Warren C (2002) Of Superquarries and Mountain Pathways: Recurring Themes in Scottish Environmental Conflict. *Scottish Geographical Journal*, Vol 118 No 2, pp101-127.

Warren CR and Birnie RV (2009) Re-Powering Scotland: Wind Farms and the 'Energy or Environment?' Debate' *Scottish Geographical Journal*, Vol 125, No 2, pp97-12.

Warren CR, Lumsden C, O' Dowd S and Birnie RV (2005) 'Green on Green': Public Perceptions of Wind Power in Scotland and Ireland. *Journal of Environmental Planning and Management*, Vol 48, No 6, pp853-875.

Warren CR and McKee A (2011) The Scottish Revolution? Evaluating the Impacts of Post-Devolution Land Reform. *Scottish Geographical Journal*, Vol 127, No1, pp17-39.

Watson J (2000) *Crofting and the Environment - Opportunities for the Future.* Speech to the SCU. 31/03/2000.

Watson V (2003) Conflicting Rationalities: Implications for Planning Theory and Ethics. *Planning Theory and Practice*, Vol 4, No 4, pp395-407.

Weart SR (2008) *Discovery of Global Warming*. Published Online by the American Institute of Physics. *http://www.aip.org/history/climate/summary.htm*

Weiskel T (1997) *Selling Pigeons in the Temple: The Danger of Market Metaphors in an Ecosystem*. Harvard Divinity School Occasional Paper, No 8, July 1997. *http://ecojustice.net/Coffin/ops-008.htm*

Wenger E (2006) *Communities of Practice: A Brief Introduction*: *http://www.ewenger.com/theory/communities_of_practice_intro.htm*

Western Isles Fisheries Trust (1999) *Economic Survey of Visiting Anglers in 1999*.

Western Isles Tourist Board (2005) *Wind Farm Research* - Final Report. *http://www.viewsofscotland.org/library/docs/WITB_survey.pdf*

Wetherall M, Taylor S and Yates SJ (2001) *Discourse Theory and Practice: A Reader*. London: Sage.

White L (1967) The Historical Roots of Our Ecological Crisis. *Science*, Vol 155, No 3767, pp1203-1207.

White T (1996) *Private Exchange and Social Capital: Multiple Functions of Common Property Regimes in Haiti*. Paper presented to 6th Biannual Conference of the International Association for the Study of Common Property. Berkeley, California.

Wilbraham L (1995) *Thematic Content Analysis: Panacea for the Ills of 'Intentioned Opacity' of Discourse Analysis*? Paper Presented at the First Annual Qualitative Analysis Conference, A Spanner in the works of the Factory of Truth, October 1995. University of the Witswatersrand, South Africa. *http://www.criticalmethods.org/wil.htm*

Wiegleb G (2002) *The Value of Biodiversity*. BTU Institute of Environmental Management, Cottbus.

Wigan M (1998) *The Scottish Highland Estate*. Shrewsbury: Swan Hill Press.

Wightman A (1996) *Who Owns Scotland*. Edinburgh: Canongate Books.

Wightman A (2000) 'Own Goal'. *Roof*, Nov/Dec.

Wilkinson R (1994) *Fishing the Scottish Islands*. Shrewsbury: Swan Hill Press.

Williams CC and Millington AC (2004) The Diverse and Contested Meanings of Sustainable Development. *The Geographical Journal*, Vol 170, No 2, pp99-104.

Willis D (1991) *The Story of Crofting in Scotland*. John Donald Publishers: Edinburgh.

Wills WPJ (1994) Subsidiarity and EC Environmental Policy: Taking People's Concerns Seriously. *Journal of Environmental Law*, Vol 6, No 1, pp85-91.

Wilson E O (1988) (Ed) *Biodiversity*. Washington DC: National Academy of Sciences/Smithsonian Institution.

Wilson GA (1997) Selective Targeting in ESAs: Implications for Farmers and the Environment. *Journal of Environmental Planning and Management*, Vol 40, No 2, pp199-236.

Wilson S (2005) *Production of the List of Species and Habitats considered to be of Principal Importance for the Purpose of Biodiversity Conservation in Scotland.* Scottish Biodiversity List Part 2 Technical Report – Final Report. Prepared by K Blake. SNH, Battleby. *http://www.snh.gov.uk/docs/B277674.pdf*

Windaction (2006) Claim That Windfarm Would Support Only 70 Jobs. *www.windaction.org*

Winter M (1996) *Rural Politics: Policies for Agriculture, Forestry and the Environment.* London: Routledge.

Winter M, Gaskell P and Short C (1998) Upland Landscapes in Britain and the 1992 CAP Reforms. *Landscape Research*, Vol 23, No 3, pp273-289.

Wissenburg M (1993) *The Idea of Nature and the Nature of Distributive Justice* in A Dobson A and P Lucardie (Ed) *The Politics of Nature: Explorations in Green Political Theory.* London: Routledge, pp3-20.

Wissenburg M (1998) *Future Directions in Green Political Thought. Greening Liberalism: How to Liberate Liberalism from the Bad Name It Deserves.* *http://www.psa.ac.uk/cps/1998/wissenburg/pdf*

Withers CWJ (2005) Landscape, Memory, History. Gloomy Memories and the 19th Century Scottish Highlands. *Scottish Geographical Journal*, Vol 121, No1, pp29-44.

Wolsink M (2000) Wind Power and the Nimby Myth: Institutional Capacity and the Limited Significance of Public Support. *Renewable Energy*, Vol 21, No 1, pp49-64.

Wolsink M (2007) Wind Power Implementation: The Nature of Public Attitudes: Institutional Capacity and the Limited Significance of Public Support. *Renewable and Sustainable Energy Review*, Vol 11, No 6, pp1188-1207.

Woods M (2003) Conflicting Environmental Visions of Rural: Wind Farm Development in Mid Wales. *Sociologia Ruralis*, Vol 43, No 3, pp271-288.

World Commission on Environment and Development (1987) *Our Common Future.* Oxford: Oxford University Press.

World Health Organisation (1994) Development of the WHOQOL; rational and current status. *International Journal of Mental Health*, Vol 23, No 3, pp24-56.

World Health Organisation (1997) *Measuring Quality of Life.* WHO, Geneva, Switzerland. *http://www.who.int/mental_health/media/68.pdf*

Worster D (1988) *The Ends of the Earth.* Cambridge: Cambridge University Press

Worster D (1993) *The Wealth of Nature: Ecological History and the Environmental Imagination.* Oxford University Press: USA.

Zidansek A (2007) Sustainable Development and Happiness in Nations. *Energy*, Vol 32, No 6, pp891-897.

Zimmerman MJ (2010) Intrinsic Vs Extrinsic Value. *The Stanford Encyclopaedia of Philosophy. http://plato.stanford.edu/entries/value-intrinsic-extrinsic/*

Zube EH, Sell JL and Taylor JG (1982) Landscape Perception: Research, Application and Theory. *Landscape Planning*, Vol 9, No1, pp1-33.

APPENDIX 1 THE NATURAL ENVIRONMENT – INTERNATIONAL AND NATIONAL PROTECTED AREAS

INTERNATIONAL DESIGNATIONS AND WESTERN ISLES RELEVANCE:

World Heritage Sites (WHS) listed by the World heritage Committee of UNESCO under the Convention of World Cultural and Natural heritage adopted in 1972 – 1 Site – St Kilda and surrounding waters and islands;

RAMSAR Sites under the 1971 Ramsar Convention on Wetlands of International Importance as Waterfowl Habitat ratified by the UK Government 1976 – 4 Sites: Lewis Peatlands; Loch an Duin (North Uist); North Uist Machair and Islands; and South Uist Machair and Lochs (total area 69,640);

Biosphere Reserves part of a network created by UNESCO as representative of natural habitats of the world's natural regions – 1 Site – Loch Druidibeg (1,667 ha);

Biogenetic Reserves have been designated in response to the Bern Convention ratified by the UK Government in 1983;

Special Protection Areas (SPA) under EC Directive (79/409/EEC) on the Conservation of Wild Birds – 15 Sites (total area 90,481 ha);

Special Areas of Conservation (SAC) designated under EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora – The Habitats Directive – 14 Sites (total area 90,226 ha)

Environmentally Sensitive Areas designated under EC Regulation 2328/91 (Article 21), EC Regulation 2078/92 and Agriculture Act 1986.

National Nature Reserves (NNR) designated under the National Parks and Access to the Countryside Act 1949 and Wildlife and Countryside Act 1981 – 4 Sites – Loch Druibideg; Monach Islands; North Rona and Sula Sgeir; and St Kilda (total area 3,237 ha);

Sites of Special Scientific Interest (SSSI) designated initially under the 1949 Act and now under the Nature Conservation (Scotland) Act 2004 – 53 Sites (total area 37,350 ha);

Areas of Special Protection designated under the Wildlife and Countryside Act 1981;

Regionally Important Geological and Geomorphological Sites (RIGS) a non-statutory designation. However, the sites are protected through the planning system;

NGO Nature Reserves non-statutory conservation sites (unless they coincide with a statutory designation) managed by the RSPB and SWT;

Historic Landscapes and Historic Gardens although not having a statutory basis these designations put an obligation on LPAs to consult SNH under the Town and Country Planning General Development Procedure (Scotland) Order 1992 and Circular 6/192 – 1 Site – Lewis Castle Grounds, Stornoway;

National Scenic Areas (NSA) protected through the issue of Circular 20/1980. There is a requirement to consult SNH on specific categories of development within these areas – 3 Sites – South Lewis, Harris and North Uist; South Uist machair; and St Kilda (total area 116,600 ha – a third of the Western Isles land area);

National Parks designated under the National Parks (Scotland) Act 2000;

Regional Parks designated under Section 48A of the Countryside (Scotland) Act 1967;

Country Parks designated under section 48 of the Countryside (Scotland) act 1967;

Local Nature Reserves declared by Local Authorities under Section 21 of the 1949 Act- 1 Site – Loch Stiapabhat, Lewis;

Long Distance Routes designated under Section 40 of the Countryside (Scotland) Act 1967;

Forest Parks non-statutory parks designated by the Forestry Commission mainly for recreational purposes.

APPENDIX 2 MULTI-STAKEHOLDER DISCOURSE 1

Objection to Lewis Wind Power (LWP) Planning Application

I object to the above planning application for a 234 turbine wind farm in Lewis, on the following grounds.

There is no Local Plan for Rural Lewis, and therefore there has been no opportunity for the community to participate in public consultation regarding appropriate land use. Normally, the public are afforded the opportunity for detailed discussion in the preparation of a Local Plan. As this did not happen in rural Lewis, I now request that the LWF proposal be the subject of a public Enquiry.

The visual intrusion will be enormous if this development is allowed to go ahead. Virtually everyone in North Lewis, a landscape dominated by the flat blanket bog, will be affected. This contravenes National Planning Policy Guideline (NPPG) 6 which states that "....developments should not be permitted where they would have a significant long-term detrimental impact on the amenity of people living nearby....".

This development is proposed for an area of high environmental importance (UN Ramsar site, Special Protection Area, adjacent to a special Area of Conservation). Projects which have an adverse impact on these sites should not go ahead if any alternative sites are available (NPPG 6). I submit that the LWP proposal would be extremely damaging, and that evidence has not been presented proving that there are no other ways of generating 702 MW of electricity.

The present land use – grazing peat cutting, visiting and using family shielings, fishing walking and other recreational uses – are disregarded in the Environmental Statement, and will be severely affected or lost if the proposal goes ahead. This contravenes the Western

Isles Structure Plan (SC8) which seeks"....land use and development solutions that sustain and enhance the cultural traditions and heritage of the islands....", and also NPPG6 which calls for planning policies "..... to protect the character of the designated areas against developments, including traffic generated by them, which would impair their recreational qualities.

APPENDIX 3 MULTI-STAKEHOLDER DISCOURSE 2

The Planning Officer

My objections to the proposed wind farm by AMEC/LWP are:

The whole development will destroy the landscape damaging thousands of years of natural heritage and wild life. It seems that for the past 50 years various governments have been saying save the rain forest in Brazil, look after the tundra in Greenland, find alternatives to peat compost because large scale extraction is damaging wild life and moorland in Ireland. Also Wildlife International have stated many of the birds in Britain and Europe are in decline as a result of industrial development of fragile places such as these. Yet here we are in the 21st Century about to turn one of the few remaining natural areas left in the British Isles into an industrial landscape all in the name of so called progress.

AMEC say the farm will generate around 6% of the UK's 10.4% green energy target, "which in reality is 0.624% the total energy required." Yet they fail to estimate in their percentages the cost of fuel that will be used in transport and excavation also the carbon dioxide emitted on a massive project like this, which will take four years to complete, {if this is deducted, then the savings in energy and cutting down of greenhouse gasses printed in their Environmental statement does not show a SIGNIFICANT picture,} which in fact is a small return for an inconceivably large and expensive undertaking.

{For the good of the Isle of Lewis} that's what we hear, what good will it be to the community. The developers have to sell the electricity to the national grid and pay transmission charges, who then sell it back to us, not at a reduce price because the company's will recoup their costs plus interest. "The islanders however!" Have to look at the turbines, listen to the howl of the blades, walk past the pylons hearing the endless hum of the power lines and suffer the health hazards they may transmit.

The upgraded interconnect. Is it possible that in a few years when nuclear power comes back into fashion and they realise that wind farm turned out to be a white elephant and this island being industrial, may be you will allow the building of one or two nuclear stations, or use this Rocky Island west of Scotland as a dump for radioactive waste. That would put the finishing touch to the destruction it seems you are trying to achieve.

Quarries, not a great deal of information is given, but with the amount of stone needed for 100 miles of roads etc; where will they be situated, how large will they have to be, what

impact on the environment and the communities in the area, will the access roads through the villages cope with the traffic needs, can they be made safe with regard to inquisitive children and after all the required stone has been removed will they be re-landscaped.

<u>The quarries should be under a separate planning application and not incorporated in the present wind farm application.</u>

Finally.

The Environment Services Committee have to come to a fair decision, but various Councillors openly state they are totally in favour of the project, how is it possible for the Committee to prove a non-biased judgement. Members with such views should not be allowed to vote on this application. But to regain confidence in the system a public debate should be held followed by a referendum.

In years to come if this project goes ahead and future generations ask for those who destroyed the Isle of Lewis. I hope records are kept or may be a plaque placed in the centre of Stornoway listing their names.

APPENDIX 4 MULTI-STAKEHOLDER DISCOURSE 3

NORTH LEWIS WINDFARM APPLICATION BY LEWIS WINDPOWER

I wish to object to the above application, on all of the following grounds.

There has been no community consultation on this scheme. There is no local plan for rural Lewis, and the community has therefore not been given the opportunity to take part in discussions regarding the appropriate land use.

The development contravenes the following planning guidelines:

NPPG 14. Natural heritage. Para. 5. *"Attractive and ecologically rich environments, where the natural environment is valued and cherished, are essential to social and economic well-being. A key role for the planning system is to ensure that society's land requirements are met in ways that do not erode environmental capital."*

The Environmental Statement provided by the developer makes no reference to the personal, cultural or historical attachment of the population of Lewis for their landscape and heritage.

Para. 16. *"The most sensitive landscapes may have little or no capacity to accept new development. Some of Scotland's remoter mountain and coastal areas possess an elemental quality from which many people derive psychological and spiritual benefits. Such areas are very sensitive to any form of development or intrusive human activity and planning authorities should take great care to safeguard their wild land character. This care should extend to the assessment of proposals for development outwith these areas which might adversely affect their wild land character."*

It is essential that these wild land qualities are safeguarded for both residents and visitors; these are the very qualities that make this landscape unique.

Para 80. *"The Precautionary Principle. The government is committed to the application of the Precautionary Principle where there are good grounds for judging that a development could cause significant irreversible damage to our natural heritage."*

The developer has assessed that many aspects of this development would cause significant, adverse and irreversible damage to the natural heritage.

NPPG 6. Renewable Energy Developments Para. 22. " *In relation to International natural heritage designations Ramsar sites, Special Protection areas (SPAs) and Special Areas of Conservation (SACs)), renewable energy projects, which would have an adverse effect on the conservation interests for which the site has been designated, should only be permitted where there is no alternative solution and there are imperative reasons of overriding public interest.* "

The proposed development area is an SPA and RAMSAR site. The developer has stated that there will be significant adverse environmental effects on the site. It has not been demonstrated that there is no alternative solution and further, no reasons of over-riding public interest have been demonstrated.

NPPG 6. (Guiding Principles) Para 16. *"The Scottish Ministers wish to see the planning system play its full part by making positive provision for such developments by:...meeting the international and national statutory obligations to protect designated areas, species and habitats of natural heritage interest and the historical environment from inappropriate forms of development; and minimising the effects on local communities."*

To approve this development, located in an open, wild island landscape which is designated to protect the existing species and habitats, would be in breach of this guiding principle. This development would have a catastrophic effect on the local communities, and on the natural and historic environment.

NPPG 18. Planning and the Historic Environment states: *"The guideline recognises that the historic environment comprises more than just the physical remains of the past and that the relationship between historic buildings, cultural features and the natural environment can help give an area its particular identity and character."*

Buildings and cultural features are only one part of what the whole historic environment means to all kinds of people. The indigenous population have been shown little or no regard in the developer's assessment, or in their proposals.

The sense of belonging, and if inheriting the unique culture and tradition through generations is defined in **Para 20**: *"The government recognises the historic environment as a finite and non-renewable resource and seeks to encourage its preservation and continued use so that it may be enjoyed today and passed on in good order to future generations."*

Approval to build one of the world's largest windfarm developments within this designated and cherished environment would make a mockery of all these guidelines.

Para 26 states: *" The cultural and environmental value of the historic environment adds to the quality of life of the local community. Additionally, it can help promote an area as a visitor destination which, in turn, can help generate widespread economic benefits through tourism and recreation. "*

Tourism is a major employment factor in this island, and all the statistics available indicate that the potential loss to this economy from tourism alone could be far in excess of any benefits from the development of this windfarm.

Western Isles Structure Plan: Policy SC9 Sustainability Management Practices pg 15:
" ...The Comhairle will ... further seek to sustain and enhance the quality of the unique landscapes, natural environment and biodiversity of the Western Isles for the enjoyment and education of its residents and visitors. "

Approval of the proposed development would be in direct breach of the Council's Structure Plan.

Comhairle nan Eilean Siar's response to the UK Energy Review (as approved by the Sustainable Development Committee, 28th August 2002) states: *"The development of renewable energy should always be balanced against natural heritage issues. The Comhairle would however argue that the balancing exercise is best dealt with at a local level and that the people of the Western Isles are well placed to judge what is in the interests of the environment."*

The North Lewis windfarm survey, published in August 2004, revealed that nearly 90% of those interviewed were opposed to this development.

I wish to object to the planning application by Lewis Wind Power (AMEC and British Energy) for the erection of 234 wind turbines in north Lewis.

The visual impact cannot be justified or mitigated. Lewis is characterised by vast open views; the sky and ocean dominate the landscape, creating a sense of space and tranquillity. The proposed windfarm would be visible from almost every village on the island, as well as from parts of Harris. Many of the turbines would be only 1.5 km from houses, and the developers acknowledge that there will be an increase in background noise levels. They also acknowledge a "substantial" and "long-term" effect on people's visual amenity. NPPG (National Planning Policy Guideline) 6 (Renewable Energy Developments) states that "In relation to the local community, developments should not be permitted where they would have a significant long term detrimental impact on the amenity of people living nearby, and where the impact cannot be mitigated satisfactory."

The windfarm is planned for land which is home to large numbers of protected birds, and is covered by several environmental designations: UN Ramsar Site (Wetland of International Importance): Special Protection Area (SPA-the Birds Directive) and Important Bird Area (IBA – the Bern Convention). It is adjacent to a special Area of Conservation (SAC – the Habitats Directive). NPPG 6 states that " In relation to international natural heritage designations (Ramsar sites, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)), renewable energy projects which would have an adverse effect on the conservation interests for which the site has been designated, should only be permitted where there is no alternative solution and there are imperative reasons of over-riding public interest, including those of a social or economic nature." The Western Isles Structure Plan also follows these guidelines (RM8).

The proposal contravenes NPPG 14 (Natural Heritage). For example: "Attractive and ecologically rich environments, where the natural environment is valued and cherished, are essential to social and economic well-being. A key role for the planning system is to ensure that society's land requirements are met in ways that do not erode environmental capital."

"The most sensitive landscapes may have little or no capacity to accept new development. Some of Scotland's remoter mountain and coastal areas possess an elemental quality from which many people derive psychological and spiritual benefits. Such areas are very sensitive to any form of development or intrusive human activity and planning authorities should take great care to safeguard their wild land character. This care should extend to the assessment of proposals for development outwith these areas which might adversely affect their wild land character."

"The presence of a protected ... habitat is a material consideration in the assessment of development proposals. Planning authorities should take particular care to avoid harm to species or habitats protected under ... European directives."

The developers, in their Environmental statement, disregard the present land use of the area in question. It is used, as it has been for thousands of years, by the local population to graze stock, to cut peats for domestic use, and to visit family sheilings, many of which have been in occupation for generations. The moorland and sheilings are a precious part of the cultural heritage of the island's people. Theme 3 of the Western Isles Quality of Life Initiative is that "The cultural and historical heritage is enhanced and promoted." The Western Isles Structure Plan (Policy ED2) states "Development proposals for ... wind (on-shore and off-shore) energy schemes and associated infrastructure ... will be viewed positively, subject to satisfactory assessment of all of the following: (i) the impact on local communities and any other existing or proposed land uses and interests; (ii) the impact, including cumulative impact, on natural and built heritage resources."

Lewis Wind Power predicts that, after the construction phase, the windfarm would employ 33 people, and 41 jobs would be supported by its supply chain. An annual rent for the use of the land of approximately £4 million would be paid (half of this would go to estate owners, some of whom live off-island, the rest to crofters). An estimated £560,000 would be paid to local communities, and an estimated £702,000 to a Western Isles-wide fund. Tourism currently brings £16 to £20 million to the economy of Lewis each year (£40 to £60 million to the Western Isles), employs 20-30% of the local population, and is growing by 6% per annum. Peace, tranquillity, atmosphere, character, scenery, history and culture are the main attractions that draw visitors to the Western Isles (Macpherson Research). A Visitscotland survey found that 25% of tourists would be less likely to return to an area with turbines. In a survey of tourist attitudes to the Lewis Wind Power development, 90% of respondents stated that the proposed development would, in their opinion, discourage tourists from visiting Lewis. (Visitor Survey on the Impact of Windfarm Development in Lewis, by tourism operators in North-west Lewis, 2004). This potential loss of tourists would have massive repercussions for the economy of Lewis (and the rest of the Western Isles – many tourists visit Lewis as part of an island-hopping holiday), and lead to the loss of many more jobs than the windfarm could create.

In direct contradiction of local council and Scottish Office guidelines, no official community consultation has been undertaken to ascertain community opinion. No Local Plans exist for Ness or the Westside, where much of the windfarm is proposed. A survey of over 1400 people in North Lewis undertaken by a local community group found that 88% of residents were against the proposed development (North Lewis Survey Group, 2004). The Western Isles Structure Plan states that "Members of a sustainable community are afforded opportunities to play a full part in the decisions that affect it." This has not been

done – in fact, it could be argued that the Local Authority have thwarted public discussions on wind farms, as they have repeatedly stated that it is unfair to discuss any aspect of a planning application until the formal planning application has been lodged. The Western Isles Structure Plan, policy SC9, states "the council will encourage management practices and activities that meet sustainability objectives in the use of land, water and other natural resources. It will further seek to sustain and enhance the quality of the unique landscapes, natural environment and biodiversity of the Western Isles for the enjoyment of its residents and visitors." The erection of 140 metre wind turbines on designated areas by a private company from outside the Western Isles is clearly in contravention of these stated aims.

I feel there has been insufficient debate locally on the impact this scheme would have on our local community, economy and way of life. I would therefore urge that a public enquiry is held.

I would like to object on the following grounds:

There has been no community consultation on this scheme. There is no local plan for rural Lewis, and the community has therefore not been given an opportunity to take part in discussions regarding appropriate land use.

Please tick the box below if you would like your personal details to be kept confidential.

APPENDIX 7 MULTI-STAKEHOLDER DISCOURSE 6

I am an American citizen who, after hearing of the horrific raptor casualties caused by my country's windfarms (especially Altamont, California), wishes to register an objection to the proposals lodged by Amec and British Energy for a 234-turbine wind farm on the Isle of Lewis in the Lewis Peatlands Special Protection Area (SPA), Isle of Lewis, Scotland, a site also designated under the RAMSAR Convention.

This consortium has chosen to ignore consistent and repeated advice from concerned individual conservationists and organizations to avoid developing on areas designated for their wildlife value. The proposed windfarm is of a scale, and in a location, where the damage it will do will harm this important area – legally protected for its important birds and rare peatland habitat.

This is part of a network of the very best sites for bird life in Europe, protected under European law. Any proposal for development on any of these EU protected sites has to pass a number of tests, the most fundamental being that any development should not damage the integrity of that site. The other factors which have to be considered are whether there are any alternatives to the proposed location for the development and whether or not there is overriding public interest in the development going ahead.

I believe that the Amec and British Energy proposal would damage the site, that there are suitable alternatives and that the public have a greater interest in maintaining the moor as a wild place than in allowing industrial development on it. A development on a special site like this should be for the benefit of the environment and our future generations, not to their cost. As for the threat to birds, the Golden Eagle is well known to be highly susceptible to turbine blade strike (more than 1000 eagles have been killed in Altamont, California, over the last 20 years) and there are sufficient other significant threats (e.g.: persecution, poisoning) to the Scottish and European populations. Other bird populations and important habitats are, as you are aware, at risk of destruction or despoilation.

This is a matter which causes grave concern to UK and European conservationists and, as an American, I join them in requesting that you turn down Amec/British Energy's application. Failing this, at the very least, I urge you to demonstrate your accountability and initiate urgently a public inquiry.

Thank you.