Harnessing Nature's Benefits for Human Well-being: Recognising the Wider Values of visits to our Coastal Landscapes

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Abstract
This paper explores coastal tourist destinations as socially valued settings, valued highly for their ability to satisfy human needs and to enhance wellbeing; a value that is largely unrecognised in traditional economic assessments of tourism. It examines the ways that tourists experience the intangible benefits that natural areas provide, which are termed cultural ecosystem services by the Millennium Ecosystem Assessment and the subsequent National Ecosystem Assessment and refer to ‘the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experience’. It will examine how such benefits of nature contribute to subjective wellbeing and how this influences tourists’ motivations for visiting natural areas.
Outline of Paper

Introduction
Protecting and enhancing natural landscapes makes sense on both an economic level, to preserve visitor numbers for example, and also on an intuitive level as landscapes evoke deep felt emotional responses, as demonstrated through the work of Kaplan and Kaplan (1989), Kellert and Wilson (1993) and Burgess et al (1988) who have, amongst others explored how people experience and react to the natural environment. Crespo and Flores (2003) go so far as to conclude that ‘identifying and protecting critical natural resources both for material and for emotional reasons is the crux of sustainability’ (p126).

Monetary assessments of natural resources are arguably most heavily relied upon as they can be easily inputted into cost benefit analyses for the purposes of tourism and natural resource management decisions. Such approaches are increasingly being contested and debated however, as they focus values down to a single monetary unit and are based on the idea of nature as a commodity, something that can be, actually or hypothetically, bought and sold in the market place (O’Neill (2007), Gregory at al.(1993), Kahneman and Knetsch (2005)). Such debates have resulted in alternative approaches to environmental valuation being put forward which deviate from emphasising the commodity value to a greater emphasis on understanding the intangible subjective, emotional and symbolic meanings associated with natural environments, the personal attachments that people form with landscapes and the benefits they derive from them which policy and decision makers find difficult to measure. In tourist settings, these intangible values are arguably the very reason for people visiting the landscape and yet, they are little researched or understood.

It is however, essential that these values are taken into account in decision-making processes, because by understanding the divergent meanings people ascribe to the environment, natural resource managers can manage settings for diverse publics in ways which are relevant and important to them. Moreover, understanding what human benefits and values might be lost as environments are destroyed or left to degrade is imperative in a holistic management of the environment.

This brief paper outlines a research project in progress to address these issues and describes a methodology developed to tackle the challenge of capturing ‘intangible values’ in ways which respect their intangible nature but still allows them to be analysed, understood and transmitted into management practice.

A Wellbeing Perspective to Environmental Value
This paper seeks to examine the rich and complex relationship that people have with the natural landscape by investigating the role played by the coastal areas of Dorset in providing benefits to people using contemporary discourses of cultural ecosystem services and subjective human wellbeing. It uses a human needs approach to determine the ways in which the natural environment acts to satisfy needs and influence wellbeing. Furthermore, it focuses upon how such a perspective can add to an understanding of the ways in which the natural environment and specifically coastal areas matter to people and have worth for them.

The idea that people develop attachments and emotional bonds with the physical environment has been explored through various disciplines and has been identified in terms such as place identity and place attachment, (Williams et al., 1992) and sense of place and rootedness, (Tuan, 1974). Such connections have also been explained through a human dependence on nature or what has come to be termed ‘biophilia’ after the influential work by Kellert and Wilson (1993). Their hypothesis proclaims a biological dependence on nature that extends far beyond issues of material sustenance to encompass a human craving for aesthetic, intellectual, cognitive and even spiritual meaning in the landscape. Such cravings
can be thought of as human needs and it is argued that the satisfaction of these needs leads to increased wellbeing. This research uses innovative methodologies to explore this relationship and to tackle the challenge of measuring and quantifying such nebulous concepts.

**An Innovative Methodology**

The methodology for this study was developed with the aim of operationalising complex ideas about human wellbeing and how they are affected by contact with nature. It uses the concept of cultural ecosystem services put forward by the Millennium Ecosystem Assessment to frame the research which include ‘the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experience’ (MEA, 2005). It also used the ideas developed through the subsequent National Ecosystem Assessment which examined the interactions between human needs and cultural ecosystem services in a UK context. This assessment purported that it is by meeting human needs that components of the Earth’s ecosystems become cultural goods and services. It is the extent to which these human needs are satisfied by contact with nature and what effect that has on individuals that this methodology is designed to examine.

The numerous dimensions of wellbeing evident throughout the literature were unpacked and a conceptual framework for examining human needs was developed using amongst others, the Human Scale Development Framework developed by Chilean economist Max-Neef (1992) and Maslow’s (1943) Theory of Human Need as a starting point. The resultant categorisation of human needs was designed to encompass the myriad dimensions of wellbeing found through the literature and the final categorisation used was:

1. Belonging and participation (including sense of place)
2. Need to know and understand (including cognitive development, learning and education)
3. Aesthetic needs and appreciation
4. Leisure and recreation
5. Freedom and escapism
6. Self-actualisation (including reflection and inspiration)
7. Transcendence (spiritual enrichment, calm and tranquillity)

A psychometric scale was then developed, using groupings of items under each human need category and the final survey consisted of thirty one items grouped under the seven human needs categories. By asking respondents to choose the degree to which they agreed with items on a likert scale, the extent to which the case study sites acted to satisfy various human needs could be recorded and quantified. Some items were adapted from various existing scales such as those cited above, whilst others were developed for the purpose of this study.

**Limitations of Human Needs Approach**

It should be noted that the dimensions of human wellbeing are not fixed and there is considerable overlap conceptually between the categories of human needs. Each category has been subjectively decided upon by the researcher and the items making up each human needs scale are not mutually exclusive and could fit into a number of categories. For example, in ‘Belonging and Participation’, the idea of a deep connectivity with nature could equally be thought of as a spiritual or transcendent experience. So, whilst these categories provide a useful conceptual framework for examining the ways in which the natural environment impacts upon human wellbeing, they must be thought of as dynamic and fluid.
Case Study Sites
This survey was carried out at two case study sites along the Jurassic coast of Dorset. These were at Durdle Door and Charmouth beach. These sites were chosen primarily for their attraction as ‘natural sites’ and for the potentially high occasion of cultural ecosystem services at each site. In addition, they are both relatively untouched by traditional tourist facilities (save for a small café and heritage centre at Charmouth beach) which may have otherwise proved to be influential in perceptions of the landscape. In this way, the effects of the natural landscape can be, at least to a certain extent isolated and measured.

The survey was carried out during three phases which spanned the tourist season of 2011 (June, August and October). It was decided to take a wide and inclusive sampling approach and include the whole of the visitor population to the two case study sites. In this way, each visitor had an equal chance of being asked to take part in the survey without prejudice to socio-economic status, length of stay or distance travelled.

A Mixed Methods Approach
The quantitative data collected was also complemented by a series of in-depth interviews to gather some richer insights into why people visit these areas and how they make them think and feel about their lives. In total 40 in-depth interviews were recorded and a further cohort of 13 individuals who were intending to visit the Dorset coast during 2011 were recruited to take part in further in-depth work. This group were also required to complete the survey but in addition, they were asked to take photographs of whatever they found interesting or meaningful in the landscape and also to write a landscape diary entry about their visit, what they did and how it made them think and feel. Lastly, they took part in a 30-40 minute interview to further explore their experiences on the Dorset coast. NVivo is being used to analyse these qualitative data.

Some early analysis of results indicate a broad consensus of the wellbeing properties of the landscape at the case study areas and an indication of the restorative effects of these landscapes. These will be discussed more fully during this paper presentation.


