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An Inquiry Concerning the Acceptance of Intrinsic Value Theories of Nature

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ABSTRACT

This study empirically assesses the extent to which intrinsic value theories of nature are accepted and acknowledged outside the realm of academic environmental ethics. It focuses on twenty of the largest landowning organisations in England, including both conservation and non-conservation organisations and investigates the environmental philosophical beliefs and values held by representative individuals of these groups. An in-depth interview was held with a representative from each organisation. The interviews were analysed using qualitative data analysis software and the results compared against a backdrop of academic philosophical positions. The study found that an ecocentric position which acknowledges nature's intrinsic value was adopted by the majority of respondents, both from conservation and non-conservation organisations. However, it was also found that individuals felt the idea of nature's intrinsic value was generally not reflected in organisational policy.

KEYWORDS

Intrinsic value, conservation, land management, qualitative analysis, environmental ethics

AIM AND INTRODUCTION

The aim of this study is to examine the acceptance or acknowledgement of intrinsic value theories of nature in an applied context. To this end, the study investigates empirically the existence of such theories amongst major conservation and non-conservation landowners/land managers in England. Acceptance of intrinsic value theories is examined at both personal and organisational levels as perceived by each interviewee, in order to ascertain whether individuals' values are reflected in the policies of their respective organisations. In making the move from theoretical notions of intrinsic value to intrinsic value in an applied sense, we add to the debate regarding how people see their relationship to land and assess whether such relationships outside the realm of academic environmental ethics remain based purely on instrumental principles.

The body of literature concerning environmental ethics is indeed considerable (Benson, 2000; Elliot, 1995; Palmer, 1994), much of which is motivated by the perception of the environmental crisis beginning in the 1960s (Elliot, 1995; Frolova, 1998; Jenkins, 1998; LaTrobe and Acott, 2000; Palmer, 1994; Passmore, 1975) but which has its roots in questions relating to humans' place in nature, which have occupied philosophers at least since Plato (Benson, 2000; Palmer, 1994; Pratt, 2000). There is thus a wealth of literature pertaining to the ethical status of nature and the metaphysical possibilities of selves, subjects and objects.

However, as Minter and Manning (1999) suggest, in-depth empirical research into environmental ethics, as opposed to opinion or attitude surveys, 'is largely absent from the scholarly literature' (p. 195). Thus, whereas the literature presents us with numerous accounts of differing systems which can or ought to guide our relationship with nature, little is known about which aspects of these systems have actually been accepted by those who have the ability to affect land. In other words, even if the philosophers have by and large rejected a purely anthropocentric, utilitarian approach to nature (Palmer, 1994), it is not philosophers that tend to write management plans.

It is suggested that ethics can be viewed as an evolutionary process, that is, that our moral sympathies tend to become more encompassing as humankind develops (Darwin, 1981; Leopold, 1968; Nash, 1989; Rolston, 1989). Thus, for Aldo Leopold, the next stage in our evolutionary ethical process is to enlarge the boundaries of our moral sympathies 'to include soils, waters, plants, and animals, or collectively: the land' (1968: 204). According to Palmer (1994: 73), it would seem that the majority of environmental ethicists have reached this next stage, but it is not known the extent to which people other than these ethicists have done so, nor even if others are moving in such a direction at all.

However, as Minter and Manning (1999: 199–200) argue, to identify and describe the state of people's ethical belief systems at any given time not only provides a descriptive insight into a particular state of affairs, but is also in-

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strumental in the process of ethical construction itself. That is, as communities are presented with knowledge of ethical systems already extant, their range of choice regarding ethical possibilities increases as they become more informed. An understanding of people's values and beliefs about nature is also relevant to the process of formulating environmental policies. Empirical studies such as this are therefore instrumental in providing a background to such policy decisions.

Just as knowledge of extant ethical systems may inform a community's ethical decision making, then so might a community's ethical decision making help to inform and reformulate ethical systems. For example, problems inherent with theoretical ethical systems may be overcome in unforeseen ways once these theories are actually put into practice, or else conversely, the reasons which people give for rejecting the adoption of a particular set of ethics in practice, may serve to illustrate weaknesses within such a system. Viewed in this way, 'folk ethics' stands in a position of reciprocal criticism and enlightenment with academic ethics.

BACKGROUND

Value theory is a central area of debate within environmental ethics (e.g. Palmer, 2003). Fundamental questions revolve around consideration of different types of value, how value is distributed, the origin of value and the recognition of value. A common distinction, for example, is that made between instrumental and intrinsic value. Instrumental value is related to usefulness. For instance, a pen has instrumental value as it helps to achieve another goal, that of writing. While there is broad agreement in the literature concerning ideas of instrumental value, the meaning of intrinsic value is more widely contested. Generally speaking intrinsic value refers to something that is valuable in itself and is not necessarily valuable as a means to other ends. Humans are often recognised as possessing intrinsic value but there is considerable debate concerning the application of the concept in a wider environmental context.

An issue of central concern relates to our understanding of the origin of intrinsic value. Is intrinsic value something that has real 'objective' existence, or is it a concept that is created 'subjectively' by people? This distinction has resulted in protracted debates between value subjectivists and value objectivists (Palmer, 2003). Value objectivists adhere to the idea that intrinsic value is something that has real existence and is not something simply created by humans. In other words we are recognising something in the real world rather than merely creating (or constructing) it. Value subjectivists, on the other hand, contend that intrinsic value is something that is created by humans and then 'projected' onto reality. Another important area of discussion regarding intrinsic value is consideration of where intrinsic value resides. Different schools of thought extend the concept of intrinsic value variously from humans (anthropocentrism)

to sentient and non-sentient individuals (biocentrism) to holistic systems such as ecosystems or landscapes (ecocentrism).

A considerable number of journal pages over the years have been devoted to exploring different formulations regarding the locus and source of intrinsic value. Rolston writes of intrinsic natural value and argues that the teleology of organisms and indeed species provides a wealth of objective values within nature, (Rolston, 1989; Lee, 1996; Palmer, 1994) such that: 'Every genetic set is a normative (nonmoral) set, proposing what *ought* to be, beyond what *is*, on the basis of its encoded information' (Rolston, 1989: 128). Such objectivity, however, is a step too far for Callicott, who argues that although nature may truly be the locus of intrinsic value, humans remain the source of any such value, thus rendering nature's intrinsic value wholly subjective, but none the less real and actual (Callicott, 1986; Lee, 1996; Palmer, 1994). An important distinction which provides something of a synthesis between these two positions is provided by Lee (1996), who distinguishes between recognised articulated values and mutely enacted values. Only humans (being rational, sentient beings) may be said to be both the source and locus of recognised articulated values, although other organisms may be the locus of such values with humans remaining their source. Mutely enacted values are, however, objective values within/of nature, based, again, on organisms' teleology.

In addition to speculation concerning the 'nature' of intrinsic value, there is also the issue of how to recognise intrinsic value. Nunez (1999: 118) states that: 'Scientific enquiry by itself is not an adequate means for detecting natural value, "since a more sophisticated, living instrument is required"' (Rolston, 1989: 104)'. This idea opens up a very tangled terrain of epistemological enquiry. A basic tenet of the scientific revolution is that in order to understand the natural world, primary (objective) qualities should be given priority over secondary (subjective) properties. Adopting an essentially Cartesian approach, scientific endeavour builds an edifice of understanding of the natural world – objective properties of nature are studied through quantification and the natural/physical sciences, while subjective properties remain in the province of the social sciences and arts. If the objectivist argument concerning intrinsic value has validity, then the question of detecting that value must be considered. There are a number of ideas that tentatively start to point toward the subjective recognition of objective intrinsic value in nature.

According to Rolston, our immersion into the life of the biotic community allows us to learn something of the source of our true being. Nature provides 'rich experience ... of awe, mystery, vastness, aesthetic beauty ... We gain a sense of proportion, place, identity; we are humbled in some ways, exalted in others' (1989: 221). Leopold too writes of 'a sense of wonder over the magnitude and duration of the biotic enterprise' (1968: 109) and of a need for 'intellectual humility' in order to see the cultural value of wild nature (ibid.: 200). A treatment of the concept of 'wonder' is provided also by Hepburn (1984) who highlights

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virtues such as respect, humility and compassion as amongst those which may arise from an attitude of wonder. In contrast with curiosity or astonishment, the more steady and enduring attitude of wonder, is, Hepburn argues, 'notably and essentially other-acknowledging' (ibid.: 205, his emphasis). Such an attitude is 'non-exploitative, non-utilitarian', thus one is wondering at and respecting the values truly belonging to the object in question (ibid.: 205–6).

We are not suggesting that such sentiments and ideas provide unequivocal evidence for the existence of intrinsic value. However, they do begin to open up a territory for exploring how intrinsic value might be recognised. Much of the literature revolving around intrinsic value concerns its academic formulation. Academic rationalisation might provide very useful insights into the nature of reality and the value of the environment. However, if Nunez and Rolston are correct, it may require subjective insights to recognise something that is objectively real. In the context of this study it is important to reflect on the indicators that might point towards the recognition of intrinsic value, even if the term is unfamiliar to the participants.

METHODS.

Sample selection

The type of information sought within this study was a rich description of philosophical ideas, beliefs and values regarding nature. A large amount of detailed information was thus required from each respondent, necessitating a relatively small sample group, which was intended to be illustrative, rather than representative of any given population (Frankfort-Nachmias and Nachmias, 1992; Valentine, 1997). First, in order to place the study within a practical, applied setting, a non-academic context was needed. Secondly, it was intended that the policies and values of the sample group mattered in some significant and practical way in relation to land management. To satisfy both these criteria, organisations were selected which own or actively manage (or are directly responsible for the management of) significant areas of land in England. The smallest area for which any selected organisation was responsible was 2,000 acres, and the largest 1,118,040 acres. On average, each organisation selected is responsible for the management of approximately 230,300 acres (932 km²) of land at any given time. The total area of land represented by organisations in this study (allowing for 'unknowns', respondents' estimated calculations etc.), is approximately 4,375,686 acres (17,715 km²). Therefore, a reasonably significant area of land will potentially be affected by participant organisations' policies and values. A breakdown of organisations' land ownership/responsibility is presented in Figure 1 (acreages were derived from Cahill (2001) and/or provided by respective participating organisations).

Respondent	Acreage (England)
<i>Conservation</i>	
Countryside Agency	1,118,040
Environment Agency	648,375*
National Trust	550,000
RSPB	275,000
Norfolk Broads	74,840
Woodland Trust	20,000
E. Sussex C.C.	16,000
Groundwork Trust	4,940
Plantlife	3,900
West Berks. C.C.	3,374
W. Sussex C.C.	2,000
Oxon. C.C.	(no data)
<i>Total Conservation</i>	<i>2,716,469</i>
<i>Average Conservation</i>	<i>246,952</i>
<i>Non-Conservation</i>	
Forestry Commission	494,000
Ministry of Defence	474,240
Crown Estates	219,277
Church of England	200,000
Duke of Northumberland	132,200
Baron Roborough	39,500
Earl Yarborough	28,000
Earl Lonsdale	72,000
<i>Total Non-Conservation</i>	<i>1,659,217</i>
<i>Average Non-Conservation</i>	<i>207,402</i>
<i>Total (all)</i>	<i>4,375,686</i>
<i>Average (all)</i>	<i>230,299</i>

* E.A manage 875 km of rivers. Average estimate for width of rivers 3m. So, $875 \times 3 = 2,625 \text{ km}^2$.

FIGURE 1. Participant organisations and their landownership/responsibility

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It was decided to include both conservation and non-conservation organisations in the study. There were two main reasons for this: first, organisations other than conservation bodies have policies and values that effect land management in England; second, inclusion of non-conservation organisations allows for any obvious differences or similarities between the two sub-groups to emerge.

By the time of the selected deadline date, 8 non-conservation and 10 conservation organisations had agreed to take part. Subsequent 'chasing-up' resulted in two further conservation groups, but no further non-conservation groups, agreeing to participate (thus providing 12 conservation and 8 non-conservation organisations).

Data collection and analysis

Twenty separate face-to-face interviews were carried out, each lasting around an hour. Interviews were recorded using a dictaphone and transcribed verbatim as soon as possible afterwards. An interview guide approach was used in which a checklist of topics was devised prior to data collection. The interviews were conducted in a conversational style allowing respondents to introduce unanticipated topics at will (Burgess, 1984; Frankfort-Nachmias and Nachmias, 1992; Valentine, 1997; Veal, 1997), whilst ensuring that each of the central topics were covered (Burgess, 1984; Moser and Kalton, 1971; Valentine, 1997). The purpose of the topics listed on the checklist was to approach the notion of nature's intrinsic value from several different angles, thus providing the respondent with an opportunity to express his/her views from a variety of different prompts. This was felt to be important as respondents may not necessarily understand or identify with a concept phrased in one way, but may do so if it is phrased differently.

This approach also means that if, for example, by the end of an interview, there have been no responses indicating acceptance of nature's intrinsic value, then this is much more likely to be a true reflection of the respondent's beliefs, rather than a misinterpretation of one individual question on which that piece of evidence depends. Where the order of topics was followed as per the checklist, questions on 'intrinsic value theories of nature' were not explicitly asked or defined until around half way through the interview. This allowed the respondent freedom to develop a presentation of his/her belief system about nature in his/her own way (Veal, 1997). While maintaining the conversational style of the interviews, it was also important that (by the end of the interview) the respondent understood the interviewer's conception of intrinsic value theories of nature. The idea of intrinsic value was eventually presented in a non-controversial way and provided a final, 'concrete' notion against which the respondent could ultimately confirm his/her opinion. The definition provided within the interviews is typified by that given to respondent C1, as follows:

... the notion that nature, or parts of nature, have value in their own right, despite any use to humans. (C1, p6.)

Although care was taken to ensure that an appropriate individual was contacted as a representative of the organisation, this was no guarantee that the respondent's beliefs and values coincided with those of the organisation. One aspect of the overall descriptive picture being sought was to ascertain whether or not organisations' policies were generally in keeping with those of their representative respondents. To this end, topics were asked specifically both from an organisational and from an individual perspective. Thus if the respondent described first the organisation's opinion, s/he would then be asked to describe his/her own view on the subject, and vice versa. Notes were taken immediately following each interview as to anything said by the respondent after the dictaphone was switched off and also relating to the respondent's demeanour or the general 'feel' of the interview.

The data were analysed thematically using *QSR N5* computer software for qualitative data analysis, also known as *NUD*IST*. Each transcript was entered into the software, then each transcript was organised or coded into 'nodes'. This means that each line or paragraph of text was copied to a heading or sub-heading ('node') according to its content. Thus, for example, all units of text in which a respondent discusses his/her belief that nature's intrinsic value is objective, were coded under: *Intrinsic Value* → *Belief* → *Subjective/Objective*. Text could therefore be coded under the topic as originally designed on the checklist, but if that text unit seemed also to be discussing new, emerging themes, then this could also be coded under a new heading or node.

DISCUSSION

Intrinsic values

The results indicated that a high proportion (80%) of those interviewed claimed to believe in nature's intrinsic value. As respondents were drawn from both conservation and non-conservation organisations, this suggests that such beliefs are present amongst 'mainstream' land managers, as well as those within the realm of nature conservation. These results are also in keeping with those of several other studies which found that beliefs in nature's intrinsic value were held by people other than academic environmental ethicists (e.g. Bengston and Xu, 1995; Carson 2001; Craig et al., 1993; LaTrobe and Acott, 2000; Minter and Manning, 1999).

That respondents' personal belief in intrinsic value was indeed a deeply held belief and not merely a platitudinous response, is evidenced by the accumulation of a number of factors. Firstly, this belief was consistent with other responses made throughout the interview. Secondly, almost all of those respondents who expressed such a belief also spoke passionately of moments in which they experienced feelings of awe and wonderment inspired by aspects of nature. Although this might be interpreted in different ways (for instance linked to aes-

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thetic utilitarian appreciation of nature) the way that respondents spoke in these interviews suggests an alternative interpretation indicating a deeper connection with nature. In response to being asked about feelings of awe and wonderment to nature, respondents C6 and C5 describe it as follows:

... it's when I'm out on a farm and you just see a view or you're sitting ... or whatever ... you wouldn't be in the business if you didn't feel like that. And it's nothing to do with religion or anything like that, I'm not a religious person at all, but it, you've got to have a sense of – well, I can't believe you can't have a sense ... of something greater, not something greater, but just wow. I mean, that's what I feel, is wow ... (C6, p. 9.)

Oh, quite amazing, it's like a sort of gut reaction really ... like butterflies in your stomach ... when you see something ..., either an amazing ... spider making a web, or something like that, some fantastic, you know, amazing sort of creature doing something, or just, you know, a sort of beautiful view or an amazing sunset or something like that, but yeah, I mean, it's like a, it's like a gut feeling, gut reaction. (C5, p. 5.)

In isolation, such perspectives cannot be interpreted solely as evidence of personal belief in the intrinsic value of nature. But when interpreted alongside other sentiments within the interviews, they do suggest a very deeply felt connection with nature beyond a purely instrumental justification.

Hepburn's (1984) argument that an attitude of wonder allows the perceiver to acknowledge values truly belonging to the object in question, certainly seems to have been borne out within this study. All but one of the respondents who had experienced moments of awe and wonderment inspired by an aspect of nature, also believed that nature's intrinsic value was objective. Statistically of course, this could be reduced to nothing more than coincidence, given the small sample size involved, but qualitative analysis of respondents' attitudes and values does indicate that in such encounters with nature, respondents are exhibiting a deep respect of that which they perceive. The key terms used by the respondents in their descriptions of these moments included: *humility, privilege, insignificance yet belonging, vastness*. Comparison of such terms with the words of Rolston on this subject, and in context with respondents' other value-statements within the interviews, suggests that the attitude described by the author is indeed of the same kind described by the respondents. Rolston tells us that nature provides 'rich experience ... of awe, mystery, vastness, aesthetic beauty ... We gain a sense of proportion, place, identity; we are humbled in some ways, exalted in others' (1989: 221). The importance of such moments of awe lies in their ability to provide in the perceiver a sense of humility and respect for nature's value, and thus a reassessment and realisation of the human perceiver's relationship with the natural world. Such observations are not, by themselves, conclusive proof that subjective feelings of awe and wonderment relate directly to respondents'

views on intrinsic value. However, they do suggest a relationship to the natural world that appears to go beyond utilitarian valuation.

Thirdly, several respondents alluded to the notion that such values are widely held by land managers, almost as an implicit prerequisite for working with land (e.g. C6, C11, NC4, NC7, NC8). Craig et al. (1993) took as an instance of evidence that they were dealing with heart-felt values, the fact that one respondent thanked the interviewers for the chance to reflect on his/her values (p. 139). It was clear in this study that the interviews were dealing with very strongly held, heart-felt ideas, such that many respondents found it difficult rationally to articulate their feelings. One respondent (C4) stated after the interview that s/he was grateful to have been given the chance to discuss these beliefs.

The majority of respondents (85%), (which included all of those who believed in nature's intrinsic value), also claimed that it would be worse to lose an entire species than an individual organism. The aim with this line of questioning was to ascertain whether respondents saw the unit of moral concern as being ecological collectives (species, ecosystems etc) or merely individual animals and/or plants. It may be objected here that even someone who saw value as located only within individual organisms, would still answer that losing an entire species would be a greater loss, as a species represents a large number of individuals. However, there are several factors which suggest that this is not the case. First, respondents generally spoke of the conservation of habitats, species and ecosystems throughout the interviews. Second, no respondent attempted to clarify their answer by saying, for example, that the loss of a species represents the loss of many individual organisms. Third, respondents spoke of the loss of something over and above individual existences, such that:

...if you destroy ten square metres of [common species] or whatever, you, OK, it's not a great impact, they'll recover, whereas if you destroy the last [rare species] colony in the country, you know, then that's the last you'll ever see of them, that's them gone (C1, p. 6).

Lastly, several respondents had no problem with the idea of felling individual trees or culling mammals for the sake of wider habitat conservation (e.g. C6, C9, C11, C12, NC3, NC4, NC7, NC8). It is therefore safe to conclude that an individualistic, biocentric account (akin to that of Taylor, 1989) is rejected by the majority of respondents, in favour of an ecocentric perspective resembling that of Callicott (1986), Leopold (1968) or Rolston (1989).

Respondents' acknowledgement of 'non-utilitarian values' of land or wildlife was coded in a strict fashion, such that only responses which acknowledged value despite any use to humans were included. Thus, spiritual, aesthetic or cultural values, although often non-consumptive, were still considered as uses and therefore excluded. Further, this question was posed at an early stage during the interview and before any explanation of intrinsic value theories was provided by the interviewer, thus very few prompts or clues would have been given to

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respondents by this stage as to the target subject of the interview. Despite these potentially restricting factors, 65% (13) of respondents claimed that both they and their organisations recognised non-utilitarian values of nature, with typical responses being in terms of wildlife and/or habitat value. Respondent NC7, for example, when asked whether s/he felt that wildlife had value despite any use to humans, replied:

Yes ... that just harps back to the, you know, recognising that it isn't solely human use, is it, the communities, be they, you know, bugs and beetle level or mirco-organisms and soil level' (p. 2).

Although 65% of respondents recognised non-utilitarian value of nature, 80% (16) of respondents claimed to believe in nature's intrinsic value. This discrepancy is best explained by respondents' understanding of the terminology used. The three respondents who were not categorised as acknowledging non-utilitarian values (C2, C6, C9) each interpreted the terms 'non-use' or 'non-utilitarian' to mean 'non-consumptive use' and thus spoke in terms of aesthetic, cultural and non-financial values respectively. Indeed, respondent C9 explicitly stated that s/he felt that 'use' was a problematic term in relation to nature. The philosophical problem here is represented by the grey area which is encountered when humans' *interaction* with nature (deemed to be both necessary and ethically desirable by authors such as Leopold, Naess and Rolston) slides imperceptibly into humans' *use* of nature. For this reason, it would be inappropriate to interpret respondents' inclusion of these contemplative values here as evidence of an anthropocentric attitude.

Duties and objective values

As Midgley (1983) points out, the list of objects which may be regarded as being morally considerable and thus to which we may have duties, exceeds merely rational, sentient or even animate beings. This notion is echoed by 70% of the respondents in this study (14 respondents), who felt that they had duties to land or wildlife and indeed, all bar one of these respondents felt that this duty pertained both to land or habitats, as well as to wildlife. This negates the idea that sentience is a necessary prerequisite for being worthy of moral consideration. However, it would seem that respondents were not accustomed to speaking of values in this way, as in 14 cases, respondents began by speaking of values to people in relation to land, rather than to land itself, and addressed the question accurately only after the question was rephrased or repeated.

The discrepancy between duties felt by individuals (70%) and by their organisations (40%) is related to formal policy. In policy documents, organisations tended to describe a duty to people, even if their organisational activities could be interpreted as conserving nature for its own sake, such that:

'... certainly where it's written down, it's probably towards the nation and the local people, but in some cases it's probably when I sort of think about it, it actually is to the land itself' (C5, p. 2).

Duties towards land represent moral imperatives, that is, actions which we feel we ought or ought not do in relation to nature. The presence of such imperatives was investigated with the question concerning whether or not respondents felt that we had the right to destroy aspects of wild nature (in addition to questions asking specifically about duties to land/wildlife). The 'right to destroy' question produced a somewhat mixed response, with the majority of respondents falling into the 'uncategorisable' or 'borderline' categories. Respondents indicated a realisation that some modification of nature by humans is inevitable, but that in many instances we had failed to have sufficient regard for the importance of nature itself, thus *'giving human life a value that it perhaps shouldn't have in respect to the rest of life'* (C6, p. 7).

From this, and taking into consideration respondents' general acceptance of nature's intrinsic value, it is possible to deduce two examples of imperatives which represent the respondents' broad position here. First, that there ought to be some limit to the extent to which we may justifiably modify nature and that we have a duty not to exceed that limit. Second, that we have a duty to have regard to nature's intrinsic value in our dealings with nature. The latter imperative is essentially that of Rolston, and the former represents a position somewhere between Rolston and Leopold (i.e., between weak and strong eco-centrism (Stenmark, 2002)), depending on where that limit is set.

The majority of respondents believed that nature's intrinsic value would persist in the absence of any human valuer (85%, 17 respondents), thus indicating a strong belief in the objectivity of this value. This, in addition to the reasoning presented by Grice (and also by Mackie and Foot, in Grice 1991), suggests a widespread acknowledgement amongst respondents of nature's intrinsic value as absolute and objective. However, it is important to bear in mind at this juncture, that for these respondents, nature's intrinsic value is both objective *and* subjective. All but two of the respondents who believed that nature's value was objective (C8 and NC3 were borderline cases), had also stated that they *themselves* believed that nature was of value in its own right, thus indicating an internalised, subjective value, in addition to the perceived truth that (objective) value would persist despite them.

Respondent C3 (who had rejected the idea of nature having intrinsic value) believed that only humans have the cognitive capacity to form value judgements and thus that values may only exist in the presence of a human valuer (p. 4). Conversely, respondent C5 claimed that even if 'value' is a human concept, nature would still have value despite any human valuer (p. 4). A useful distinction to introduce here in order to understand this problem is that of the difference between 'value' as a verb, and 'value' as a noun. It may be accepted, for example, that only humans are capable of valuing as a cognitive process,

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but that values may exist in nature, whether they be rationally perceived or not, in relation to any organism which strives to maintain its existence, such that its existence is intrinsically of value to it. Thus, value-as-verb may be entirely dependent on a human valuer, but not so value-as-noun. This is reminiscent of Lee's (1996) approach which distinguishes between 'recognised articulated values' (as human dependent) and 'mutely enacted values' (as objective). Two of the respondents (C9 and NC7) made specific reference to such a distinction within the interviews. C9, for example, when asked if nature would still have value in the absence of humans, stated that:

... the value we're talking about is a value that we have derived, conceived, it will have a value but it will have a different value (p. 8).

Similarly, NC7 answered:

Yes, it just wouldn't be a perceived value would it. (p. 6.)

Basic values, reason and emotion

Max Black (1946) argued that since basic beliefs cannot be deduced from other beliefs, deductive logic will not help us in providing a justification for such beliefs. A similar picture may also be applicable to our basic values, in that it may not be possible for an individual entirely to justify deductively why such values are held. Clearly, there may be other reasons as to why a respondent does not, or does not *choose* to, justify his/her beliefs and values, but if it seems that little justification for such values is possible or forthcoming, then they may at least be admitted as candidates for basic values.

In other words, given the open, conversational style of the interview, respondents were perfectly at liberty to 'hang' their value-statements onto other justifying beliefs, thus rendering, for example, a belief in duties to land contingent on further beliefs, perhaps that land is aesthetically beautiful and that beautiful things are precious. In this example, the basic value would be concerned with 'the beautiful', rather than with land, which here is reduced merely to an instance of the beautiful. Thus, one has duty towards land *because* it is beautiful, illustrating a rational, deductive move from one (contingent) value to another more basic value.

This deductive move is not, however, a particularly difficult or convoluted logical construct and could easily be expressed by respondents during a conversational interview if such valuation were part of a conscious, rational process. If, on the other hand, this valuation is based on a 'gut reaction' or emotionally heart-felt response, it is not arrived at via any conscious process of reason and thus cannot be rationally or deductively explained - one simply has *nowhere left to go* to provide deeper justification for such a heart-felt, basic value.

There was indeed very little justification offered by respondents to support the feeling that they had a duty to land or wildlife – this was, in most cases (10/14) simply stated or agreed. Some responses were more clear-cut than others – respondent NC3, for example, stating that ‘I don’t *not* owe it something’ (p. 4). However, of the four who did not simply state that they felt this duty, two (NC1 and NC4) required several prompts to bring them on-topic. One (C10) stressed that this duty was both to land and to people, and one (C12) answered the question in terms of nature’s objective intrinsic value. Overall, there was little justification by means of other values for the respondents’ position. Therefore, if, to follow from Midgley (1983), that to which we have a duty is to be considered as morally considerable, then it would seem that from the responses concerning duties, and in context with their other responses, respondents held the notion that land is morally considerable as something approaching a basic value.

Whilst discussing specifically their belief in nature’s intrinsic value, two respondents (C9 and NC5) stated that this value was connected with nature’s value as part of God’s creation, thus the basic value in those instances is likely to be faith in God, or that God is good, or some such thing. In the remainder of responses acknowledging a belief in nature’s intrinsic value (14 respondents), it is more likely that this was a basic value, as no appeal for justification was made to any further values. However, eleven of those fourteen respondents described this value as operating within and between non-human species and/or their habitats, that is, interconnections and relationships within nature carry values with them. This is strongly reminiscent of Rolston’s description of a matrix of objective values within nature (1989, e.g. pp. 91 et seq). However, in order for these objective, external values to form a respondent’s basic value, there must also be a subjective, internalised element, and the description here is of objective values within nature, and not necessarily within the respondent. Respondents’ experiencing of moments of awe provides one illustration of the internalisation of such values, but this is further emphasised by the respondents’ claim that *their* acknowledgement of nature’s intrinsic value has with it a strong emotional element – in other words, not only do the respondents acknowledge rationally that such value exists, they feel it too – the value is thus internal to the respondent.

70% of respondents considered that their belief in nature’s intrinsic value was a function both of reason and of emotion. All but one (C1) of these respondents stated that such valuing began as an emotion or a gut reaction, which was subsequently rationalised, such that:

I tend to start with, it’s got a value, and then try and work out why, in my own mind, I think it’s got a value (C9, p. 8),

or that:

‘it perhaps starts out as an emotion, but it has to be tempered very much by reason (C7, p. 5).

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This strong emotional aspect therefore confirms the notion that this basic value is indeed internal to the moral agent.

If this basic value is felt first and rationalised later, it cannot be said to be based entirely on rational observations such as 'that organisms are interconnected'. That is, this value is caused within the moral agent (perhaps via a moment of awe) and is then added to or reinforced by such observations which then feed into the valuing process. Those specific observations are therefore not part of the essence of that value which was already extant. This analysis has implications for other categorisations of belief systems about nature, for example, that presented as part of Minter and Manning's (1999) empirical study.

Minter and Manning's categorisation included four headings and corresponding 'representative statements' which the authors felt were concerned with beliefs recognising nature's intrinsic value, which collectively they termed 'Radical Environmentalism' (p. 198). These headings and statements were as follows:

<i>Heading.</i>	<i>Representative Statement.</i>
14. Humanitarianism	Animals should be free from needless pain and suffering.
15. Organicism/Animism	All living things are interconnected.
16. Pantheism	All living things have a spirit.
17. Natural Rights.	All living things have a moral right to exist.

The categories which come closest to the views of respondents in this study are 15 and 17. There is an important distinction between the authors' categorisations and the general outlook presented by respondents in this study. Minter and Manning's statements are essentially individualistic, and, as we have seen, the theme which emerged from the interviews was that biocentric (individualistic) value systems were rejected in favour of more ecocentric approaches. The notion of 'rights' (heading 17) in this context is also problematic, as Midgley (1983) argues, 'the word may need to be dropped entirely' (p. 94), and indeed, the term was not frequently used by respondents within this study. Unfortunately, heading 15 fairs little better. The objective observation of 'interconnectedness' is not essentially identical to, nor necessarily representative of respondents' basic values – it may well be a member of the *supporting cast* to such values, but it certainly does not play the *lead role*. The basic value with which respondents seem to identify is 'that nature has value in itself' or 'that land is morally considerable' and this is not specifically represented in Minter and Manning's categorisation. Were this value to have been so represented, then Minter and Manning may have found an even greater level of support within their study for intrinsic value theories of nature. It is worth noting at this point also that the term 'Radical Environmentalism' no longer seems appropriate to describe positions acknowledging nature's intrinsic value, if 'radical' is taken in its 'extreme

political' sense, and if, as this study (and other studies noted above) suggests, the position is now relatively widely accepted.

Motivations and relationships with nature

The 'conservation' sub-group's motivations to conserve provide still further emphasis that their relationship with and valuing of land is indeed fundamental for these respondents. All but one of this sub-group (11/12) described a long-standing or life-long personal interest in conservation and the countryside, five of whom noted also that watching the disappearance or impoverishment of the countryside had acted as a significant motivator for their choice of career. Three (C4, C8, C10) also spoke explicitly of a need or desire to work with land in a practical, 'outdoors' sense. With the benefit of hindsight, it is regrettable that the 'non-conservation' sub-group were not also specifically asked about their motivations, perhaps not to conserve, but to choose to work with land. It is possible, and indeed likely, that this group would also have spoken of the desire for contact with nature as a motivating factor. Respondent NC8, for example, spoke of his/her childhood upbringing in a rural environment and that working with land thus seemed to be a natural and necessary progression (pp. 7–8). NC7 happened to mention (following the interview), that s/he had re-trained specifically to move away from a large city and to work with land, and within the interview, had often spoken of people's estrangement from nature and how this could and would lead to unfavourable or even disastrous consequences (e.g., pp. 2–3). Similarly, Carson (2001) found that a practical connection with nature was an essential part of the motivations and beliefs of permaculturalists in the UK.

No reference or allusion was made within the interviews to the 'deep ecological' notion of the extended self (Naess, 1989), rather, respondents' relationship with nature seems to be based on a personal attachment to, and respect for land, thus indicating the attitude of caring of which Plumwood, (1991) and again, Leopold and Rolston write. The idea of personal connection with land is indeed central to the human-nature relationship encouraged by Leopold and Rolston. Leopold (1968) writes that the modern human is 'separated from the land by many middlemen, and by innumerable physical gadgets. He has no vital relation to it' and describes this as '... the most serious obstacle impeding the evolution of a land ethic' (pp. 223–4). Equally, for Rolston (1989), 'modern man ... has found himself distanced from nature, increasingly competent and decreasingly confident', whereas 'ecological humans' encounter nature as 'a community of value in which they share, they are at home again' (p. 26). Thus, for these respondents, recognition and internalisation of nature's value is, in a very real sense, a 'way of life'. 'Value must be lived through, *experienced*, but so as to discern the character of the surroundings one is living through' (Ibid., p. 104, sic).

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Policy

The views and values expressed by the respondents are very personal accounts of each individual's attitude to nature. In general, however, similar views and values do not seem to be represented by the organisations (as interpreted by the respondents). 80% of respondents, for example, claimed to believe in nature's intrinsic value, whereas only 30% of respondents believed that their organisation made, or would make such a claim. Similarly, 70% of respondents felt that they had a duty towards land or wildlife, whereas only 40% believed that their organisation felt such a duty, and indeed, only 3 respondents said that intrinsic value had ever been discussed in the workplace at anything approaching a policy level. Rather, the picture which emerged was one in which anthropocentric arguments are considered to be more persuasive for policy or publicity documents (e.g. C1, C3, C5, C8, C9), a point which was argued also by Norton (1989) and Green (1985). However, it is also a picture in which nature's intrinsic value is implicitly understood and shared amongst land managers, despite the fact that it is rarely discussed (as stated by eleven respondents).

There is evidence to suggest that some respondents are simply not comfortable with discussing such issues. Within notes made immediately following the interviews, it was noted that four respondents (C1, C2, C10, NC2) were uncomfortable or generally reluctant to talk about values and philosophical issues. In addition, respondent NC2 at one point within the interview complained:

I don't know, I mean, a bit deep these questions, you know, for a poor old land agent. (p. 15)

The level of off-topic, verbose responses is also relevant as an indicator of the degree of discomfort felt by respondents in discussing a particular issue. Within the realm of clinical psychology, for example, the *Adult Attachment Interview* measures the relevance and succinctness (amongst other factors) of transcripts, thus revealing aspects of the mental state of the respondent in relation to the topic under discussion (for further information, see, e.g., Shaver et al., 2000, or Steele et al., 1999). Four of the transcripts within this study contained significant sections of off-topic responses, three of which (C2, C10 and NC2) being amongst the respondents noted above, who seemed generally uncomfortable discussing philosophical issues. 25% of respondent C2's transcript and 30% of respondent C10's transcript was categorised as off-topic or borderline off-topic (see § 4.3.6).

However, whatever the reason for this, statements acknowledging nature's intrinsic value simply do not seem to be regarded by respondents as appropriate for inclusion in policy discussions. As respondent NC2 delightfully put it:

I think it's more like what you might call a dinner party discussion, isn't it, as opposed to a business discussion, no, I think if I probably started raising things like that, they'd probably, people would think I'd gone off my rocker (p. 13).

The end result then, in accordance also with the findings of Craig et al. (1993), is that perceived policy does not include acknowledgement of nature's intrinsic value and thus does not adequately represent the beliefs and values of the respondents.

CONCLUSION.

The results of this study suggest that intrinsic value theories of nature are widely accepted amongst both the conservation and non-conservation land managers who took part. This, in addition to the findings of other recent empirical studies, suggests that acceptance of such theories is no longer the exclusive province of environmental ethicists and that it would be misleading to say that holding such theories represents an unusually extreme or 'radical' environmental position.

Nature's intrinsic value was seen by respondents as being, at once, both subjective and objective, that is, that they as moral agents placed a value on nature for what it is in itself, but that nature would still be of value and contain values in the absence of any human valuer. Respondents rejected the notion that sentience was necessary in order for an object to be worthy of moral consideration and value was largely perceived as subsisting in ecological collectives over and above individual organisms, thus representing an ecocentric position akin to that of Rolston or Leopold, rather than the biocentric perspective of Taylor.

Two imperatives which may be formulated as representative of respondents' views are as follows:

- i) There ought to be some limit to the extent to which we may justifiably modify nature and we have a duty not to exceed that limit.
- ii) We have a duty to have regard to nature's intrinsic value in our dealings with nature.

The action which is directed by these imperatives is (i) that we ought not exceed *some limit* of modification of nature and (ii) that we must *have regard to* nature's intrinsic value. Thus, although these imperatives direct those courses of action stated, the exact placement of that limit and the weight attached to our having regard to nature's value, leave room for interpretation, thus admitting the notions of *strong* ecocentrism, represented by Leopold and *weak* ecocentrism, represented by Rolston (Stenmark, 2002). The spectrum of the majority of respondents' views thus falls between these two points of strong and weak ecocentrism.

Respondents' valuing of nature seems to be deeply held and heart-felt, often stemming from a life-long interest and involvement in the countryside. Little justification was offered by appeal to deductive reasoning for holding such values, which thus approach the status of *basic values*. Indeed, respondents stated that there was a strong emotional element involved in this valuation, such that value often begins as an emotion, which is subsequently tempered by reason.

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