

Spiritual Revelation in Wilderness Under Down-Under

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Abstract—People may well be attracted to wild places in pursuit of deeper meanings. There is an increasing body of western literature emphasizing people's loss of spiritual relationship with the Earth, and an emerging body of literature on the importance and role of spirituality in protected area management. However, little work has been done linking the two, particularly work utilizing empirical methodology. There is a challenge for wilderness managers; the integration of spiritual values into wilderness planning and management processes. Filling a knowledge gap in Australia, this exploratory research uses a predominantly quantitative research design to: (1) help recognize and understand people's spiritual relationships with, and sense of spiritual attachment to, the Tasmanian Wilderness World Heritage Area; (2) assist future management planning and operational decisions in Tasmania; and (3) inform wilderness management practices more generally. A self-reporting, mail-back questionnaire has been developed and a pilot study of a random sample of the general population conducted. The survey instrument included a psychometric scale, qualitative and other questions, and photographs. Preliminary results confirm respondents have a spiritual affinity with the Tasmanian wilderness. A larger survey using a stratified sample is planned.

What is the point of preserving wilderness? The values that warrant its preservation have been listed innumerable times: ecological sanctuary, genetic storehouse, tourist drawcard, recreational resource. And at the end of the list we may add something about the spiritual values of wilderness. Why don't we put spiritual values first? Is it because we consider them less important than economic and practical values? Is it because we cannot explain them in purely rational terms? Are we afraid that if we say what we feel, we will be accused of being irrational? (Hawes 1996: page 1).

Introduction

Are wilderness areas more than just a recreational opportunity? People may well be attracted to wild nature in pursuit of deeper meanings. There has been an increasing body of western literature lamenting the loss of spiritual relationships and connection with nature and the earth in recent time (for example, Berry 1990; Driver and others 1996;

Gottlieb 2004; Kaza and Kraft 2000; Kellert and Farnham 2002; Lines 2001; Washington 2002). Additionally, there are calls for a 'spiritual renewal' (Orr 2002: 1459), a 'spiritual renaissance' (Christie 2002: 1466), or the embracing of the 'spiritual imperative' (Kumar 2004) in order to manifest true environmental sustainability. There is also an emerging body of literature on spirituality as a theoretical framework within public land, national park and wilderness management processes (for example, Hamilton 2000; IUCN 2004; Magary 1996; Maller and others 2002; Perschel 2004).

While there have been numerous theoretical and practical quantitative and qualitative studies into wilderness spirituality in countries such as the United States (for example, Brayley and Fox 1998; Fredrickson and Anderson 1999; Heintzman 2002; Heintzman and Mannell 1999; Johnson 2002; Stringer and McAvoy 1992; Trainor and Norgaard 1999), research into the spiritual values of wilderness are seemingly still in their infancy in Australia—Australian studies are few (but see for example, Fox 1997; the forest studies of Lamb and Morris 1997; and Williams and Harvey 2001). There are not too many countries other than the United States that have had the good fortune to be blessed by the Emersons, Thoreaus, Muirs, Leopolds, Adams and Zahnisers of this world, their collective prose, philosophy, photography and wilderness advocacy culminating in one way or another with the passage of the U.S. Wilderness Act. Although the word "spiritual" may not be specifically referred to in this Act, the often-used term "wilderness character" is seen as an analogue (Kaye 2002).

The Australian Context

Unlike the United States, Australia does not have a federal act protecting wilderness, with only sections of the Environment Protection and Biodiversity Conservation Act of 1999 relating to wilderness and then only to Commonwealth and not state reserves. In Tasmania there is no specific wilderness legislation although the Tasmanian Wilderness World Heritage Area (TWWHA) represents 20 percent of the land area of that state. The 1.3 million ha (3,212,370 acres) TWWHA was first inscribed on the World Heritage list in 1982, and extended in 1989. The TWWHA contains a diverse mosaic of landscapes from mountainous, alpine environments, to wild ocean beaches, to calm, inland lakes. Visits from Australia and overseas are consistently about half a million annually. Visitor opportunities include bushwalking, whitewater rafting, climbing, aesthetic appreciation, and participation in commercial tourism operations, such as scenic cruises and aircraft overflights and landings.

Management of the TWWHA is vested in the Tasmanian Parks and Wildlife Service. While the declared objectives of the 1999 TWWHA management plan mandate management

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for the full diversity of wilderness values, the mandate is more implicit than explicit. Spiritual values and their management have not been specifically addressed to date. A search of the TWWHA management plan revealed three occurrences of the use of the word 'spirit'—two in a descriptive sense (cultural perception or cultural landscape), and methylated spirits in the Fuel Stove section (Parks and Wildlife Service 1999). While spiritual values are not specifically mentioned in the plan, the caption to a photograph included in a major review of management effectiveness in the TWWHA may be indicative of change: "For many visitors, wilderness areas offer a place for relaxation, reflection and spiritual renewal" (Parks and Wildlife Service 2004: page 186).

Despite the paucity of spiritual values research in Australia, these values have been recognized for at least thirty years. For example, writing about Tasmanian national parks Sharland (1972: page 71) said: "These refuges [for protection of wildlife, but also as refuges for human life] are essential to maintain the mental and spiritual balance of the people. That is a generally accepted fact. And it's a role being played by the national parks among many kinds of people and with a variety of interests." Later, Davis (1980: page 9), delivering an academic address in 1979, confirmed that perhaps the most important purpose of national parks are "as oases of spiritual and aesthetic refreshment." And a 1992 Australian government wilderness discussion paper states: "The spiritual value of wilderness is an essential part of its cultural value" (Robertson, Vang and Brown 1992: page 33).

In order to fill a knowledge gap in Australia, the exploratory research I am currently engaged in investigates the values of the TWWHA from a spiritual perspective, discussed in the context of wilderness management processes. The work has a pragmatic intent, with results intended to assist future management planning and operational decisions in Tasmania, and inform wilderness management practices more generally. The purpose of this paper is to provide an overview of the research, describe the study methodology, and present a brief summary of the results of my preliminary study.

Spirituality

To lay some of the groundwork for further discussion, we need to distinguish 'spirituality' from 'religion.' As Kumar (2004: page 3) says: "Sometimes the words spirituality and religion are confused, but spirituality and religion are not the same thing." Elkins and others (1988) agree, saying that in the past a spiritual person was thought of as being a religious person, but a change—possibly because of the perceived failure of traditional religions to cater to the spiritual needs of people—is now being recognized.

The distinction also needs to be made between two streams of spirituality. One stream refers to the spirituality of indigenous and traditional peoples and is related to cultural customs and sacred sites (see, for example, the extensive and comprehensive United Nations Environment Programme sponsored report, *Cultural and Spiritual Values of Biodiversity* (Posey 1999)). The other is the modern, western conception that extends beyond the particular. It is this latter stream that I am engaged in. The spiritual and cultural connections and associations indigenous peoples have with nature—in Australia, particularly with 'country'—

is acknowledged with respect. However my research limits itself to western spirituality.

Difficulties in Operationalizing 'Spirituality'

People's spiritual relationship with the natural world is an abstract topic, dealing with higher order emotions and thought; spiritual values themselves are "ethereal and intangible and, therefore, hard to define and measure" (Driver and others 1996: 5). Barnes (2003: 271) agrees, referring to spiritual values as "fuzzy" values. Even if spiritual experiences are measurable, people may either not recognize them as such, or find it difficult to verbalise such experiences (McDonald, Guldin and Wetherhill 1989; White and Hendee 2000). Survey methodologies "are not well-suited to delving into spiritual experiences" (Magary 1996: 292). However, despite these difficulties, the Spiritual Orientation Inventory, "a measure of humanistic spirituality," has been proposed (Elkins and others 1988: 12).

Research Design Issues

Researchers seeking to explore people's spiritual connection with wilderness using quantitative methods face challenges because of the difficulties associated with defining spirituality, and the articulation by people of their spiritual experiences. Consequently, it is not uncommon for researchers to use qualitative research techniques. Qualitative research methods seem best for examining the *genius loci* of place (Moore 1997). However, spirituality may be "assessed and even 'quantified' when sensitively pursued" according to Elkins and others (1988: page 12). Quantitative results are more easily communicated (Moore 1997), accessed and usable by managers and other decision makers. Political reality confers precedence on calculable values that "count" (Putney and Harmon 2003). Importantly, quantitative results can be generated from a representative sample of a target population. While quantitative and qualitative methods are distinct approaches, Stynes and Stokowski (1996: 451) perceive:

... these techniques as more complementary than competitive. Both sets of methods have important contributions to make to our understanding of values, nature, public land management, and the human spirit. Multiple perspectives are as valuable in the research arena as in matters of public policy.

The research reported here uses both quantitative and qualitative methods and thus is a mixed-method design.

Study Methods

In order to determine whether Tasmanians value the TWWHA from a spiritual perspective, and address how spiritual values could be managed should they be confirmed to exist, a self-reporting, mail-back questionnaire has been developed and a pilot study undertaken. The questionnaire booklet used in the pilot study has four parts. First, there are a series of questions on TWWHA visitation. The main body of the instrument comprises a psychometric scale, qualitative and

other questions and forms the second part. The third part is a photo gallery and questions, with demographic questions making up the final section. Details of the second and third segments follow. The visitation and demographic sections adopted standard approaches and are not reviewed here.

Psychometric Scale and Other Questions

An item pool of 60 questions was assembled under several sub-domains or themes (table 1). The themes are a structural device and serve an explanatory purpose. The majority of questions are informed by the literature (table 1). Fifty-six questions (numbered from 1–56 in the pilot study booklet) utilize a seven-point Likert scale continuum for each statement—from ‘strongly disagree’ to ‘disagree,’ ‘slightly disagree,’ ‘undecided,’ ‘slightly agree,’ ‘agree,’ and ‘strongly agree.’ Simple weights of 1, 2, 3, 4, 5, 6, and 7 are applied for scoring purposes, respectively. Fifty-two of the 56 statements (numbered from 1–52 in the pilot study booklet) form a psychometric scale. The remaining four statements (numbered 53–56 in the pilot study booklet) are contingent upon respondents having prior experience of wilderness in Tasmania or elsewhere. To maintain completeness, these four statements are not included in the psychometric scale because some respondents are likely to skip them. However, these statements have meaning in their own right.

Specifically, a battery of 21 statements is used to establish the spiritual predisposition of respondents (table 1). These statements are drawn from the 85-item, nine-dimensional Spiritual Orientation Inventory (SOI) developed by Elkins and others (1988) to measure humanistic spirituality. Of the 21 statements, 12 are from the ‘Transcendent’ and nine are from the ‘Sacredness of Life’ dimensions of the SOI.

The perceived effect of aircraft noise intrusion on the peace and quiet of the TWWHA is explicitly measured (Question 58 in the pilot study booklet) by the ‘noise awareness/annoyance response scale’ adapted from Cessford (2000). Question 59 in the pilot study booklet asks respondents to choose between

management infrastructure reductions (closing roads, closing walking tracks, removing boardwalks, removing huts, removing signage and ‘other’—specified by respondents) to improve the spiritual values of the TWWHA. Two questions (57 and 60 in the pilot study booklet) provide the opportunity for respondents to answer in their own words and thus allow a qualitative response. Question 57 enquires: “Some people find a spiritual value in wilderness. This means different things to different people. If you find spiritual value in wilderness, what does it mean to you?” Question 60 asks: “Do you think the Tasmanian Parks and Wildlife Service, which manages the TWWHA, could improve spiritual opportunities in the TWWHA? If so, how?”

In a pre-test to the pilot study, opinion on the survey statements was obtained from two independent reviewers (national park manager, part-time national park staff member and wilderness enthusiast), and statements and questions revised accordingly.

Photographs

A qualitative design aspect of the research, the survey instrument uses photographs of the TWWHA to gauge respondents’ perceptions of spirituality. In a process of photo-elicitation, photographs have been used to elude people’s responses to them in natural values studies (for example, Hocking 1995 and Williams and Cary 2001 in Australia; Kalltenborn and Bjerk 2002 in Norway). Prosser and Schwartz (1998: page 124) define the term:

Although not a homogenous set of practices, in its conventional form ... photo-elicitation can be described as a single or sets of photographs assembled by the researcher on the basis of prior analysis and selected with the assumption that the chosen images will have some significance for interviewees. The photographs are shown to individuals or groups with the express aim of exploring participants’ values, beliefs, attitudes, and meanings.

Table 1—Survey themes, the number of questions in each theme, and example references contributing to the development of the pilot study instrument.

Theme	Number of questions	Examples of informing references
Importance of solitude and quiet	4	Hammitt 1982; Riley 1996
Qualitative question: meaning of the spiritual value of wilderness	1	Trainor and Norgaard 1999
Spiritual landscapes (some questions with management implications)	6	Hamilton 2000; Magary 1996; Taylor and Geffen 2004
Spiritual predisposition scale	21	Elkins and others 1988
Spiritual values of wilderness	14	Johnson 2002; McDonald, Guldin and Wetherhill 1989; Perschel 2004
Spirituality and sacredness of nature	5	Berry 1990; Maller and others 2002; Metzner 1995
TWWHA Management: Policy—aircraft activities—noise impacts	3	Cessford 2000; USDA Forest Service and NOAA 2002
TWWHA Management: Policy—infrastructure and naturalness nexus; solitude and visitor numbers	2	USDA Forest Service and NOAA 2002
TWWHA Management: Policy and practices—provision of spiritual opportunities	1	
Understanding of spirituality	3	Fredrickson and Anderson 1999; Kumar 2000
Total questions	60	

Two methodological issues were considered relevant to research using images. First, it was recognized that a significant methodological problem was the potential for photo quality to influence perception. There were also different axes of perception or axes of variation to be taken into account. In the TWWHA, these include a diversity of landforms (coast, inland plains, high country, alpine), a diversity of water bodies (sea, inland lakes and rivers, wild rivers), a mosaic of vegetation types, distinct seasonal variation, and variation in photographic style.

An image bank of candidate color images for the survey was created from two sources. Images from various published media, such as Tasmanian wilderness calendars, diaries, postcards, and books, were reviewed and scanned. Experienced Tasmanian wilderness photographers also collaborated by contributing images. The primary criterion for contributing photographers was that images needed to be of the TWWHA. A more subjective criterion for the majority of photographers was the presence of spiritual evocation in the images, in their opinion.

Expert opinion (primary research supervisor) was obtained on the pool of approximately 250 images, and images not of the TWWHA, or adjudged unsuitable for the study, discarded. The resulting 143 color images were attributed to six photographers. The rationale for using more than one photographer was to avoid the possibility of the photographic style of one photographer influencing respondents' perceptions. The photographers gave permission for the use of their images for research purposes, and copyright provisions were made.

In an informing process, the 143 images were trialed with 16 people (student colleagues, academics, national park manager), casting votes for those images eliciting a spiritual response in their opinion. General information on the topic of the research accompanied the trial. The votes were converted to simple frequencies and summed. Any voluntary qualitative comments were recorded at the time of the trial. Twelve images were then chosen for the pilot study. These 12 were the 11 images with the highest number of votes, and another image thought useful for the research because it was the only one of the 12 to include a human presence. The score for the latter image was in the lower one third of votes. The 12 images conformed generally with the physical setting attributes for a spiritual experience reported in the literature (for example, McDonald, Guldin and Wetherhill 1989). More than half the images featured mountains, and three quarters featured water in all its guises.

Factors considered in limiting the number to 12 color images for the pilot study were possible survey completion demands on respondents, presentation quality, production cost, and a trade-off between image numbers on the one hand, and keywords and phrase numbers on the other. Because a more thorough response was aimed for, it was thought more important to obtain the fullest representation of spiritual suggestions possible. Therefore, the number of keywords and phrases was emphasized and the number of images limited.

Two options for presenting the images to respondents were considered. One was for the images to stand-alone, with respondents being asked to write their own words should the images elicit any response. Alternatively, a list of spiritually indicative and other descriptive words could be provided,

with respondents selecting from a list. Because of the difficult and abstract nature of the research, a compromise between the two methods was trialed in the pilot study. A list of 38 keywords and phrases (table 2) was provided in the pilot survey instrument, together with space for respondents to write their own words as well, if they felt so inclined.

The 38 keywords and phrases (table 2) were determined from the literature (for example, Harmon and Putney 2003; Hawes 1981; Magary 1996; McDonald, Guldin and Wetherhill 1989; Perschel 2004; Read 1996; Stringer and McAvoy 1992) and the results of the trial. The keywords were checked for logical grammatical expression by prefixing each of them with either the term: "This image produces (in me) a sense of [keyword or phrase]"; or "This image produces (in me) a sense of being [keyword or phrase]." All keywords and phrases satisfied either of these criteria.

Pilot Study

Prior to the pilot study, the draft survey instrument was pilot tested with members of the Tasmanian World Heritage Area Consultative Committee. This 15-member panel acts in an advisory role to the government on TWWHA management matters and includes representatives from the scientific and Aboriginal communities, recreational interests, local government, conservation interests, industry and tourism (Parks and Wildlife Service 1999). The pilot test resulted in useful changes being made to the instrument.

In preparation for the printing of the pilot survey as an A4-sized booklet, the 52 statements comprising the psychometric scale and 12 color photographs were randomly ordered (Deville 2004). The photographs were numbered "Photograph 1" through "Photograph 12." Large-scale versions of the images were printed in color on A3 size paper and folded in half to create an A4-size insert to the survey booklet. Smaller "thumbnail" versions of the images were printed in color in the survey booklet to aid identification by

Table 2–The alphabetically sorted keywords and phrases list as printed in the photographic section of the pilot study survey booklet.

Term	Term
a compelling presence	joyful
a manifestation of the Holy Spirit	lonely
aesthetically beautiful	mystery
ancient	not doing much for me
austere	old
awe	omnipotent
bleak	oneness
connected with all of existence	powerful
delightful	reflective
divine	reverence
dreadful	sacred
fearful	sanctuary
foreign	serene
God's country	something beyond myself
homage	spiritual
humbling	the Garden of Eden
immersed in the landscape	timeless
inspiring	transcendent
isolated	wonder

respondents. The 38 keywords and phrases were alphabetically ordered, a value-neutral technique.

In mid-2005, the survey booklet was delivered by mail to a random sample of 190 people residing in the Tasmanian electoral division of Denison who could understand English and were not incapacitated due to ill health. Dillman (2000: page 146) suggests that: "For a pilot study, a sample of 100 to 200 respondents is generally drawn, but may be larger if resources allow." The constraints of a postgraduate research budget restricted the sample size to anything larger. The survey package contained a personally signed cover letter, survey booklet, color photograph insert, and a stamped return envelope. The procedures of the mail-out generally followed that recommended by Dillman (2000).

The purpose of the pilot study was as indicator of a response rate, as a trial run of administrative procedures (for example, survey booklet preparation, mailing out, follow up, analysis), and to check the validity and effectiveness of the survey questions, in particular the identification of items in the scaled questions not contributing to explanatory power.

Summary of Pilot Study Results

A response rate of 35 percent (67 returned surveys) was achieved after one postcard reminder follow-up (Dillman 2000), suggestive of a final response rate greater than 40 percent if further follow-up measures had been implemented. A summary of some results from a preliminary analysis of the pilot study data follows.

- Respondents plainly value the TWWHA from a spiritual perspective.
- The scaled questions exhibit a homogenous structure from exploratory factor analysis. Four latent variables or factors were extracted although the loading on the first factor was very high (eigenvalue of 25), effectively swamping the other factors.
- The 52 scaled questions show a Cronbach's alpha score of 0.975, indicating a high level of internal consistency of the instrument.
- The photographs show promise in displaying underlying factors and sensations responsible for producing what might be described as a 'spiritual response' from wilderness landscape elements.
- The top three choices from the photograph keywords and phrases list across all 12 images were 'aesthetically beautiful,' 'inspiring' and 'serene' in that order. The word 'spiritual' ranked 22 out of 38.
- Of the 67 respondents, 36 were female (54 percent), 27 male (40 percent), and four unreported (6 percent).
- The 'Spiritual Predisposition Index' of respondents overall was 4.8/7 (n = 63), a moderate score.
- The qualitative question asking respondents to define what wilderness spirituality meant to them, was very well answered in terms of the depth of feelings expressed. A content analysis of the narratives revealed the word 'peace' was most often used.
- Fourteen of the 25 respondents (56 percent) completing the question on hypothetical infrastructure reductions said closing roads would improve the spiritual values of the TWWHA.

Discussion and Summary

To researchers pursuing the qualitative research paradigm, the measurement of the spiritual values of wilderness is possibly an anathema. However, the research reported above is seeking to provide the wilderness management agency in Tasmania with objective data.

The pilot study confirms a spiritual relationship with the TWWHA among respondents. This is especially significant because the pilot study was directed to a random sample of the general population. However the difficulties of such an undertaking, of survey questionnaires arriving without notice in the letterboxes of an unsuspecting public, should not be underestimated. The response rate of 35 percent, considered by some researchers as low, was satisfying in view of the topic and the nature of a random sample.

It is acknowledged that the number of questions in the pilot study may be considered to be too many by some researchers. The length of the pilot instrument was intentional, on the basis that questions not contributing to explanatory power would not be included in the main study. Nevertheless, the large number of questions coupled with the small sample size may contribute to the homogenous structure of the data set.

While the next stage of the research involves a survey of a larger, stratified sample in Tasmania (members of conservation groups, Parks and Wildlife Service staff, general public), more work is needed to refine the survey instrument, especially the management type questions. In this latter vein I pose two questions to myself: "How do you manage for spiritual values?" and "How do managers maintain and enhance spiritual values?" These questions could turn out to be unanswerable. It might transpire that looking after the biodiversity aspect of wilderness will suffice, and the rest will follow. The default condition is that the research may be a consciousness raising exercise for managers not already cognizant of the existence of the spiritual values of wilderness.

An adaptive mechanism, the spiritual dimension of wilderness has evolved, is evolving, and will continue to evolve in response to changes in ourselves and our relationship to the natural world. The manifestation of spirituality in the wilderness concept both reflects the unmet needs of our urban, commodity-driven culture, and reveals some archetypal part of us that this culture has obscured (Kaye 2002: page 45).

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