

## People, environment, language and meaning: values in nature and the nature of 'values'

Denise Dillon

James Cook University, Singapore campus

The Wet Tropics World Heritage Area (WTWHA) in Australia's North Queensland provides the real world social and applied context for considering an example of language dynamism. In its use as a social activity, language imbues the world with meaning, and in turn derives meaning, through interplay among language, thought and experience (Landauer and Dumais p211; Cruse p125). How people come to conceptualise complex words and ideas depends on different cultures and languages of use (including public, workplace and scientific subcultures and terminologies). As an added factor, certain expressions function as 'buzzwords' or 'catchphrases' to invoke an emotive reaction (Little 929). Whereas emotive language works for general communication, situations requiring precise meanings for shared terminologies might result in the dismissal of mistreated terms as poorly defined and inconsequential (Callicott, Crowder and Mumford p23; Hull et al. p11).

Although popular media often alter meanings through common use or misuse (Watson), multidisciplinary and applied contexts of use can engender serious and consequential problems of language/meaning interplay. Watson referred to the 'language of public life', meaning that used by civil servants. In Watson's (p1) argument, this represents "the language of the leaders more than the led, the managers more than the managed". Hull et al. (p11) voiced a similar opinion about the flow of influence in language use: "While there are members of the public who try to speak for the environment, they have considerably less power than do environmental professionals at developing the language of nature. This dual role of environmental science and management creates important ethical responsibilities". These instances highlight the importance of taking responsibility for developing and using discipline-appropriate lexicons, for when parties share terminology but not meanings, language 'slippage' leads to communication challenges and implications in real world contexts (Johnson et al. p581). In a pragmatic sense, 'context' extends beyond the linguistic environment, to physical, social and epistemic environments, as object surroundings, social relationships, and beliefs and knowledge. Temporal and historical contexts offer further pertinence.

As a case in point, the construct of 'values' has a history of association with social science disciplines including economics and psychology. Economists consider values according to market worth. To psychologists and anthropologists the word 'values' has an important status as the linguistic referent of a foundational construct relating to why people behave the way they do and how they 'should' behave (e.g. Kluckhohn and Strodtbeck p96-102; Schwartz and Bilsky p553). In recent times, environmental legislation, protection, politics, and management discourses have hijacked and used this term and referent in ever-more consequential ways (Witter 83; Hull et al. p11; Satterfield p356; Bengston p515). Consider an example in the North American forestry context, where "values are often thought of as physical things in the woods" (Tindall p58), instead of cultural ideas or goals. Connotations of 'values' as physical entities do not sit well in light of the many studies purportedly measuring environmental values using operational definitions based on the

theorized psychological construct, and “understood as residing in people, not places or things” (Reser and Bentrupperbäumer "Social Science In ..." p41). If environmental professionals including managers and scientists from different disciplinary backgrounds use different terms to mean the same thing and similar terms to mean different things, the public develops an understandable scepticism of those professionals (Hull et al. p1). Core terms and constructs, in both ‘pure’ and applied science, require precise definitions for valid operationalisation and consistent measurement (Reser and Bentrupperbäumer "What and Where" 4). Communication with respect to ‘values’ in the environmental domain lacks such precision and consistency (Bentrupperbäumer, Day and Reser p738).

The construct of ‘environmental values’, in its ties to ‘natural heritage’ and ‘cultural heritage’, featured integrally in the listing in 1988 of the Wet Tropics World Heritage Area (WTWHA) on the World Heritage register<sup>1</sup> (UNESCO 3) and to the WTWHA’s continuing management. The WTWHA actually consists of 733 separate parcels of land, many privately owned (Wet Tropics Management Authority). National parks, state forest and public land leases constitute the bulk of the Area. Reflecting the diversity in ownership and tenure, those involved in the management of the WTWHA (either directly or indirectly) range from private landowners to government agencies. Research, management and environmental conservation groups, Indigenous community groups and private landowners variously seek to understand, manage, maintain, preserve and present the ‘environmental values’ – including ‘natural values’, ‘cultural values’ and ‘biodiversity values’ – of the WTWHA.

The WTWHA’s universal significance as a unique and irreplaceable property, as a source of scientific interest, and its local, economic importance for tourism, makes the study and discussion of Wet Tropics environmental values a multidisciplinary and extra-disciplinary (i.e. non-academic) endeavour. Stakeholder groups with interests in the WTWHA include federal, state and local governments, natural resource management agencies, scientists, conservation groups, Indigenous owners, landholders, farmers with land bordering the WTWHA, local and foreign visitors to the area, and local residents. Scientists devote research time and money in their efforts to further understand the area’s diversity. Environmental management agencies use some of the information garnered from this research to better protect and conserve the area’s natural heritage. Conservation groups work with and against government agencies in their own efforts to protect the environment, to advance public awareness of perceived threats to the area, and to promote pro-environmental behaviours. In an applied sense, protected area management legislation (e.g. the "Environmental Protection Act") implicates ‘environmental values’ as a core aspect of the environment requiring protection, management, and presentation, as well as measurement and monitoring. The fact that values also represent a key aspect of human landscapes and environments challenges the enactment of this legislation.

Etymologically, *value* comes from the Old French, *valoir*, meaning ‘to be worth’, and from the Latin *valere*, ‘to be strong’, ‘to be worth’, hence, *value* as a singular noun often denotes price or worth. The study and consideration of *value* (singular) has a long and venerable tradition. The branch of philosophy devoted to axiological ethics focuses interest on the epistemology of value, with roots in Platonic and Aristotelian accounts of value. Philosophical concerns regarding value largely constitute three questions. Firstly, which properties or characteristics represent what it means to *have value*? Secondly, does value exist in objects, or in the way one feels towards an object? Finally, what typifies the decision process regarding what *has value* or *is valuable*? (Honderich p895).

Spinoza (p3-5), the seventeenth-century Dutch philosopher, asserted the human tendency to deem an object good, and therefore valuable, because people desire, wish and strive for it. The act of valuation creates the value. Spinoza argued that the converse of this (desiring, wishing and striving for anything because of its value) does not occur. One might

argue for the desirability of beauty due to its aesthetic value, but, if beauty rests in the eye of the beholder, the act of valuation – and desire – still creates the value.

In the eighteenth century, Kant's (p102) moral philosophy addressed intrinsic worth, or value which human valuation cannot replace by an equivalent and instead has a 'dignity', beyond market price or affective price. It does not have worth relative to any other, as measured by human want, need or preference, but consists of worth unto itself. In a further step, Hartmann's values doctrine<sup>ii</sup>, one of the major works in axiology, holds that "Values are not only independent of the things that are valuable (goods), but are actually their prerequisite...they are that through which things are valuable" (p186). Each person has a presupposed, a priori standard by which to decide if experience with goods serves as useful, serviceable, or advantageous (Hartmann p186). Whether objects can possess value independent of conscious human evaluation sits at the centre of a still-unresolved debate in the discipline of environmental ethics regarding intrinsic value. See, for example, Callicott (p221-61), Rolston (p18), and Lee (p95) for conflicting positions in this debate.

Meanings of values have thus developed over many centuries in these formative contexts and circumstances. The nature of the Wet Tropics context – the natural environment – lends itself to influences outside the spheres of management legislation or psychometric measurements of human concerns. The eighteenth century literary Romanticism movement, for instance, also embraced the idea of intrinsic value in nature, and the contemporary language of environmentalism, or 'greenspeak' (Harré, Brockmeier and Mühlhäusler) contains shades of Romantic ideals. Harré, Brockmeier, and Mühlhäusler (p38-41) noted at least four possible 'greenspeak' distinctions of 'nature' and 'natural': natural/artificial, organic/inorganic, rural/urban, and wilderness/peopled. In the Wet Tropics context under consideration, most such distinctions potentially feature in the phrase 'natural values'. As the natural values require protection, 'natural' takes on a positive connotation and the obvious interpretation that natural values do not include the negative connotations that rest in the distinctions 'artificial' (alien, or imposed by humans), 'urban' (built up, with an imposed regularity, corrupted) or 'peopled' (the idea that the existence of people creates an artificial, controlled environment).

The positive connotations of natural values evoke elements of Romanticism, with its focus on strong emotional links between humans and an idealised environment (Hinchman and Hinchman p342). 'Natural', 'rural', and 'wilderness' together evoke positive aesthetic images associated with utopian idylls and primitive, uncorrupted societies. Admittedly, further complexities feature within the range of meanings eighteenth-century writers expressed in the word and concept 'nature' in its aesthetic sense:

'Nature' has, of course, been the chief and the most pregnant word in the terminology of all the normative provinces of thought in the West; and the multiplicity of its meanings has made it easy, and common, to slip more or less insensibly from one connotation to another, and thus in the end to pass from one ethical or aesthetic standard to its very antithesis, while nominally professing the same principles. (Lovejoy p444)

The relationship between nature and the human mind, rather than necessarily antithetical, suggests consideration of "alternative aspects of a self-same reality" (Hinchman and Hinchman p337). Nevertheless, the wilderness/peopled distinction of 'natural' has relevance in the Wet Tropics context through a preference for the conservation of uninhabited areas within the WTWHA that appear relatively free of human interference. The wilderness aspect preserves the rural/urban contrast, of wild nature as the antithesis of human-tamed landscapes (Johnson et al. p582). However, the desire to preserve and protect wild landscapes for their

own sake combines with the desire to preserve and protect the landscapes for their role in regulating the quality of human habitation. The focus is thus on the environment as well as on people within the environment. Human desire constitutes a vital affective component within the meanings of 'values'.

Emotion, albeit a common and functional characteristic of public involvement in environmental issues, further clouds the waters of understanding. Communication about environmental values potentially yields to emotive rhetoric, with differences of opinion among research scientists, managers, public land users, and environmental activists regarding appropriate land use and function (Vining p10; Vining and Tyler p21). A Romantic element in Wet Tropics discourses notwithstanding, there remains the notion that science has no room for emotion, and indeed Romanticism represented a movement away from reductionist reasoning and towards imagination, unfettered creativity, and an emotional connection to all life, expressed as vitalism (Hinchman and Hinchman p338). A Forestry academic's address to a public forum audience of interested, general public members illustrates this dichotomy: "Forestry is about science. What you are talking about are values. Values are beyond the realm of science" (Tindall p57). Such a stance represents an extreme view that all, nor even many, environmental professionals do not share: "while many environmentalists are scientists, and the concerns of many environmentalists are rooted in science, the concerns of environmentalists (and others for that matter) tend to be multi-faceted – and not limited to scientific issues" (Tindall p64). Thus, a reflective acknowledgement of differences in meaning and application works better than assuming universal understandings about 'values'. It appears an unsafe assumption, for instance, that a scientist would consider the environmental values of a landscape consistently whether one referred to the landscape as 'unlogged woodland', 'virgin scrub' or 'pristine rainforest'. Similarly, for a tourist operator, real estate agent, farmer or logger, the values evoked by each of the phrases might emerge as starkly different (Woodward p3). Through language, individuals and groups have the power to influence decisions pertaining to environmental management, planning and policy: "the terms employed in the environmental sciences do more than describe—they also guide attitudes, frame discussions and shape policy" (Carolan p929).

Many associate Romantic idylls and images of untarnished landscapes as symbols of freedom and clarity of mind, with beauty as an ideal. However, 'aesthetics', like 'values', interposes another ambiguous topic in environmental discourse (e.g. Botkin; Daniel; Lee; Tindall), for it has both physical and psychological origins. Beauty, as a psychosocial construct relating to human response and appreciation, also directly relates to biophysical attributes. As for landscape beauty, an increasingly accepted premise implies that beauty equates with 'unmarred by human activity' (Botkin p111-13), often referred to in the Wet Tropics context as 'intact rainforests', 'pristine beaches', or 'unobstructed vistas'. In this sense, beauty exists not so much as the visual stimuli but as a symbolic ideal, implicitly linked to human values as underlying preferences.

Additionally, connotative meanings of 'values' in many cases conceivably stem from consideration of the WTWHA as a 'natural resource'. This idea goes hand in hand with the notion of stewardship (Harré, Brockmeier and Mühlhäusler p40), which involves the management of nature as well as the management and maintenance of Indigenous ties to the land. The importance of cultural connections with the environment for Indigenous people, and a respect for that relationship, forms an analogy for how other locals hold the environment in high esteem, as a culturally shared landscape connected with a sense of place (Giurgola; McBryde). Concrete historical evidence of human 'existence' and use of natural resources (i.e. bone middens, quarries, stone tool workshops) does not appear to interfere with the notion of the WTWHA as 'wild' and 'natural'. Acceptance of such historical evidence contrasts, however, with the idea of human interference leading to land and water

degradation, intimating that under such conditions the land represents neither wild nor natural existence. Although the natural/artificial distinction prompts a temptation towards simple classification, the dichotomy proves an artificial one, as every part of the natural environment arguably bears some connection with human existence (Harré, Brockmeier and Mühlhäusler p39; Johnson et al. p582).

Moreover, traditionally-oriented Indigenous communities make arguably little meaningful distinction between the 'natural' and the 'human' environment, and understand and relate to the larger environment as a living, breathing sentient being and system (Rose; Reser "Indigenous Touchstones"; Reser "The Land Is Living"). Hence the matter of where values reside develops a particular relevance (Reser and Bentrupperbäumer "What and Where" p131-40). However, not only Indigenous people talk about cultural values. When 'cultural' operates as an adjective of 'values', particularly in the context of cultural World Heritage values, the invoked and elicited domains of meaning and reference change appreciably in a Western cultural context. Indeed, the term 'cultural heritage values' clearly and logically also encompasses the values and sentiments of generations of non-Indigenous residents and cultures.

To some modern environmentalists such as Leopold (p177), values have three loci. Firstly, values exist within experiences that point to people's origins, both national and evolutionary. The second locus of values rests in experiences that reinforce the nature of the human place within the biotic food chain. Finally, values lie in experience wherein individual conscience dictates action, such as the restraint exercised under the collective guise of sportsmanship. Leopold consistently described 'cultural values' as residing within lived experience, from the general to the personal. Leopold argued that cultural values exist by "common consent of thinking people" (p177), as evidenced in "sports, customs and experiences that renew contacts with wild things" (p177).

Uses of 'cultural' in the Wet Tropics context suggest distinctions such as cultural/natural; civilized/uncouth; artistic/scientific; or intellectual/philistine. The contrast between 'cultural' and 'natural' relates to the idea of nature as unpeopled wilderness, with a potential for conflict between natural and cultural priorities. Although modern cultures evolved as a natural extension of 'civilization', extreme environmentalists consider sophisticated, industrialized cultures in negative terms. Alternatively, a distinction of 'cultural' as the difference between the civilized and the uncouth reverses the affective polarity, with civilization positively associated with the idea of people in control, in contrast with the negativity implied in the crudeness or rawness of the untamed, or uncouth. It appears less likely that the artistic/scientific or intellectual/philistine distinctions of 'cultural' feature with relevance to the Wet Tropics context. Certainly, many social scientists understand cultural values as fundamental to human existence.

Notably, Kluckhohn and Strodtbeck (p11-20) espoused a theory of variations in 'value orientations' to explain basic value systems, or human-constructed ways of life. According to value orientations theory, these principles occur in definite patterns of cultural existence through interaction between cognitive, affective and directive elements in the evaluative process (Kluckhohn and Strodtbeck p5-10). Proponents of the theory claim that all cultures express value orientations to varying degrees, depending on their specific need to order and direct their thoughts and behaviours. Kluckhohn and Strodtbeck (p12) summarised cultural commonalities in five crucial problems from which they drew five different orientations: 1) Human nature, 2) (Hu)man<sup>iii</sup>-nature, 3) Time, 4) Activity, and 5) Relational. Table 2 summarises the five common concerns and their respective ranges.

Table 2

*Kluckhohn's Five Value Orientations Considered Common to all Human Groups*

Orientation		Range of possible variations	
Human nature	Evil	Neutral	Good
Human-nature	Subjugation to nature	Harmony with nature	Mastery over nature
Time	Past	Present	Future
Activity	Being	Being-in-Becoming	Doing
Relational	Lineality (hierarchical order)	Collaterality (grouped organization)	Individualism

Again, aspects of Romanticism are evident in the orientations, which Kluckhohn and Strodtbeck considered universal among cultures. The 'human nature' orientation represents aspects of the character of innate human nature, whereas the 'human-nature' orientation represents the range of appropriate relationships between humans and nature. The Romantic movement aspired to achieve harmony between humans and their 'natural' surroundings. The third orientation, 'time', represents the temporal focus of human life as a linear continuum. According to Romantic thought, time need not always operate within linear variations: "Romantic time does not flow by at a constant rate; it eddies and swirls, densely present in certain defining experiences and moments that hold the tenses together" (Hinchman and Hinchman p345). The range of the 'activity' orientation expresses the modality of human behaviours and, finally, the range of the 'relational' orientation expresses the modality of human relationships. The Romantics, of course, most strongly promoted individualism. The value orientations system represents one of many such models that social scientists have used in attempts to unravel the complexities of values, and of human interactions with their environments.

Uncertainty stemming from ambiguous uses of key terms and constructs has practical consequences for effective communication and management, credible research, and the public understanding of science. Certainly, the inability to satisfactorily express what one knows or intends creates difficulties for those who desire or take on the responsibility to report, communicate or explain. Consider the arguments likely to arise between groups of locals and natural resource managers if both agreed on the importance of retaining a specific area's 'values' prior to the subsequent clearing of substantial amounts of non-native vegetation, thereby reducing its visual appeal<sup>iv</sup> (Gobster p16-17). Locals might argue that the values (referent: aesthetics) had disappeared, without qualifying that those values consisted partially of the ability to enjoy seeing 'natural' vegetation. Resource managers could correctly respond that they had indeed retained the values (referent: natural heritage), through the removal of the 'weed' species and the increased potential for native species regrowth. Given the possibility that some of the non-native species might prove saleable for timber, economists might argue that the values (referent: trees or commodity) constituted the harvest. Each of the referents remains open to further interpretation, as none represents a fixed 'true' determinate.

Although the current public push towards environmentalism stems in part from affinities with Romanticism, ecology and related earth sciences constitute disciplines devoted to the scientific study of biotic processes, organic interactions and transformations of energy and matter. In contrast, values constitute a psychological condition of the human state, and studies of values belong in disciplines devoted to exploring such aspects of humans. To go further, discussion of values appears best left to those for whom it represents a familiar construct relating to human-constructed ways of living. The extension of values as a concept within the environmental domain lacks justification unless all of its users share a mutually agreed upon meaning. Discussions of values in a WTWHA context lack such mutual agreement. In the interests of clarity, it would seem beneficial to develop the habit of using unambiguous and emotionally neutral language even when discussing issues that involve such a fundamental element of the human condition – the human connection to nature.

## References

- Bengston, David N. "Changing Forest Values and Ecosystem Management." Society and Natural Resources 7 (1994): 515-33.
- Bentrupperbäumer, Joan M, Tara Jane Day, and Joseph P Reser. "Uses, Meanings, and Understandings of Values in the Environmental and Protected Area Arena: A Consideration of 'World Heritage' Values." Society and Natural Resources 19 (2006): 723-41.
- Botkin, Daniel B. "An Ecologist's Ideas About Landscape Beauty: Beauty in Art and Scenery as Influenced by Science and Ideology." Forests and Landscapes: Linking Ecology, Sustainability and Aesthetics. Eds. S R J Sheppard and H W Harshaw. Wallingford, Oxon, UK: CABI, 2001. 111-23.
- Callicott, J Baird. "Rolston on Intrinsic Value: A Deconstruction." Beyond the Land Ethic: More Essays in Environmental Philosophy. Albany, NY: State University of New York Press, 1999. 221-61.
- Callicott, J Baird, Larry B Crowder, and Karen Mumford. "Current Normative Concepts in Conservation." Conservation Biology 13.1 (1999): 22-35.
- Carolan, Michael S. "The Values and Vulnerabilities of Metaphors within the Environmental Sciences." Society and Natural Resources 19 (2006): 921-30.
- Cruse, Alan. Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford Textbooks in Linguistics. Eds. Keith Brown, et al. 2nd ed. Melbourne, Aust.: Oxford University Press, 2004.
- Daniel, Terry C. "Aesthetic Preference and Ecological Sustainability." Forests and Landscapes: Linking Ecology, Sustainability and Aesthetics. Eds. S R J Sheppard and H W Harshaw. Wallingford, Oxon, UK: CABI, 2001. 15-29.
- "Environmental Protection Act". 1994. Reprint No. 6A: Queensland Parliamentary Council. 6 April 2005.  
<<http://www.legislation.qld.gov.au/Legislation%20Docs/CurrentE.htm>>.
- Giurgola, Romaldo. "Symbolism as Transformation of Reality: City Form of Canberra and the New Parliament House." A Sense of Place? A Conversation in Three Cultures. Ed. Australian Heritage Commission. Technical Publications Series Number 1. Canberra: Australian Government Publishing Service, 1989. 20-27.
- Gobster, Paul H. "Restoring Nature: Human Actions, Interactions, and Reactions." Restoring Nature: Perspectives from the Social Sciences and Humanities. Eds. Paul H Gobster and R Bruce Hull. Washington, D. C.: Island Press, 2000. 1-19.
- Harré, Rom, Jens Brockmeier, and Peter Mühlhäusler. Greenspeak: A Study of Environmental Discourse. London: Sage, 1999.
- Hartmann, Nicolai. Ethics. Ethik, published 1926. Trans. Stanton Coit. Vol. 1. London: Allen & Unwin, 1932.
- Hinchman, Lewis P, and Sandra K Hinchman. "What We Owe the Romantics." Environmental Values 16.3 (2007): 333-54.
- Honderich, Ted, ed. The Oxford Companion to Philosophy. Oxford: Oxford University Press, 1995.
- Hull, R Bruce, et al. "Understandings of Environmental Quality: Ambiguities and Values Held by Environmental Professionals." Environmental Management 31.1 (2003): 1-13.
- Johnson, D L, et al. "Meanings of Environmental Terms." Journal of Environmental Quality 26.3 (1997): 581-89.



- Kant, I. The Moral Law, or, Kant's Groundwork of the Metaphysics of Morals. Trans. H J Paton. Melbourne: Hutchinson's University Library. (Original work published 1785), 1947.
- Kluckhohn, F R, and F L Strodtbeck. Variations in Value Orientations. Evanston, ILL: Row, Peterson, 1961.
- Landauer, Thomas K, and Susan T Dumais. "A Solution to Plato's Problem: The Latent Semantic Analysis Theory of Acquisition, Induction, and Representation of Knowledge." Psychological Review 104.2 (1997): 211-40.
- Lee, Keekok. "Awe and Humility: Intrinsic Value in Nature. Beyond an Earthbound Environmental Ethics." Philosophy and the Natural Environment. Royal Institute of Philosophy Supplements. Eds. Robin Attfield and Andrew Belsey. Vol. 36. Oakleigh, Melbourne: Cambridge University Press, 1994. 89-101.
- Leopold, A. A Sand County Almanac and Sketches Here and There. American Museum of Natural History Special Members ed. London: Oxford University Press, 1949.
- Little, Paul E. "Environments and Environmentalisms in Anthropological Research: Facing a New Millennium." Annual Review of Anthropology 28 (1999): 253-84.
- Lovejoy, Arthur O. "'Nature' as Aesthetic Norm." Modern Language Notes 42.7 (1927): 444-50.
- McBryde, I. "'Those Truly Outstanding Examples...': Kakadu in the Context of Australia's World Heritage Properties – a Response." A Sense of Place? A Conversation in Three Cultures. Eds. J Domicelj and S Domicelj. Technical Publications Series Number 1. Canberra: Australian Government Publishing Service, 1989. 15-19.
- Reser, Joseph P. "Indigenous Touchstones in the Search for a Global Ethic: Australian Aboriginal Representations of Aboriginal Self-World Connections." Conference on Morality and Environment. Saarbrücken, Germany, 1992.
- . "The Land Is Living." Art Monthly 62 (1993): 20-21.
- Reser, Joseph P, and Joan M Bentrupperbäumer. "'Social Science' in the Environmental Studies and Natural Science Arenas: Misconceptions, Misrepresentations and Missed Opportunities." Environment, Society and Natural Resource Management: Theoretical Perspectives from Australasia and the Americas. Eds. Geoffrey Lawrence, Vaughan Higgins and Stewart Lockie. Cheltenham, UK: Edward Elgar, 2001. 38-52.
- . "What and Where Are Environmental Values? Assessing the Impacts of Current Diversity of Use of 'Environmental' and 'World Heritage' Values." Journal of Environmental Psychology 25.2 (2005): 125-46.
- Rolston, Holmes, III. "Value in Nature and the Nature of Value." Philosophy and the Natural Environment. Royal Institute of Philosophy Supplements. Eds. Robin Attfield and Andrew Belsey. Vol. 36. Oakfield, Melbourne: Cambridge University Press, 1994. 13-30.
- Rose, D B. Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness. Canberra: Australian Heritage Commission, 1996.
- Satterfield, Theresa. "In Search of Value Literacy: Suggestions for the Elicitation of Environmental Values." Environmental Values 10 (2001): 331-59.
- Schwartz, Shalom, and Wolfgang Bilsky. "Toward a Universal Psychological Structure of Human Values." Journal of Personality and Social Psychology 53.3 (1987): 550-62.
- Spinoza, B. A Spinoza Reader: The Ethics and Other Works. Trans. Edwin Curley. Princeton, NJ: Princeton University Press. (Original work (Ethics) published 1677), 1994.
- Tindall, David B. "Why Do You Think That Hillside Is Ugly? A Sociological Perspective on Aesthetic Values and Public Attitudes About Forests." Forests and Landscapes: Linking Ecology, Sustainability and Aesthetics. Eds. S R J Sheppard and H W Harshaw. Wallingford, Oxon, UK: CABI, 2001. 57-70.

- UNESCO. "Convention Concerning the Protection of the World Cultural and Natural Heritage". 1972. United Nations Educational Scientific and Cultural Organization. 10 June 2005. <[http://whc.unesco.org/world\\_he.htm](http://whc.unesco.org/world_he.htm)>.
- Vining, Joanne. "Environmental Emotions and Decisions: A Comparison of Responses and Expectations of Forest Managers, an Environmental Group, and the Public." *Environment and Behavior* 24.1 (1992): 3-34.
- Vining, Joanne, and Elizabeth Tyler. "Values, Emotions and Desired Outcomes Reflected in Public Responses to Forest Management Plans." *Research in Human Ecology* 6.1 (1999): 21-34.
- Watson, Don. *Death Sentence: The Decay of Public Language*. Sydney: Knopf, 2003.
- Wet Tropics Management Authority. "A Chronology of the Protection and Management of the Wet Tropics of Queensland World Heritage Area". Cairns, 2003. WTMA. February 5 2005. <[http://www.wettropics.gov.au/mwha/mwha\\_history.html](http://www.wettropics.gov.au/mwha/mwha_history.html)>.
- Witter, Daniel J. "Wildlife Values Applications and Information Needs in State Wildlife Management Agencies." *Wildlife Values*. Eds. William W Shaw and Ervin H Zube. Center for Assessment of Noncommodity Natural Resource Values, Institutional Series Report Number 1. Fort Collins, CO: U.S.D.A., Rocky Mountain Forest and Range Experiment Station, 1980. 83-90.
- Woodward, Margaret. "Designing the Interpretation Interface: Quality Communication Design as an Aspect of Visitor Experience in Nature-Based Tourism". n.d.: University of Tasmania. March 18 2008. <<http://www.utas.edu.au/arts/imaging/woodward.pdf>>.

---

<sup>i</sup> The 1972 UNESCO "Convention Concerning the Protection of the World Cultural and Natural Heritage" defines cultural and natural heritage, specifying that attributes including man-made features and biophysical features and processes are *of outstanding universal value*. Contemporary uses of 'values' as an expression in Wet Tropics discourse denoting aspects of the environment rather than people very likely has at least some of its origins in the Convention.

<sup>ii</sup> Hartmann's work provides a synthesis of ancient and modern ethics, drawing on the foundational writings of Aristotle and the relatively new ideas of Kant and Nietzsche.

<sup>iii</sup> In deference to contemporary conventions for inclusive language, I have replaced Kluckhohn and Strodtbeck's original 'man' in the man-nature orientation with 'human'.

<sup>iv</sup> This type of situation did actually occur, in the Chicago area, concerning the restoration of prairie lands and the removal of introduced woodlands.