

7 Ambivalence towards nature and natural landscapes



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CHAPTER OVERVIEW

7.1 INTRODUCTION 68

7.2 HISTORICAL OVERVIEW 68

7.3 EMOTIONAL IMPACTS AND MEANINGS OF NATURAL ENVIRONMENT EXPERIENCE 69

7.4 VIEWS OF NATURE AND LANDSCAPE PREFERENCES 71

7.5 THEORETICAL PERSPECTIVE 72

7.6 PRACTICAL IMPLICATIONS 74

7.7 SUMMARY 74

GLOSSARY 75

SUGGESTIONS FOR FURTHER READING 75

REVIEW QUESTIONS 76

R

7.1 INTRODUCTION

The previous chapters have featured evidence that **nature** and **landscapes** are generally considered beautiful and beneficial. Although this evidence is strong and compelling, there is reason to believe that people's reactions to nature are not always positive. Indeed, as we shall see in this chapter, at least some natural landscapes evoke a mixture of positive and negative feelings and thoughts. This **ambivalence** seems to evolve around the degree of human influence on these landscapes; especially landscapes with either a very low or a very high degree of human influence tend to evoke mixed positive and negative responses. The present chapter therefore focuses on wild, untamed landscapes and managed, human-influenced landscapes as natural settings of highly ambivalent character. In what follows, we begin by providing a brief historical overview. We then present a review of contemporary empirical research and theorising on ambivalence towards nature and natural landscapes. We conclude with suggestions on how this ambivalence can be dealt with in policy, planning and design.

7.2 HISTORICAL OVERVIEW

When speaking about ambivalence towards nature, the focus is often on **wilderness**. Although wilderness has been defined in many ways, the term is generally used as referring to those natural areas untouched (or unmanaged) by humans (Cronon, 1996). For most of Western history, wilderness was viewed as a place to fear and avoid. It was associated with the deserted, savage, desolate, the barren, with places on the margin of civilisation 'where it is all too easy to lose oneself in moral confusion and despair' (Cronon, 1996, p. 8). Even after the Middle Ages, Europeans abhorred the wilderness so much that travellers sometimes insisted on being blindfolded so that they would not be confronted with the terror of untamed mountains and forests (Nash, 1982).

The Enlightenment in Europe brought a first change in this negative perception of wilderness. Partly because of scientific discoveries, natural phenomena were seen by some (mostly intellectual and well-to-do city dwellers) as complex and marvellous manifestations of God's will. The dominant poor rural population, however, still had to deal with the dangers of untamed wild lands. This was also the case for pioneers settling North America, who were living too close to the wilderness for appreciation.

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During the era of Romanticism, however, wilderness became sacred and associated with the deepest core values of the culture that created and idealised it (Cronon, 1996). It became the inspiration for the evolving concept of the **sublime**, i.e. a sense of awe and reverence, sometimes mixed with elements of fear (Burke, 1757). In the United States, wilderness even became a source of national pride, with national wilderness parks compensating for the lack of cultural-historical monuments that could help define the nation state.

Since the late 20th century, the dominant tendency in Western countries is towards **biophilia**, or love of nature (Wilson, 1984; see also Chapter 4). However, negative perceptions of wilderness as a place that is useless, unsafe and untidy have not vanished, and may quickly re-emerge in particular contexts and situations that heighten people's vulnerability to nature. Conversely, highly managed natural settings that are strongly controlled by humans may also evoke negative thoughts and feelings. Such settings are often perceived as overly formal and excessively tidy, and thereby, unnatural (Özgüner & Kendle, 2006). In general, wild as well as managed natural settings appear to be imbued with ambivalent, positive and negative, meanings, which may create important variation between as well as within individuals in emotional and cognitive responses to these settings. In the following paragraphs, we will discuss empirical findings that testify to these ideas.

7.3 EMOTIONAL IMPACTS AND MEANINGS OF NATURAL ENVIRONMENT EXPERIENCE

A study among Dutch students provides some empirical evidence for the ambivalent meanings of wild nature (Koole & Van den Berg, 2005). Participants were asked to report how often they were inclined to think about various specified topics, including death and freedom, when they were in a wilderness environment, relative to when they were in a managed natural environment or in the city. As many as 76.7 per cent of the participants reported that they were more inclined to think about death in wild than in managed nature, and 68.9 per cent reported that they were more inclined to think about death in wild nature than in the city. Wild nature was also strongly associated with thoughts about freedom; 81.1 per cent of the participants reported that they were more inclined to think of freedom in wild than in managed nature, and 77.8 per cent were more inclined to think of freedom in the wilderness than in the city. This double association between wilderness and thoughts about death and freedom fits with the idea that wilderness is laden with ambivalent meanings.

Wild nature is not only associated with ambivalent meanings, it may also evoke ambivalent emotional responses. Evaluations of outdoor wilderness and survival programmes have revealed that a stay in the wilderness may evoke strong fears and

other negative emotions as well as strong positive emotions (Bixler & Floyd, 1997; Kaplan & Talbot, 1983). Fear responses to wilderness are generally assumed to be driven by **biophobia**, or a biologically preparedness to quickly learn and retain fears of natural objects and situations that threatened the human species during the course of evolution (Seligman, 1971; Ulrich, 1993). This assumption is supported by laboratory experiments which have shown faster learning and slower unlearning of fearful responses to natural stimuli such as snakes than to human-derived stimuli such as guns (Öhman & Mineka, 2003). Besides strong fears, participants of wilderness programmes also report strong positive emotions from overcoming these fears, including an increase in psychological energy, a greater self-confidence and a sense of awe and wonder (Ewert, 1986; Kaplan & Talbot, 1983). These mixed emotions are reminiscent of so-called sublime or impressive nature experiences, as described by Burke's (1757) philosophy.

Van den Berg and Ter Heijne (2005) have studied impressive nature experiences in relation to gender and sensation seeking. Based on quantitative analyses of people's personal encounters with natural threats, they identified four clusters of situations that tend to evoke both fear and fascination in people:

- close encounters with wild animals;
- confrontations with the forces of nature (e.g. a storm or an earthquake);
- overwhelming situations (e.g. being intimidated by the greatness of a forest); and
- disorienting situations (e.g. getting lost in the woods).

Most participants reported that they felt a mixture of fear and fascination when they were in these situations.

In a following study, Van den Berg and Ter Heijne (2005) presented participants with standardised scenarios of the prototypical situations, and asked them to imagine how they would feel in these situations. They found that low sensation seekers and women, unlike high sensation seekers and men, more often responded primarily with fear and avoidance tendencies, and less often responded primarily with fascination and approach tendencies. Because gender and sensation-seeking are stable personal characteristics, these findings suggest that individual differences in emotional responses to nature cannot easily be influenced or changed.

Not only wild untamed nature, but also more common urban green spaces tend to be associated with highly ambivalent meanings and emotions (Bonnes, Passafaro, & Carrus, 2011). These spaces are found to be associated with beauty and restoration as well as with crime and lack of social safety (the so-called 'stranger danger' or fear for the 'man behind the tree'). In particular the presence of high levels of dense understory vegetation that offers potential attackers a place to hide is associated with a higher fear of crime and feelings of not being safe in urban parks (Fisher & Nasar, 1992; Jorgensen, Hitchmough, & Calvert, 2002). Feeling unsafe in urban parks tends to be highest among women, low income groups and members of ethnic communities (Virden & Walker, 1999; see also Chapter 4).

7.4 VIEWS OF NATURE AND LANDSCAPE PREFERENCES

Another domain which deals with ambivalence towards nature has studied people's cognitive representations of the relationship between humans and nature. Much of this research has focused upon the long-standing philosophical issue whether humans stand above nature – **anthropocentric view** – or whether they are part of or even subordinate to nature – **ecocentric view** (Zweers, 2000). Four basic views of the appropriate relationship between humans and nature have been identified, ranging from anthropocentric to ecocentric: (1) master, (2) steward (or guardian), (3) partner and (4) participant (De Groot, 2010; De Groot & Van den Born, 2003; Keulartz, Van der Windt, & Swart, 2004: see Box 7.1).

Large-scale surveys have revealed that levels of adherence tend to be highest for the steward/guardian and the partner view (De Groot & De Groot, 2009; Hunka, De Groot, & Biela, 2009; Van den Born, 2006). The participant view also receives substantial support, whereas the master view is generally rejected. An important finding is that respondents often agree with more than one view at the same time, which suggests that many people display a certain degree of ambivalence in their view of nature. This notion is corroborated by qualitative research showing that people's spontaneous descriptions of the relationship between humans and nature often contain a mixture of (opposing) ecocentric and anthropocentric elements (Van den Born, 2008).

People's views of the relationship between humans and nature are closely related to their **images of nature** and aesthetic landscape preferences (Buijs, 2009; De Groot & Van den Born, 2003). An anthropocentric view is associated with a functional nature image, in which intensively managed settings that are useful

BOX 7.1 VIEWS OF HUMAN–NATURE RELATIONSHIPS

- *Master*: Humans stand above nature and may do with it as they want. Economic growth and technology are expected to solve environmental problems.
- *Steward/Guardian*: People have the responsibility to care for nature on behalf of God and/or future generations.
- *Partner*: Humans and nature are of equal value. They both have their own status and work together in a dynamic process of mutual development.
- *Participant*: Humans are part of nature, not just biologically, but also on a psychological level. Technological interventions in nature are not allowed.

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for humans are considered beautiful and good examples of nature. An ecocentric view is associated with a wilderness image, in which natural settings that are untouched by humans are highly preferred and considered beautiful and good examples of nature.

A substantial body of research has investigated individual differences in views of nature, nature images and landscape preferences (Buijs, Pedroli, & Luginbühl, 2006; Özgüner & Kendle, 2006; Sklenicka & Molnarova, 2010; Van den Berg & Koole, 2006). This research has consistently revealed that anthropocentrism, as indicated by people's views of nature, nature images and landscape preferences, is strongest among people with a low income and education level, elderly, immigrants and groups with functional ties to the landscape, such as farmers, hunters and birdwatchers. For example, a Dutch survey revealed that 44 per cent of first and second generation immigrants (mostly from Turkey or Morocco) adhered to a functional image of nature, whereas this image was held by only 15 per cent of native Dutch respondents (Buijs, Elands, & Langers, 2009).

7.5 THEORETICAL PERSPECTIVE

In the previous sections, we have seen that people display ambivalence in their direct encounters with nature and in their cognitive representations and aesthetic evaluations of nature. What are the deeper causes of this ambivalence? One possibility is that some people may not have sufficient knowledge to be able to enjoy the full benefits of nature. According to proponents of the **ecological aesthetic** (see also Chapter 4), the **intrinsic value** and beauty of nature can be fully appreciated only if people have sufficient knowledge and deeper understanding of intact ecosystems (Gobster, 1999). This explanation suggests that people's ambivalence towards nature can be resolved by means of education and bringing people into contact with wild nature. An important problem with this explanation, however, is that it does not fit with empirical findings on individual differences in emotional and cognitive responses to nature. In particular the finding that farmers and other groups with profound and extensive knowledge of nature and ecosystems, such as hunters and birdwatchers, tend to display the most negative feelings toward wilderness and the most anthropocentric views is inconsistent with the ecological aesthetic (Van den Berg, Vlek, & Coetier, 1998). Moreover, empirical evidence suggests that people's views of nature and landscape preferences are not easily malleable by educational interventions (Parsons & Daniel, 2002). This calls into question whether ambivalence towards nature stems merely from a lack of knowledge and experience.

Another possibility is that ambivalence towards nature is rooted in fundamental human motivations (Koole & Van den Berg, 2004). As described above, nature, particularly wilderness, is inherently associated with uncontrollability and death (Koole & Van den Berg, 2005). Indeed, many children first learn about death by observing how animals die. Research on terror management theory has shown that

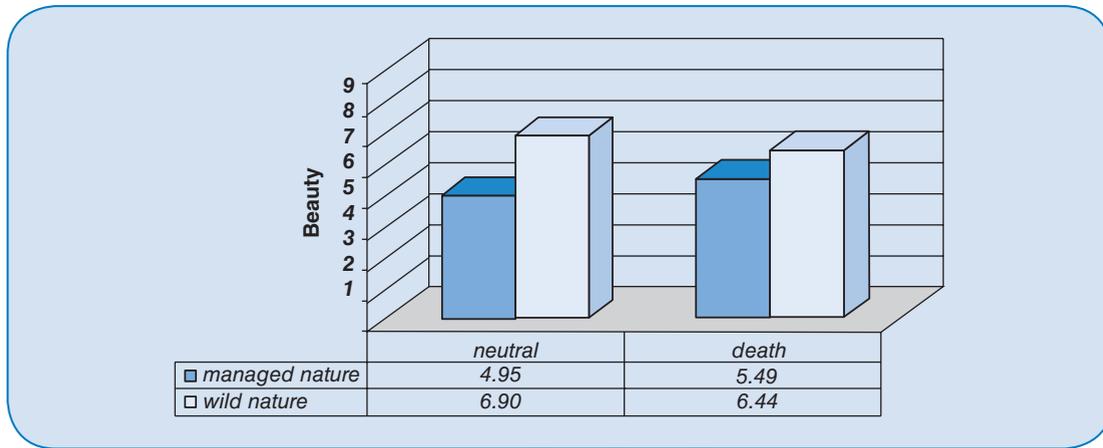


Figure 7.1 An experiment among 48 university students showed that reminding participants of their own mortality weakened their aesthetic preference for wild over managed nature as compared to a neutral control group.

Adapted from Koole and Van den Berg (2005; Study 2).

people have a basic psychological need to protect themselves against existential anxiety that comes from the realisation that their own death is ultimately uncontrollable and inescapable (Greenberg, Solomon, & Pyszczynski, 1997). Because of nature’s close connection with death, terror management processes will often lead people to distance themselves from (wild) nature. For instance, individuals who have been experimentally reminded of death are especially likely to support beliefs that humans are distinct from animals and to report being disgusted by animals (Goldenberg et al., 2001). Additional experimental research has shown that visual preferences for wild over managed settings can be weakened by reminding people of their mortality (Koole & Van den Berg, 2005; see Figure 7.1). In sum, there is emerging evidence that ambivalence towards nature is grounded in deep-seated, existential concerns.

The motivational account fits well with the empirical evidence on individual differences in responses to nature. A common characteristic of all groups who have been found to display negative feelings and anthropocentric thoughts about nature and wilderness is that they are less able to protect themselves against existential anxiety that is associated with nature, either because they are directly dependent on nature for their well-being (i.e. farmers) or because their position in life is vulnerable and insecure (i.e. people with a low income). The motivational account of ambivalence towards nature is also consistent with observations that the historical trend towards positive, ecocentric views of nature seems to go hand in hand with a growing separation and alienation from nature in Western countries (Cronon, 1996). Indeed, for many urbanites, contact with nature is limited to what they see through the windshield on the daily commute along with some occasional visits to

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parks and the countryside. According to the motivational account, this link between alienation from nature and ecocentricity may be explained by the fact that people who are more detached from nature are more capable to distance themselves, literally or psychologically, from the 'savage reality of nature' (Koole & Van den Berg, 2004).

7.6 PRACTICAL IMPLICATIONS

The research and theorising discussed in this chapter have important practical implications in many domains. In the domain of environmental education, for example, the research suggests that outdoor education programmes will be more effective if they focus on strengthening participants' self-confidence (and thus, making them feel more secure) than if they focus on knowledge acquisition. Indeed, evaluations of environmental education programmes have consistently revealed that the most successful programmes make use of hands-on learning as a way to help students master real-life skills and boost their self-confidence (Wheeler, Thumlert, Glaser, Schoellhamer, & Bartosh, 2007).

In the domain of nature policy and management the research is especially relevant for ecological restoration or 'rewilding' programmes, which are currently being developed or implemented in rural as well as urban areas in many countries. These programmes are aimed at restoring and protecting wildlife and native vegetation in degraded, eroded or disturbed sites and providing connectivity between these sites. Although such programmes will be supported by a large majority of populations in Western countries, some groups hold more critical/negative views (Van den Berg et al., 1998). The research discussed in this chapter suggests that these views should be taken seriously, and not be discounted as 'resistance to change', as they reflect existential needs and motivations.

In general, an important guideline that can be derived from this chapter is that nature education and management strategies should accommodate and match people's needs for existential security. **Participatory planning** trajectories are a widely used tool for identifying the needs and concerns of user groups. The knowledge presented in this chapter can contribute to such participatory discussions and help reach shared understanding of one's own and other's position and ideas regarding nature.

7.7 SUMMARY

In this chapter we have reviewed research in environmental psychology that provides empirical support for the long-standing notion that nature, in particular wild nature, can evoke both positive and negative feelings and thoughts. We have argued that this

ambivalence towards nature fits best with a motivational account, which states that nature is a reminder of people's existential insecurity because of the intrinsic link between nature and death. The chapter's main lesson is that ambivalence towards nature and natural landscapes is not the result of ignorance, but of deeply seated motivational concerns, and thus should be dealt with accordingly in nature education, management and spatial planning.

GLOSSARY

- ambivalence** the coexistence of opposing attitudes, thoughts or feelings, such as love and hate, towards an object (i.e. a landscape), a concept (i.e. nature) or a person.
- anthropocentric view** the view that humans stand above nature, leading to the assessment of nature through a human or functional perspective.
- biophilia** people's innate tendency to seek connections with nature and other forms of life.
- biophobia** people's innate tendency to quickly learn and slowly unlearn fearful responses to natural stimuli that have posed threats to human survival throughout evolution.
- ecocentric view** the view that there are no existential divisions between human and nature, leading to the assessment of nature as being valuable in itself, even if it has no (direct) use for humans.
- ecological aesthetic** an approach to landscape aesthetics which assumes that the more people learn about ecosystems, the more they will appreciate them.
- image of nature** people's cognitive conception of what nature is.
- intrinsic value** the value that a landscape has of itself, irrespective of its use or function for humans.
- landscape** an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.
- nature** a broad concept that encompasses natural areas such as forests as well as agricultural landscapes, urban greenery, and natural elements and features such as trees and lakes.
- participatory planning** a paradigm that emphasises involving urban or rural communities in the strategic and management processes of spatial planning.
- sublime** a sense of awe and reverence, sometimes mixed with elements of fear.
- wilderness** an area of land that is untouched (or unmanaged) by humans.

SUGGESTIONS FOR FURTHER READING

- Jorgensen, A., & Tylecote, M. (2007). Ambivalent landscapes – Wilderness in the urban interstices. *Landscape Research*, 32(4), 443–462.
- Konijnendijk, C. C. (2008). *The forest and the city: The cultural landscape of urban woodland*. London: Springer.
- Nassauer, J. I. (1995). Messy ecosystems, orderly frames. *Landscape Journal*, 14(2), 161–170.

REVIEW QUESTIONS

1. Describe the four views of the relationship between humans and nature that have been identified in empirical research.
2. Which two kinds of landscapes typically evoke ambivalent (positive and negative) responses?
3. How can ambivalence in emotional and cognitive responses towards nature be explained?

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