The Role of Imagination in Experiencing Natural Environments

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Abstract.—The experience of natural environments and places is multifaceted, involving psychological functions such as perception, cognition, memory, emotion, and imagination. Environmental perception and cognition were key topics in early research in environmental psychology. More recently, attention has also been directed to affective dimensions of environmental experience, such as emotion and mood. As yet, however, little attention has been given to the role of imagination in experiencing natural environments and places. The term “imagination” encompasses a diverse set of phenomena, including visualization, dreaming, reverie, and the use of metaphors and symbolism in language and thought. In this paper, I illustrate some ways in which imagination functions in people’s experiences of natural environments, using examples drawn from qualitative, mail-back surveys about special outdoor places in the upper Midwest.

1.0 INTRODUCTION

At some point in our lives, most of us have looked at the sky and used our imagination to spot clouds that bear fanciful resemblances to animals, people, or things. This is one very familiar example of how imagination can enter into our experience of the natural world.

Not only clouds, but all kinds of natural shapes and forms, are able to evoke or activate imagination. On the photo-sharing website, Flickr (www.flickr.com), there is a popular group called “Accidental Hidden Faces in the Natural World,” where people have posted hundreds of pictures of natural scenes, including trees, rock formations, flowers, and clouds, that seem to contain human faces (for example, Fig. 1). Sometimes these “hidden faces” in natural scenes are not obvious at first, but once you notice one, it can be almost impossible to ignore. When you then view that landscape again, you might have the eerie feeling that the landscape is looking back at you.

In the novel, The Woodlanders, Thomas Hardy (1906) describes a forest scene as evening approaches:

... as the hour grew later, and nine o’clock drew on, the irradiation of the daytime became broken up by weird shadows and ghostly nooks of indistinctness. Imagination could trace upon the trunks and boughs strange faces and figures shaped by the dying lights; the surfaces of the holly-leaves would here and there shine like peeping eyes, while such fragments of the sky as were visible between the trunks assumed the aspect of sheeted forms and cloven tongues (p. 143).

This description calls to mind the mysterious “Green Man” (Anderson 1990), a traditional motif in the ornamentation of medieval European churches, which depicts an enigmatic face peering out from a thicket of foliage (Fig. 2). Perhaps this tendency of the human

Figure 1.—A “hidden face” in the trunk of a tree, from the Flickr website. (Photo used with permission by Pavel N. Matustik)
mind to perceive human faces in the complex forms of nature has contributed to the development of myths and traditions about spirits that inhabit natural places like forests and mountains.

These examples make it clear that imagination does play a role in how we experience natural environments, but research in environmental psychology has not paid much attention to imagination. Early studies in the field focused to a large extent on environmental perception and cognition. Despite more recent interest in affective and emotional aspects of environmental experience, there is little empirical research on environmental imagination.

Part of the reason for this lack of research may be that imagination is a difficult concept to define precisely. The word “imagination” as it occurs in everyday speech is ambiguous and is used in several quite different ways. It can refer to visual imagery, to fantasy and reverie, to creativity and inventiveness in thought and action, and to the use of metaphors and symbolism in writing and speech. It is not clear whether all of these meanings are related to each other in any essential way. Another difficulty is that imagination appears to have close connections to other psychological functions, such as perception, cognition, and memory (Thomas 2005). It is not easy to say whether imagination is truly a distinct mental faculty and, if it is, to identify what distinguishes it from other processes of the human mind.

The role of imagination in human life has been a subject of debate in philosophy and psychology dating back at least to the ancient Greeks. Little consensus has been reached about just what imagination is and whether it is a useful concept for philosophical and scientific inquiries into human nature. Several contemporary authors have attempted to delineate the character of imagination in human experience, to organize and synthesize disparate accounts of its nature, and to establish its standing as a distinct and essential faculty of the human mind (Murray 1986, Brann 1991, Casey 2000, McGinn 2004).

I will not attempt to review or characterize the debate over imagination here. For the purposes of this paper, I will adopt a basic definition of imagination taken from the American Heritage Dictionary. Imagination is “the formation of a mental image or concept of that which is not real or present” (Morris 1969, p. 657).

2.0 METHODS

My purpose in this paper is to illustrate some of the ways in which imagination appears in people’s experiences of natural environments, using examples from a series of qualitative, mail-back surveys in which people wrote descriptions of special outdoor places. The surveys were carried out between 1986 and 2001 in five locales in the upper Midwest, ranging from urban and suburban locations in the Chicago metropolitan area to rural and wilderness settings in the Northwoods of Wisconsin and Michigan. The participants were self-selected residents of and visitors to these areas. They were asked to think of outdoor places that were important or special to them personally and to write descriptions of these places explaining what made them special. The 115 participants wrote a combined total of 358 descriptions of special places (Table 1). I did a qualitative analysis to identify common themes in their responses. Details of the methods, analysis, and findings can be found in several earlier papers (Schroeder 1991, 1996, 2000, 2002, 2004).
I did not set out to study imagination in these surveys, but as I read through the responses, I began to notice that some people’s descriptions of their special places included imaginative impressions or experiences of things that were not actually physically there. I thought that that result was interesting, so I included “imagination” as one theme in the analysis. Thus, what I present in this paper is just one part of a larger analysis of place experience.

### 3.0 RESULTS

Below, I present several themes pertaining to imaginative aspects of place experience, illustrated with quotations from the special-places surveys. The themes are not mutually exclusive, but overlap and are interwoven throughout the place descriptions. Thus, some of the quoted passages illustrating one theme could have been used to illustrate other themes as well.

#### 3.1 Mental Editing

In describing their special places, some people seemed to engage in a kind of mental editing of the landscape, by using their imagination to add features to complete or fill out the scene. It was as if they were trying to make the scene match an ideal image they had in their mind. Following are examples from three respondents.

- Needs one clump of cattails? Very open view. Like a picture - needs some horses or deer, and dragonflies.
- I then turn around and look back down the hill toward Meadow Lake, imagining deer using this trail.
- I envision a cabin behind me, and an old, rickety pier on the water.

Sometimes they would take one feature of the landscape and expand it in their mind to cover a larger area. This exercise of the imagination was usually done with parts of the environment that were remnants of larger, former natural habitats. They were using their imagination to restore those remnants to their original extent.

- Looking at the old-growth trees and imagining the land covered with them.
- The prairie in fall ... Makes me wish I could wave a wand and just open my eyes and see one direction like this all the way to the horizon.

#### 3.2 Time Travel

One form of imagination that showed up frequently is what I call “time travel,” in which a person uses the environment as a vehicle for traveling in time, usually back to an earlier era.

- The setting plays time tricks with my imagination. I pretend the area is an open savannah of years ago. The Oaks represent a stopping place to relax or take roots. Or possibly, it is years later and cows, tails swatting flies from their backs, lie under the trees’ great shade.
- Time travel may involve going back to an earlier period in the person’s own life.
Perhaps the wild garden means a great deal to me because it was my stepping stone into a bit of past, with the woodland flora of my childhood abundant.

I turn off the fax, the phone, ... the TV, the customer calls, kiss the wife goodbye for a week, and travel back in time to my special place.

Clearly, this form of imagination is closely related to memory, but in these cases it appears to me that people are not merely remembering previous events from their lives in a detached way. Rather, they are using the present environment to help them actually recapture an experience from an earlier period of their life.

Sometimes people travel further back in time than their own life, to experience earlier historical time periods. Again, they appear to be doing more than just thinking or learning about history in an intellectual way. They are seeking to actually experience in their imagination what an earlier era was like.

A place where we go that the “peace” and natural beauty almost takes me back in time to Indians and original settlement.

Would take ... a lot of imagination to put you back in the pioneer days. I enjoy the prairie for the sense of history that it imparts.

Some people wanted to be able to reenact the experience of people who lived in those earlier times.

Wanting ... to have the opportunity to ... reenact experience of those first to discover the river/falls/natural harbor setting.

I felt like a land-looker of 100 years ago searching for King Pine. It meant an opportunity to step back in time and experience the old days.

For some respondents the focus of time travel was on returning to earlier ecosystems that have now mostly vanished. As I mentioned before, they often used their imagination to expand a small remnant of that ecosystem to cover the whole landscape.

This area is a remnant of a once-vast deciduous woods of the East. I feel its constant rhythms, and sense our heritage when centuries ago the forest was our home.

Another flashback in time. I’m always trying to envision a vast horizon of native prairie.

### 3.3 Travel to Other Places

People do not use their imagination just to travel through time, but also to travel through space, to experience other places at a distance from their actual location. For example, when visiting natural places in the urbanized Chicago area, some individuals would imagine that they were in some other place, distant from the city.

It’s a backwater dammed by beavers in the past. It’s like going into southern Illinois. Peaceful, quiet, minimum human impact ... This view takes me back to the calm waters of a Northwoods lake.

The places where people traveled in their imagination were themselves sometimes imaginary, perhaps from a work of fiction they had read.

The picture in my mind that it reminded me of, probably came from reading fairy-tales: The little old wood-cutter and his wife, who were always simple, honest, good people.

The story of “Heidi” – I’ve always wanted to live on the mountain, and this view only needs a tiny village, near the pond, to be the picture in my mind from reading the story.

(Note how the latter respondent uses imagination to mentally edit the landscape, adding a village to the scene to make it correspond to her image of a place she read about in a book.)
For some people, being in their special place is like traveling to a whole different world.

A place not too far from home that when I’m there can take me to other worlds.

Within the mountains is a passageway that allows entry into paradise.

Imagination comes into play not only when people are at their special places, but also after they have left and returned home. Imagination gives them a way of revisiting and re-experiencing their special place from afar.

I can see every inch of the area as if I were there only yesterday.

The knowledge that it’s waiting gets us thru [sic] the long crummy big-city winters. We put on videos of summers past & take mini-vacations all thru [sic] January & February.

3.4 Personification

A final way in which imagination appeared in participants’ descriptions of their special places is through personification of the natural environment. The environment or some part of it is imagined to be like a person in some way. Nature as a whole is, of course, often personified as Mother Nature.

There is nothing but you and Mother Nature in her fullest glory.

We love and respect it and fervently hope it is not improved to death. Let Nature do what she does so well.

Particular natural things or features may also be imagined in human terms.

The wind is the artist’s hand on the drifts as the snow takes on random patterns and blows random designs.

The pines and their carpet of brown needles and especial quality of silence. ... the feeling of a like-minded group of people waiting on God in worship.

The hidden faces in nature mentioned in the introduction to this paper are another example of personification of nature. When people glimpse one of these whimsical faces, they are in some sense personifying the natural environment – literally giving it a human face.

4.0 CONCLUSION

These examples from the special-places surveys suggest that the faculty of imagination can come into play in experiencing natural environments in a variety of ways, and may be a significant aspect of how people find meaning in places that are important to them. This dimension of the human-environment relationship deserves more attention from researchers in environmental psychology and related fields. In addition to surveys and interviews designed to draw out imaginative aspects of environmental experience, analyses of literary works, nature writings, and a variety of culturally significant images and texts could help to identify how imagination enters into the development and expression of environmental meanings and values. The role of imagination in environmental decision-making could also be explored using such methods as process tracing.

In a more practical vein, recreation and environmental managers should also recognize that imagination can be a means for arousing people’s interest in natural environments and fostering a sense of meaning and connection with outdoor places. Many nature educators and interpreters evidently understand this relationship and are already making use of imagination in their programs in a variety of ways. For example, the U.S. Forest Service has a program for archeology volunteers called “Passport in Time.” Volunteers carry “passports” that are stamped every time they arrive at a work site, thus evoking the imaginary notion of time travel. Future research to identify the forms of imagination that are most engaging to people in experiencing nature could help to support the development of education and interpretation programs to foster meaningful connections between people and natural environments.
5.0 CITATIONS


The content of this paper reflects the views of the authors(s), who are responsible for the facts and accuracy of the information presented herein.