



Discourses of place: environmental interpretation about Vermont forests

Monika M. Derrien & Patricia A. Stokowski

To cite this article: Monika M. Derrien & Patricia A. Stokowski (2016): Discourses of place: environmental interpretation about Vermont forests, *Environmental Communication*, DOI: [10.1080/17524032.2016.1211160](https://doi.org/10.1080/17524032.2016.1211160)

To link to this article: <http://dx.doi.org/10.1080/17524032.2016.1211160>



Published online: 08 Sep 2016.



Submit your article to this journal [↗](#)



Article views: 15



View related articles [↗](#)



View Crossmark data [↗](#)

Discourses of place: environmental interpretation about Vermont forests

Monika M. Derrien and Patricia A. Stokowski

Rubenstein School of Environment and Natural Resources, University of Vermont, Burlington, VT, USA

ABSTRACT

Motivated by a lack of scholarly attention to the substance of interpretive messages and materials, this study examines discursive aspects of interpretative brochures available at forest recreation and tourism sites in Vermont, United States. Directive statements that instruct and guide visitor experiences—and the discourses to which they contribute—were analyzed for content, form, and meaning. Across the interpretive brochures, four broad discourses were identified: the natural forest, the recreational forest, the productive forest, and the dependent forest. Consideration of intertextuality revealed a fifth, hybrid discourse that linked forests to meanings of Vermont as a distinctive place. The convergence of these discourses across the set of brochures gives insight into the ways interpretation serves to both direct individual visitor experiences at particular sites, and to influence the development of larger-scale place meanings.

ARTICLE HISTORY

Received 15 July 2015

Accepted 12 February 2016

KEYWORDS

Discourse; environmental interpretation; forests; place; Vermont

If you want to help protect the environment and the quality of life in our area, become a member or volunteer today!. (Trail Around Middlebury Brochure)

Explore the rugged cliffs and mountains, quiet lakes and streams; discover the diversity of plants and animals that make up the rich ecosystem; retrace the footsteps of the region's first inhabitants and early settlers; and much more. (Moosalamoo National Recreation Area Brochure)

Introduction

Environmental interpretation in natural and cultural resource settings—ranger-led walks, campfire talks, brochures and newsletters, museum exhibits, living history enactments—is commonly provided by managers in an effort to engage visitors, encourage attention to particular features of or stories about a site, and influence on-site behaviors (Ham, 2013; Tilden, 1977). In addition to the goals of improving visitor appreciation and understanding, resource managers also use environmental interpretation to accomplish managerial objectives (reducing vandalism or coordinating visitor use patterns) and to promote their agency's public image (Beck & Cable, 2011; Ham, 1992). Interpretation differs from more formal types of environmental education in that audiences are non-captive, pleasure-seeking, and usually at leisure. In order to “captivate” audiences, interpretation often seeks to engage visitors by personalizing messages, encouraging sensory engagement, and moving beyond basic information and instruction to “provoke” and “reveal” meanings and connections (Ballantyne, Packer, & Sutherland, 2011; Ham, 1992; Tilden, 1977).

Research concerning environmental interpretation has traditionally focused on visitor reception of agency-produced messages. Scholars have given primary attention to analyzing the cognitive, attitudinal, and behavioral effects of interpretive messages on individuals (Munro, Morrison-Saunders, & Hughes, 2008), and exposure to interpretive messages has been found to positively impact visitors' knowledge, attitudes and/or behavior to varying degrees (Hughes & Saunders, 2005; Kim, Airey, & Szivas, 2011; Madin & Fenton, 2004; Munro et al., 2008; Weiler & Smith, 2009). But, audience reception of messages is only one component of the communication processes inherent in environmental interpretation: the production and dissemination of interpretive messages by agencies and organizations are necessary prerequisites to any effects that might occur as a consequence of message reception. While a few researchers have explored the strategic choices made by specialists in crafting interpretive messages and designing interpretive programs (e.g. Brito & Pratas, 2015; Peterson, 1988; Xu, Cui, Ballantyne, & Packer, 2013), studies with this focus have been sparse.

This paper focuses specifically on the discursive characteristics of messages produced by managers of forest recreation and tourism sites in Vermont in their efforts to achieve audience effects. As Markwell (2001) explained, "tour operators, guides, authors of guidebooks and promotional literature, and protected natural area management authorities" (p. 40) play an important role in guiding the way people engage in (seemingly) first-hand experiences. While the messages, media, and services of environmental interpretation can take many forms, this study focuses specifically on interpretive brochures, a type of self-guided interpretation that is prevalent in many natural and cultural resource settings, such as parks, forests, and historic sites. The term "self-guided interpretation" refers to mediated interpretive programming (publications, signage, websites, and audio technology) that visitors can use to supplement their on-site experiences; these are in contrast to conducted interpretive services (e.g. guided tours and public talks) that are led by staff or volunteers.

Brochures and other written forms of environmental interpretation offer both linguistic and visual cues to guide visitors' experiences. One written technique that can be observed in interpretive brochures is a tendency to "speak" to visitors personally, often using command statements (*directives*). Two examples are shown in the excerpts presented at the beginning of this article. Directives tell visitors how they should move through a site, how to engage their senses (and which ones), what to be attentive to, and generally, what sorts of actions are appropriate or inappropriate at a site. Produced by agencies and organizations, and contextualized with images and surrounding text, directives are stylized messages that contribute to broader environmental discourses (see, e.g. Peterson's (1988) discussion of preservationist philosophy in a national park's interpretive program).

The term "discourse" has been used by humanities and social science researchers to refer to a range of signifying practices, from language at the sentence level, to written texts or spoken conversations, to non-verbal imagery and social practices, to over-arching ideologies (Fairclough, 2003; Lehtonen, 2000; van Dijk, 1997; Wodak & Krzyzanowski, 2008). Discourses emerge within particular settings to express social and cultural relationships and meanings. In the context of environmental interpretation, the language and images of brochures can be seen as intentional discourses produced by agencies and organizations to achieve specific effects in readers. This approach supports Wodak and Krzyzanowski's (2008) definition of discourse as "linguistic action ... undertaken by social actors in a specific setting determined by social rules, norms and conventions" (p. 5).

This study considers environmental interpretation as a specific type of discursive practice fostered by managers that not only encourages certain visitor experiences, but also constructs broader social meanings of forests. Thus, we theorize that managers are ultimately directing the production of place—a term commonly defined as physical space that is differentiated by the meanings people attribute to it (Tuan, 1977)—through environmental interpretation practices. But place is more than just a set of aggregated, stable individual meanings: place meanings are also malleable, interlinked within integrated discourses of social and cultural meanings that persist in personal and collective memory (Stokowski, 2002). Environmental interpretation can be seen as one discursive arena in which such place meanings are constructed.

There are many approaches to discourse analysis, focusing on the “strategic accomplishments of language users in action [in which] speakers and writers are constantly engaged in making their discourses coherent” (van Dijk, 1997, p. 3). Discourse-oriented research has been widely applied in studies of place attachment and meaning, to examine how people develop place meanings and strengthen place attachments over time (Brooks, Wallace, & Williams, 2006; Dixon & Durrheim, 2000; Kianicka, Buchecker, Hunziker, & Muller-Böcker, 2006; Kyle & Chick, 2007; Manzo, 2003; Patterson, Watson, Williams, & Roggenbuck, 1998; Van Patten & Williams, 2008; Yung, Freimund, & Belsky, 2003), and in studies about the social construction of place and sense of place more generally (Stokowski, 2002).

To investigate how agencies and organizations construct broader societal discourses while attempting to direct visitor experiences at forest sites, this study analyzes textual and contextual aspects of interpretive brochures about Vermont forests. Interpretation about forests is of particular interest because of the central role forests have played in Vermont’s history, culture, ecology, and economy. When Europeans first arrived in the United States, forests covered about 95% of the later-to-become state of Vermont. Later, forests were cleared for timber and agriculture, resulting in a decrease in forest cover to about 25–30% by the late nineteenth century (Albers, 2000). In the early twenty-first century, 75% of the state is forested (Morin et al., 2011), and tourism, which began to be heavily promoted in the early to mid-1900s, has become a large sector of the state’s economy (Jones, 2015). Forestry, logging, and wood product manufacturing make up a small but symbolically important part of Vermont’s economy, as does maple sugaring (Northeast State Foresters Association [NEFA], 2013; O’Brien, 2006). With this prevalence and history, it is not surprising that forests owned and managed by a variety of agencies, organizations, and businesses are common sites and topics for environmental interpretation.

To study discursive aspects of environmental interpretation, two research questions are addressed. First, at a micro-level, how is directive language crafted and used in the texts of interpretive brochures to delimit and encourage certain kinds of experiences of forests? To study this question, we conduct a close reading of interpretive brochure texts, and examine their stylistic and contextual features. Second, on a macro-level, how do brochure texts in the aggregate collectively constitute specific kinds of discourses about Vermont forests? To address this question, we look across the entire set of interpretive brochures to study the intertextual characteristics of these texts. Our overall goal is to offer theoretical and practical insights to guide the production of environmental interpretation materials that can promote desired visitor outcomes.

Methods

The researchers visited 62 recreation and tourism sites in 7 central Vermont counties during summer and fall 2013. Sites were chosen for their location along major travel routes and for their orientation towards forest resources. Of the 62 sites, 13 were under federal management (national forests and parks), 6 were owned by the state (state forests and parks), 16 were owned by towns (municipal forests and parks), 26 were managed by non-profit organizations (chambers of commerce, visitor centers, museums, and nature centers) and one was a for-profit site (a museum/gift shop). Sites often provided multiple types of brochures. Free publications were available at nearly half ($n = 30$) of the 62 sites; about 150 publications were collected.

Both authors participated in a detailed sorting process to evaluate and categorize the collected publications. The first stage involved identifying distinctly interpretive brochures from among all those collected. We defined *brochures* as visitor-oriented media that included flyers, trifold brochures, and small non-bound visitor site guides—but not magazines, stand-alone maps, or agency reports. Further, drawing from common approaches (Ham, 1992; Tilden, 1977) that view successful interpretation as “more than informational” texts that reveal, provoke, and tell stories, we limited interpretive brochures to those that contained narrative text beyond lists of basic facts. At this

stage, about 25 publications—primarily advertising or promotional materials—were eliminated from further consideration.

A second sorting process then eliminated brochures that were not relevant to the study's interests in forests. Brochures retained as "forest-related" were those that made textual references to "forests" or "trees," or synonyms or subcategories for either (e.g. "woods" or "maples"). This produced a subset ($n = 52$) of the collected publications whose content was related to forests (broadly defined), and which displayed at least some interpretive characteristics (i.e. they contained more than basic information about a recreation or tourism site).

Of the 52 forest-related interpretive brochures in the sample, the largest number was produced by or in affiliation with a non-profit organization (44.2%, $n = 23$). Others were produced by or in affiliation with a federal agency (32.7%, $n = 17$), a state agency (25.0%, $n = 13$), a business (17.3%, $n = 9$), and a town (3.8%, $n = 2$). These percentages do not sum to 100 because some brochures (21.2%, $n = 11$) were produced as a result of partnerships between multiple organizational types, and were counted in more than one category.

Analysis relied primarily on a qualitative inductive approach based on linguistic, textual, and discourse analysis (Lehtonen, 2000). Three aspects of the interpretive brochures were assessed: directive statements (commands about how to experience a site) were identified and analyzed; other textual features of the brochures (topical content and images) were assessed; and intertextuality was considered through an evaluation of the discursive qualities of the entire set of brochure texts. We followed Lehtonen's (2000) suggestion that texts are materials "woven" from words, sentences, pictures, and contexts that can be disentangled by systematic analysis. In this effort, each brochure was considered to be a material text that also was linguistically and discursively meaningful.

Directive text was identified by its orientation towards telling the visitor what to do, using imperatives; directives are commands accomplished by verbs in sentences (set in bold in the following example). Directive sentences in interpretive texts (e.g. "**Look** for signs that animals have eaten here") were identified, but logistical imperatives (e.g. travel and parking instructions) were disregarded. Analysis of directive content used Microsoft Word, Microsoft Excel and HyperRESEARCH to identify, excerpt, count, and categorize directive verbs into categories based on the types of actions they directed.

Because directive statements exist within broader texts, a content analysis was conducted to identify topics presented in the interpretive brochures and to count and analyze visual images and their features (after Stokowski, 2011). Topics (the major content areas developed in brochure texts) were identified through multiple readings, and recorded in a spreadsheet. Photographs and drawings (assumed to be intentionally designed relative to the content) were documented. Maps and logos were considered generally to be formulaic materials whose inclusion was mandated, and were not considered in the current analysis. Then, features of the images—specifically, the presence of trees and people—were recorded.

Finally, results of the detailed analysis of the individual interpretive brochures were considered in the aggregate by looking across the entire set of brochures to evaluate how the directives, topics, and images contributed to broad discourses that structured how forests contributed to Vermont as a particular type of place. In this study, analysis of discourses involved comparisons across brochure texts and contexts to derive thematic patterns illustrating specific ways of guiding the ways people (brochure readers) engage with Vermont forests.

Findings

Directing visitor experience in interpretive brochures

Directive language was common in the texts of the 52 interpretive brochures under study, with the vast majority (94.2%, $n = 49$) of brochures giving visitors at least one behavioral command. Directives were found in 401 sentences in the 52 publications; because some sentences contained multiple

directives, a total of 475 directives were made overall. There were 167 different verbs used in these imperatives, with 23 verbs comprising about half (48.4%, $n = 230$) of the total. Among the most commonly used verbs, those with the most uses included *look* (29 uses), *come* (19), and *enjoy* (17).

Directive verbs were sorted into seven categories that distinguished among the types of commands they made (Table 1). Regulatory verbs, directing visitors to act according to regulations or norms at a site, were the most common (26.3%, $n = 125$) and included the largest number of different verbs (40). In general, these verbs tended to encourage passive, low-impact relationships with sites, asking visitors to “leave no trace” or “let nature’s sounds prevail.” Socially interactive verbs constituted the second largest category (20.4%, $n = 97$), and directed visitors to interact with other people or groups, particularly in terms of attending events or joining organizations. Sensory verbs (15.6%, $n = 74$) directed visitors to engage their five senses, using the verbs *see*, *hear*, *taste*, *smell*, and *touch*, and their synonyms; about three-quarters of these were visual. The remaining 37.7% ($n = 179$) of the verbs were categorized in the experiential/stationary, movement-oriented, cognitive, and emotional categories of directive verbs.

Directive sentences were only one part of brochure content; they were accompanied by more extensive texts and visual imagery. Each of the 52 brochures was organized around topical content. The three topics that appeared most frequently were recreational uses of forests (57.7%, $n = 30$ of brochures; e.g. opportunities for hiking), animals (25.0%, $n = 13$ of brochures; e.g. bird identification), and plants (25.0%, $n = 13$ of brochures; e.g. plant physiology). These three categories, along with three others—commercial forest products (21.2%, $n = 11$), land use history (19.2%, $n = 10$) and land stewardship (9.6%, $n = 5$)—accounted for 88.2% ($n = 82$) of the topic codes derived across the 52 brochures.

Content analysis showed that four of the six most prevalent brochure topics involved people. These topics were aligned toward people’s uses and interactions with the land, from work (commercial forest products) to leisure (recreational uses), to land use history and land stewardship practices. All but two of the brochures developed at least one of these four explicitly human-related interpretive topics.

Beyond topical information, brochures also included visual images, usually photographs or drawings. Overall, images were utilized extensively: 86.5% ($n = 45$) of the brochures contained at least one image, with each brochure averaging about 8.5 images. Of the elements visible in the photographs and drawings, trees were the dominant, distinguishing feature, regardless of organizational type. More than three-quarters (76.9%, $n = 40$) of the brochures contained at least one image of a tree, whether it was in the foreground or background of a photograph or a drawing. Because of the prevalence of human-related topics, the role of people in the photographs and drawings was of particular

Table 1. Types and descriptions of directives.

Category of directive verbs	% of verbs	Directed visitors to ...	Most common verbs	Example
Regulatory	26.3	follow regulations and norms	be, take, leave	<i>Be alert and yield to bicycles, pedestrians, children, and wildlife.</i>
Socially interactive	20.4	engage with other people or groups	come, visit, join	<i>Come visit our farm store and sugarhouse nestled in the pine-clad hills of East Montpelier.</i>
Sensory	15.6	use their senses	look, see, watch	<i>Look for eastern hemlock—a commercial species harvested for lumber and paper pulp.</i>
Experiential/ stationary	15.6	experience stationary activities	bring, experience, wear	<i>Bring binoculars for a closer view of the birds that live here all or part of the year ...</i>
Movement-oriented	12.0	move across space	explore, tour, walk	<i>Explore alpine territory high in the Presidential Range of the White Mountains from a rustic lodge.</i>
Cognitive	5.9	use their minds	learn, imagine, remember	<i>Learn how to identify birds, record data, take measurements, and more.</i>
Emotional	4.2	engage their emotions	enjoy, relax	<i>Enjoy the wilderness solitude or retrace the footsteps of Robert Frost.</i>

interest. Images of people were included in about half of the brochures (55.8%, $n = 29$), and just over a quarter (28.8%, $n = 128$) of the 444 total visual images in the 52 brochures contained people.

The analysis of directive sentences, topics, and images shows that, taken together, these forms of communication in interpretive brochures seek to influence the ways visitors experience a forest. Brochures direct visitors to engage their senses at a site (primarily visually), describe how people should move through a site (quietly, and without impact), and encourage people to interact with others and groups in certain ways (by joining groups or volunteering). In addition, the context in which visitor directives were made was dominated by an inconsistent juxtaposition of topics and imagery: while human-oriented topics accounted for the majority of the publications' topics, people were much less frequently pictured in the brochures. Visitors—directed to engage with sites in non-impactful ways—were at the same time shown images of forests in which people were often absent.

Discourses about Vermont forests

The analysis of directive sentences, topics, and images demonstrates how individual brochures are designed in an effort to direct and influence the ways forests are experienced by visitors. But, beyond their individual qualities, the interpretive brochures studied here also have collective weight: as public communications, they contribute to widespread discourses about forests in Vermont. Though these discourses are sometimes competing and always in the process of development and change, there are evident patterns in their composition and presentation. Analysis of these discourses can provide insight into the ways that agencies and organizations make claims about *what* forests mean in Vermont and *how* they should be used. Four distinctive discourses about Vermont forests were identified in these data: (1) the natural forest, (2) the productive forest, (3) the recreational forest, and (4) the dependent forest. Each is discussed below. In effect, these discourses used directives and other textual styles to encourage visitors to experience forests in specific ways.

The natural forest

The natural forest discourse builds on the premise that forests are natural systems, dominated by ecological processes. Visitors are directed to experience the natural forest through specific types of passive observation and following the rules put forth by management. The natural forest is supported by the imagery of people-less forests; images depict the natural objects to be seen, not the process of (people) viewing them. Common interpretive topics that develop this discourse are about plants and animals. In the natural forest, people are simply spectators. An example of a publication that develops the natural forest discourse is the Moosalamoo Birding Guide, produced by a non-profit organization in affiliation with Green Mountain National Forest's Moosalamoo National Recreation Area. The brochure directs visitors to look for birds in different habitats with visual imperatives such as "Look for these forest birds in the mature forest areas" and "Watch for the following shrub loving birds." People are absent in the imagery: of the 15 images in the brochure, there are no images of people; almost all images are of birds.

The recreational forest

The recreational forest discourse presents forests as places for people to move through, as vast playgrounds to explore. This discourse is supported by movement-oriented directives, such as *explore* and *walk*, and experiential/stationary directives such as *discover* and *experience*. The recreational forest is developed through the "recreational use" topic. Directive statements supporting the recreational forest tell visitors *what* to do, rather than *how* to do it in fine, sensory detail. Of the four discourses, people are most prominent in the recreational forest; images reinforce directives by depicting people recreating in the forest—hiking, biking, and sitting on mountain tops. An illustration of the recreational forest discourse can be seen in a brochure titled "Vermont State Parks," published by the Vermont Department of Forests, Parks and Recreation. Imperative statements are a prominent stylistic feature of this brochure, with many movement-orientated directives such

as, “Trek through serene forests” and “Skip over mountain streams.” These directives are supported by imagery: of the brochure’s 15 images, nine include people who are shown actively recreating.

The productive forest

The productive forest discourse frames forests as sites of human ingenuity and cultural tradition. Visitors are directed to appreciate the utilitarian nature of the forest, as a worksite and producer of forest products such as timber, firewood, and maple syrup. This forest is depicted as a place to harvest valuable materials, and the “commercial forest products” topic was commonly developed. Interpretive directives, however, instructed visitors to “access” the productive forest not through “working” it, but through general leisure pursuits. In other words, experiencing the productive forest for visitors means consuming, purchasing, or using forest products. The imagery highlights the “work” (showing the forest work site and products) rather than the “workers.” An example of a brochure that develops the productive forest discourse is from Morse Farm Maple Sugarworks. Imperatives direct visitors to engage with the productive forest in a leisure sense—for example, “Come see us, take our tour, walk right to our maple trees and sample our delicious maple products” and “Sit on tree stumps and watch our Harry Morse Video.” Unlike the recreational forest discourse, however, people are not the dominant feature in the imagery: of the 21 images in the brochure, only five include people.

The dependent forest

The dependent forest discourse depicts the forest as needing human management. This discourse is developed from two prevalent interpretive topics: land use change and land stewardship. The discourse includes the use of socially interactive directives that ask visitors to support efforts, and regulatory directives that seek to restrain people from counteracting management efforts. Imagery focuses on landscape scenes as the products of managerial stewardship, generally without people as a dominant feature. One example of the dependent forest discourse is the Stowe Land Trust brochure. The front of the brochure reads, “Stowe Land Trust is dedicated to the conservation of scenic, recreational, and productive farm and forest lands ...” The brochure displays 12 images, most of which depict forest and agricultural landscape scenes, and none of which include people. The imperatives use socially interactive verbs, urging people to “Become a Stowe Land Trust member” and “Volunteer your time to help us monitor and maintain our conserved properties.”

Intertextuality and discourses about forests

Every discourse exists in relation to other discourses (Lehtonen, 2000), and it is important to note that the four discourses described above are contextual and referential. Some brochures go beyond presentation of one type of discourse to draw on multiple texts and competing ideologies, while others more seamlessly weave competing, as well as converging, ideas in their discursive presentations. In many cases, the intertextual outcome is a commentary about the nature of place.

One publication that demonstrates the intertwining of place-oriented discourses about Vermont forests is a brochure titled, “Vermont Ski Resort and Year-Round Maple Syrup Guide,” produced by a business/non-profit partnership. In this brochure, discourses associated with the productive forest and the recreational forest converge. The brochure’s cover is a drawing of a snow-covered hill, with a steaming maple sugarhouse in the background, two maple trees with old-fashioned sugaring buckets affixed to them in the foreground, and a skier skiing and a snowboarder riding through the scene. This brochure contains two directive sentences (bold emphasis added):

Celebrate the abundance of Vermont: vast, beautiful mountains; authentic villages blending smoothly into productive forests and fertile farmland; deep fresh snow; and warm, friendly people.

Visit our sugarhouse after a day on the mountain ... **learn** how maple syrup is produced, **meet** great people and **sample** amazing products made with real Vermont maple syrup.

The brochure's imagery supports the directives of how people should experience the forest: "celebrating" the outdoors through recreation, and afterwards (ostensibly) visiting the sugarhouse shown behind them. That the word "Vermont" is part of the brochure's title, and used twice in these directive statements, highlights the name of the state not just as a spatial locator, but as a word that conjures distinctive, iconic meanings. The maple syrup is not just "real," but it comes from Vermont—a place to be celebrated for its authenticity.

In the Ski and Maple brochure, the imagery suggests that the productive forest and the recreational forest discourses can both be viable in the same "place" (locale)—and from an organizational perspective, to support the same outcome: tourism. The plausibility of the scene is questionable in reality, as the majority of maple sugaring in the state is accomplished using a network of plastic tubing between trees that would provide quite the obstacle to skiers. But feasibility is not what is being communicated; instead, what is being communicated are the symbolic meanings that local forested landscapes confer to Vermont as a place.

Vermont as a special place

The use of the word "Vermont" was common across the collection of brochures. It was used 32 times in the directives alone—and to a much greater extent in remaining texts. As noted above, the directives analyzed did not include transportation instructions, in which one might expect the name of the state to be used frequently. Other regional designations, such as the name of towns, regions (e.g. New England), or even nations (e.g. the United States), were used less prominently, if at all. The word "Vermont" carries meaning by its use as an adjective, such as in "Vermont wood products," "Vermont specialty foods," and "Vermont forest." Vermont-as-adjective is supported by the imagery of Vermont-as-symbol across the interpretive brochures, which were filled with quintessential images of Vermont: maple sugaring, fall foliage, skiing, and patch-worked landscapes of farms and forests.

The salience of Vermont-as-adjective is one of the prominent discursive features that agencies and organizations drew on to unify discourses of forests. Even when the word "Vermont" wasn't used, imagery was used that conjures the distinct rurality of the state (Hinrichs, 1996). The meaning of forests, and of forest products, thus becomes bigger than an individual sugarbush, or a non-timber forest product. "Vermont" itself becomes a discourse of place, supported by the directives that command visitor experiences, which aligns with the symbols, practices, and landscape of Vermont. The discourses of forests in these interpretive brochures, accordingly, contribute to a discourse of Vermont as a unified, distinctive, and symbolic place.

Discussion and conclusions

Guided by previous research on discourse and place, this study has shown how place-oriented discourses are developed across a set of interpretive brochures. These brochures illustrate the relational qualities of discourses which not only direct visitors' activities on site, but also guide more expansive, culturally salient productions. In addition to offering practical insights for agencies and organizations that produce environmental interpretation, this research contributes new methods for analyzing interpretive brochures, exploring the ways discourses are developed and used to direct visitor experiences.

Results of this study show that visitors' experiences of forests are directed in a variety of ways through the written media of environmental interpretation. In analyzing individual interpretive brochures, we found that directive statements were common across all types of brochures and topical contents, and within these, regulatory and socially interactive directives were most prominent. Further, these were supported with specific kinds of visual images (trees, people). At the aggregate level, four discourses were identified; each incorporated directives, topics, and images in unique ways. Additionally, discourses were sometimes interwoven across brochures, producing idiosyncratic meanings that linked forests to broader social and cultural meanings.

These findings raise questions about how the impact of environmental interpretation should be assessed. Evaluations of interpretation often focus on visitor learning as a way to gauge its effectiveness. Relative to this trend, it is surprising that this study found that cognitive directives in interpretive publications constituted but a small percentage of all directives. Most often, interpretive publications were directing visitors to not negatively impact a site (regulatory verbs), and explaining how to engage with other people or groups (socially interactive verbs). This suggests the need to ensure that evaluation matches the intent of the interpretation.

This also raises the question of whether the use of visitor directives is an intentional, stylistic decision on the part of managers. If interpretation is not being explicitly used to direct people to achieve cognitive outcomes, then what is its purpose? Stewart, Hayward, Devlin, and Kirby (1998) suggest that environmental “interpretation aims to stimulate, facilitate and extend people’s understanding of place so that empathy towards conservation, heritage, culture and landscape is developed” (p. 257). The authors suggest that theory-informed approaches to interpretation can help us to accomplish the goal of developing empathy and a sense of place; Rickard and Stedman (2015) have also come to a similar conclusion. The opposite is also possible, as Dickinson (2011) found in her study of a forest education program, with programs functioning to actually limit and *de-emphasize* a sense of place. In the current study, interpretive texts in brochures did seem to be geared toward empathy and/or relationship building, suggesting that an evaluation of effectiveness would be more appropriately oriented toward evaluating emotional or social outcomes, rather than learning-based ones. Future research should examine the goals agencies and organizations seek to accomplish through interpretation, and their motivations for using stylistic features such as imperatives.

While Todd (2010) found the tourist at the center of the environmental aesthetic produced across a series of National Geographic features, this study found that forest-related interpretation relied strongly on “natural” images in supporting brochure texts, with images of people playing a lesser role. The four discourses identified in this study relied on different metaphors of human–environment relations: forests as museums (the natural forest), forests as playgrounds (the recreational forest), forests as producers of goods (the productive forest), and humans as stewards of forests (the dependent forest). These divergent discourses served to emphasize pluralistic values of forests in Vermont, in contrast to Wolf and Klein’s (2007) study of the concept of the “working forest” in the Northern Forest. These authors found that dominant discourses privileged timber harvesting over other uses, with the logic that, “the forest that pays is the forest that stays” (Wolf & Klein, 2007, p. 997).

One metaphor that was not present in any of the dominant discourses identified in this study was forests *as providers of services* (beyond the provision of forest products and recreation opportunities), as envisioned in the ecosystem services framework (Klain, Satterfield, & Chan, 2014). Using this metaphor, ecological processes are seen as part of the production function for services (such as carbon sequestration or flood mitigation) that benefit humans. Wolf and Klein (2007) found this focus on what they called “forest as ecological workhorse” in only a small percentage of their respondents, as well.

Future research: discourse and the performance of place

This paper critiques the production of interpretive messages, not their reception. Do visitors act on the directives that interpretative writing offers—do they sniff the air when they’re told to smell; do they look under rocks when they’re told to? Research is needed to investigate the reception side of directive-based interpretation in order to determine whether this is the case, and to assess the power of textual commands. If directives are not acted out, do they still “do” something communicatively?

Future research should also consider visitors’ interactions with the physical attributes of resource places (i.e. the natural and built setting) that also work to direct visitors’ experiences (see Dickinson, 2011; Markwell, 2001). People experience forests through many types of encounters and media

(Carolan, 2008), one of which is environmental interpretation. Future research on interpretation would benefit from analyzing multiple modes of engagement, examining the interplay among language, material objects, and embodied experience.

While this study's analysis was organized around imperative statements, other elements of language should also be considered to examine the performance-related aspects of language. Language can serve to actively change the state of a place in and of itself (Austin, 1975; Searle, 1976). To declare, "This land is a wilderness area" *does* something active to change the nature of a place, but what other language practices have similar conceptual and practical power? While much of the research on the performance of place has "focused on activities [...] as a means to gain insight into how people produce place and make meaning from engagement with places" (Morse et al., 2014, p. 227), future research should also consider how activities and language are necessarily intertwined in producing meaning. Performances of place are guided (directly or indirectly) by wide-ranging societal and cultural symbols and discourses, and with reference to a real or imagined social response. Language is needed for comprehensive analysis of the performance of place that is attentive to "the interplay of experience and expression" (Stenner, Church, & Bhatti, 2012, p. 1715). This perspective emphasizes the ways language does more than simply represent or reflect experience; it plays an active role in constituting it.

This study has demonstrated that environmental interpretation is one way in which language is used to construct the meanings of place and direct the ways people experience it. It reinforces the need for managers to be equipped with an understanding of the implications of the form and substance of interpretation, so that they can be deliberate, thoughtful, and effective in their communications with visitors. Further, resource management agencies must also more fully consider interactions between message production and reception, particularly in an era when electronic communications are taking the place of traditional interpretive methods. By extension, this study also raises questions about how various publics attend to different messages and media, and about how visitors might even respond back to agencies. These are rich arenas for future research to build upon and expand, both theoretically and methodologically.

Acknowledgements

Thanks are also extended to Walter Kuentzel, Cheryl Morse, and Robert Manning for their helpful comments on an earlier draft of this paper.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research was supported by the McIntire-Stennis Cooperative Forestry Research Program under Grant [# USDA-NIFA-MSCFR-003725].

References

- Albers, J. (2000). *Hands on the land: A history of the Vermont landscape*. Cambridge, MA: MIT Press.
- Austin, J. L. (1975). *How to do things with words* (2nd ed.). J. O. Urmson & M. Sbisà (Eds.). Oxford: Oxford University Press.
- Ballantyne, R., Packer, J., & Sutherland, L. A. (2011). Visitors' memories of wildlife tourism: Implications for the design of powerful interpretive experiences. *Tourism Management*, 32(4), 770–779.
- Beck, L., & Cable, T. C. (2011). *The gifts of interpretation: Fifteen guiding principles for interpreting nature and culture*. Urbana, IL: Sagamore.
- Brito, P. Q., & Pratas, J. (2015). Tourism brochures: Linking message strategies, tactics and brand destination attributes. *Tourism Management*, 48, 123–138.

- Brooks, J. J., Wallace, G. N., & Williams, D. R. (2006). Place as relationship partner: An alternative metaphor for understanding the quality of visitor experience in a backcountry setting. *Leisure Sciences*, 28(4), 331–349.
- Carolan, M. S. (2008). More-than-representational knowledges of the countryside: How we think as bodies. *Sociologia Ruralis*, 48(4), 408–422.
- Dickinson, E. (2011). Displaced in nature: The cultural production of (non-) place in place-based forest conservation pedagogy. *Environmental Communication*, 5(3), 300–319.
- van Dijk, T. A. (1997). Discourse as interaction in society. In T. A. van Dijk (Ed.), *Discourse as social interaction. Discourse studies: A multidisciplinary introduction* (vol. 2, pp. 1–37). London: Sage.
- Dixon, J. A., & Durrheim, K. (2000). Displacing place-identity: A discursive approach to locating self and other. *British Journal of Social Psychology*, 39, 27–44.
- Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. London: Routledge.
- Ham, S. H. (1992). *Environmental interpretation: A practical guide for people with big ideas and small budgets*. Golden, CO: North American Press.
- Ham, S. H. (2013). *Interpretation: Making a difference on purpose*. Golden, CO: Fulcrum.
- Hinrichs, C. (1996). Consuming images: Making and marketing Vermont as distinctive rural place. In M. Dupuis & P. Vandergeest (Eds.), *Creating the countryside* (pp. 259–278). Philadelphia, PA: Temple University Press.
- Hughes, M., & Saunders, A. M. (2005). Interpretation, activity participation, and environmental attitudes of visitors to Penguin Island, Western Australia. *Society & Natural Resources*, 18(7), 611–624.
- Jones, K. (2015). Benchmark study of the impact of visitor spending on the Vermont economy: 2013. Vermont Department of Tourism and Marketing, p. 1–36. Retrieved from www.uvm.edu/tourismresearch/publications/vermont-tourism-benchmark-study-2013.pdf
- Kianicka, S., Buchecker, M., Hunziker, M., & Muller-Böcker, U. (2006). Locals' and tourists' sense of place: A case study of a Swiss alpine village. *Mountain Research and Development*, 26(1), 55–63.
- Kim, A. K., Airey, D., & Szivas, E. (2011). The multiple assessment of interpretation effectiveness: Promoting visitors' environmental attitudes and behavior. *Journal of Travel Research*, 50(3), 321–334.
- Klain, S. C., Satterfield, T. A., & Chan, K. M. (2014). What matters and why? Ecosystem services and their bundled qualities. *Ecological Economics*, 107, 310–320.
- Kyle, G., & Chick, G. (2007). The social construction of a sense of place. *Leisure Sciences*, 29(3), 209–225.
- Lehtonen, M. (2000). *The cultural analysis of texts*. (A.-L. Ahonen & K. Clarke, Trans.). London: Sage.
- Madin, E. M., & Fenton, D. M. (2004). Environmental interpretation in the Great Barrier Reef Marine Park: An assessment of programme effectiveness. *Journal of Sustainable Tourism*, 12(2), 121–137.
- Manzo, L. C. (2003). Beyond house and haven: Toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 23, 47–61.
- Markwell, K. (2001). "An intimate rendezvous with nature"? Mediating the tourist-nature experience at three tourist sites in Borneo. *Tourist Studies*, 1(1), 39–57.
- Morin, R. S., Barnett, C. J., Brand, G. J., Butler, B. J., De Geus, R., Hansen, M. H., ... Woodall, C. W. (2011). Vermont's Forests 2007. Resource Bulletin NRS-51. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- Morse, C. E., Strong, A. M., Mendez, V. E., Lovell, S. T., Troy, A. R., & Morris, W. B. (2014). Performing a New England landscape: Viewing, engaging, and belonging. *Journal of Rural Studies*, 36, 226–236.
- Munro, J. K., Morrison-Saunders, A., & Hughes, M. (2008). Environmental interpretation evaluation in natural areas. *Journal of Ecotourism*, 7(1), 1–14.
- Northeast State Foresters Association. (2013). The economic importance of Vermont's forest-based economy 2013. Retrieved from: <http://www.nefainfo.org/publications.html>
- O'Brien, E. A. (2006). A question of value: What do trees and forests mean to people in Vermont? *Landscape Research*, 31(3), 257–275.
- Patterson, M. E., Watson, A. E., Williams, D. R., & Roggenbuck, J. R. (1998). An hermeneutic approach to studying the nature of wilderness experiences. *Journal of Leisure Research*, 30(4), 423–452.
- Peterson, T. R. (1988). The meek shall inherit the mountains: Dramatic criticism of Grand Teton National Park's interpretive program. *Central States Speech Journal*, 39(2), 121–133.
- Rickard, L. N., & Stedman, R. C. (2015). Beyond ranger talks to radio stations: The role of communication in sense of place. *Journal of Leisure Research*, 47(1), 15–33.
- Searle, J. R. (1976). A classification of illocutionary acts. *Language in Society*, 5(1), 1–23.
- Stenner, P., Church, A., & Bhatti, M. (2012). Human-landscape relations and the occupation of space: Experiencing and expressing domestic gardens. *Environment and Planning A*, 44(7), 1712–1727.
- Stewart, E. J., Hayward, B. M., Devlin, P. J., & Kirby, V. G. (1998). The "place" of interpretation: A new approach to the evaluation of interpretation. *Tourism Management*, 19(3), 257–266.
- Stokowski, P. A. (2002). Languages of place and discourses of power: Constructing new senses of place. *Journal of Leisure Research*, 34(4), 368–382.
- Stokowski, P. A. (2011). The smile index: Symbolizing people and place in Colorado's casino gaming towns. *Tourism Geographies*, 13(1), 21–44.

- Tilden, F. (1977). *Interpreting our heritage: Principles and practices for visitor services in parks, museums, and historic places*. Chapel Hill: University of North Carolina Press.
- Todd, A. (2010). Anthropocentric distance in National Geographic's environmental aesthetic. *Environmental Communication*, 4(2), 206–224.
- Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. Minneapolis: University of Minnesota Press.
- Van Patten, S. R., & Williams, D. R. (2008). Problems in place: Using discursive social psychology to investigate the meanings of seasonal homes. *Leisure Sciences*, 30(5), 448–464.
- Weiler, B., & Smith, L. (2009). Does more interpretation lead to greater outcomes? An assessment of the impacts of multiple layers of interpretation in a zoo context. *Journal of Sustainable Tourism*, 17(1), 91–105.
- Wodak, R., & Krzyzanowski, M. (Eds.). (2008). *Qualitative discourse analysis in the social sciences*. New York, NY: Palgrave Macmillan.
- Wolf, S. A., & Klein, J. A. (2007). Enter the working forest: Discourse analysis in the Northern Forest. *Geoforum*, 38, 985–998.
- Xu, H., Cui, Q., Ballantyne, R., & Packer, J. (2013). Effective environmental interpretation at Chinese natural attractions: The need for an aesthetic approach. *Journal of Sustainable Tourism*, 21(1), 117–133.
- Yung, L., Freimund, W. A., & Belsky, J. M. (2003). The politics of place: Understanding meaning, common ground, and political difference on the Rocky Mountain Front. *Forest Science*, 49(6), 855–866.