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DISCOURSE AS SOCIAL PROCESS IN OUTDOOR RECREATION AND NATURAL RESOURCE MANAGEMENT: ARGUING, CONSTRUCTING, AND PERFORMING

A Dissertation Presented

by

Monika M. Derrien

to

The Faculty of the Graduate College

of

The University of Vermont

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ABSTRACT

This dissertation examines the language-based, discursive processes through which meanings and experiences are socially constituted in outdoor recreation and natural resource environments. Language use and discourse are seen as interactive, constructive processes, approached through the theoretical perspectives of argumentation, social constructionism, and performance.

Three qualitative studies, based in data collected at Acadia National Park and forest-related sites throughout Vermont, comprise this dissertation. The first study uses rhetorical analysis to examine the ways National Park Service managers and community leaders argue for the meanings and management of dark night skies in and around Acadia. The second study examines how national park visitors socially construct meanings of night sky experiences, focusing on the structure, functions and styles of language. The third study evaluates forest-oriented environmental interpretation materials produced by Vermont-based agencies through an analysis of performance. Each study analyzes a different type of discourse: semi-formal "expert" language solicited in interviews with managers and leaders (study 1), semi-formal "naïve" language solicited in interviews with park visitors (study 2), and formal, written texts produced by agencies (study 3). Results show how language is used to forge agreement across competing ideals; construct meanings despite undeveloped vocabularies and intangible values; and direct visitors to perform forests in ways that develop the meanings of place.

These studies contribute to the understanding of how individuals and organizations use language within discourse practices to create the reality in which socially- and culturally-important natural resource environments are managed and experienced, forming a body of work that informs theory and practice.

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CHAPTER 1: COMPREHENSIVE LITERATURE REVIEW

This dissertation is about the discursive construction of the meanings and management of socially and culturally-important natural resource environments in the Northeastern United States. Grounded in qualitative, interpretive modes of inquiry, this body of work analyzes language use, textual development, and discourse as interactive, constructive processes through which people create shared realities. Various theoretical perspectives inform this work, but they all are based on the premise that meaning is produced in social interaction.

The studies that comprise this dissertation are based on data collected in research projects conducted at Acadia National Park, Maine, and at forest and tourism-related sites throughout Vermont. Each of these studies analyzes a different type of spoken or written discourse originating from different sources. The first study (Chapter 2) uses rhetorical analysis to examine the ways National Park Service managers and community leaders argue for the meanings and management of dark night skies in and around Acadia, using semi-formal "expert" language solicited in interviews. The second study (Chapter 3) examines how national park visitors socially construct meanings of night sky experiences, focusing on the structure, functions and styles of language, using semi-formal "naïve" language solicited in interviews. The third study (Chapter 4) evaluates forest-oriented environmental interpretation materials produced by Vermont-based agencies through an analysis of performance, using written publications as data.

The comprehensive literature review in this chapter offers context for this dissertation's three studies. While each journal article includes its own focused literature review, this chapter provides a broader overview of the literature and an integrated perspective on the theoretical foundations that inform the research presented in the following chapters. The literature that informs multiple chapters is given the most attention. For literature specific to one particular study, this literature review will direct the reader to the chapter where a more detailed description can be found.

This literature review is presented in five sections: People, place, and environmental communication; Qualitative research; Social constructionism; Discourse; and Discourse analysis.

People, Place, and Environmental Communication

The settings for this dissertation's studies are outdoor recreation and natural resource environments, settings that have been extensively studied from many perspectives, including those that focus on people's experiences, the places where those experiences occur, and the ways managers communicate with visitors in such settings The ways these three topics have been studied are developed in the following subsections, to give insight into how this dissertation seeks to improve the field's inquiry into social processes among visitors and managers.

People in Outdoor Recreation and Natural Resource Environments

Research on people's experiences in amenity resource settings has been heavily focused on individual experiences, commonly interpreting meanings as individual qualities, which are then later related to social settings (Stokowski, 2008). This leads to a focus on meanings that originate with individuals, rather than viewing meanings as something that are produced through interaction. These studies often have a strong quantitative, cognitive, individualistic basis, such as studies of attachments to wilderness areas (Williams, Patterson, Roggenbuck, & Watson, 1992), studies of sense of place among lakefront property owners (Stedman, 2002), studies of environmental concern and place attachment and meanings (Brehm, Eisenhower, & Stedman, 2013), studies of perceived crowding at recreation sites (Manning, 2011), among others.

Qualitative approaches to studying people's experiences in such settings have also had individual orientations. While the perspectives of symbolic interactionism, social construction and discourse suggest a focus on language-as-interaction (Mead, 1967; Stokowski, 2002), most outdoor recreation research uses phenomenological approaches to "access" individual meanings. These studies focus on "meanings" that exist within recreationists' minds, rather than the production of social meanings in social space that are more than the amalgam of distinct individual meanings (Stokowski, 2002).

Research approached from a more social-cultural perspective has focused on the role of social interactions at recreation sites. For example, a sociocultural analysis of outdoor recreational places evaluated the power of shared images of places to organize

people's behaviors in everyday life (Lee, 1976). The processes of place creation in a national forest were studied using analytic induction methods (Brandenburg & Carroll, 1995). An analysis of the social construction of a sense of place by long-time attendees of an agricultural fair considered the role of social interactions among attendees, finding that attendees seemed to bond with social, rather than physical, attributes of the fair (Kyle & Chick, 2007).

Patterson, Watson, Williams, and Roggenbuck (1998) examined the ways visitors to a wilderness area constructed the meaning of a particular canoe run. They concluded that conversations which took place directly after completing the canoe trip were "important for sorting through the meaning of the experience" suggesting that " the opportunity to reflect on, relive, define the meaning of the experience, and even share the experience at the landing was an important phase of the experience" (Patterson et al., 1998, p. 447). Starting with the social basis for place meanings in their theoretical approach, Van Patten & Williams (2008) explored the meanings that individuals appropriated and attributed to seasonal homes. Their findings bolster the view that individuals' experiences need to be studied in relation to their social circumstances, and in a way that examines the interconnections among people and groups.

Amenity Resource Places

In addition to studying people's experiences, the settings in which those experiences occur has been a prominent topic in outdoor recreation and natural resource management studies. Research on "place," commonly defined as physical space that is differentiated

by the meanings people attribute to it (Tuan, 1977), has focused on the ways physical settings become imbued with meaning by visitors and/or residents (Trentleman, 2009). These studies have been informed by perspectives from geography, sociology, landscape architecture, and anthropology, as well as leisure, outdoor recreation and tourism.

Despite the extensive history of the philosophical study of meaning (Heidegger, 1962), it seems that many place scholars use the term as a general one, to evade the more contentious, disciplinarily-defined terms such as place attachment, place identity, place dependence, or even sense of place. Meaning is taken as a prosaic word, without need for definition. But, if meanings are theorized to be always in the state of becoming (Heidegger, 1962), then their study should not only be about what they "are" (which is what is done in both the cognitive and much of the phenomenological approaches to studying place), but also about how they are constructed and deployed. In relation to place research, this means that attention should be given to individual and social processes of constructing place, as well as to the contents of place meanings.

Studies of place attachment, comprised of attitudinal measures of place identity and place dependence, are characteristic of the cognitive approach to studying place, which analyzes differences between individuals. These studies view place meanings as synonymous with place attachment (Stedman, 2003; Van Patten & Williams, 2008). Additionally, most of these studies have viewed sense of place as an aggregate measure "encompassing meanings, attachment, and satisfaction" (Stedman, 2003, p. 672), with place meanings being something that happens between individual and places (Smaldone,

Harris, & Sanyal, 2008). These approaches tend to ignore social interaction as a basis for developing place meanings.

Qualitative approaches have focused on elucidating place meanings and values (Davenport & Anderson, 2005; Gunderson & Watson, 2007; Lukacs & Ardoin, 2014), as well as sense of place (Stokowski, 2002). In these interpretive studies, sense of place is considered "a multidimensional construct comprised of biophysical, sociocultural, political–economic, and psychological aspects" (Lukacs & Ardoin, 2014, p. 56). The relationship between these terms is ambiguous, however, and Van Patten and Williams conclude that, "a common pattern in the literature has been to operationalize place meanings or sense of place using measurement approaches conceptually better suited to measuring place attachment," which has the result of disregarding "how these attachments are supposed to add up to sense of place or constitute the meanings of place" (Van Patten & Williams, 2008, p. 449).

There has been considerable discussion about the interplay between physical and sociocultural factors in the social construction of place (Kyle & Chick, 2007; Sampson & Goodrich, 2009; Stedman, 2003). The importance of social interactions to people's experiences in resource places was described by Brooks, Wallace, and Williams (2006), who used a "relationship metaphor" to examine the active construction of place in Rocky Mountain National Park. They found that social and physical interactions featured prominently in people's recounting of experience, highlighting that these often became "increasingly difficult to isolate" within the same meaningful relationship (Brooks, Wallace, & Williams, 2006, p. 343). Thus, examining place as a social construction does

not discount its physical attributes or their importance – it simply emphasizes the social processes through which physical attributes are made meaningful.

Recent studies in leisure and outdoor recreation have begun to consider social and cultural influences on sense of place, increasingly by using qualitative and interpretive methods. These studies include a focus on social construction (e.g., Kyle & Chick, 2007, Stokowski, 2002) and discourse analysis, including narrative analysis, analysis of socio-political discourses, analysis of scientific claims, and rhetorical analysis (Bell, Hampshire, & Tonder, 2008; Derrien & Stokowski, 2014; Petrzelka, 2005). These studies often focus on the multiple, variable, and interactive attributes of place. Studies have also focused on the sociopolitical outcomes of people's and groups' constructions of place. Cheng, Kruger, and Daniels (2003) explored the ways that social group identity and place are intertwined, and the ways that natural resource politics often become contests over place meanings rather than issues.

Environmental Interpretation

One way that resource managers and community leaders communicate with visitors and residents about various attributes of place (or more broadly conceived natural resource environments) is through environmental interpretation, the focus of Chapter 4. Environmental interpretation, by definition, seeks to create meaningful connections among natural, cultural, and historical processes, generally on-site at resource places (Ham, 2013; Tilden, 1977). Environmental interpretation has both managerial goals

(promoting agency image and accomplishing management objectives) and visitor-related goals (visitor appreciation and understanding) (Ham, 1992).

Environmental interpretation research has historically focused on visitor reception of messages, with researchers largely concerned with the cognitive, attitudinal, and behavioral outcomes of interpretive messages (Munro, Morrison-Saunders, & Hughes, 2008). Research indicates that interpretation can and does impact knowledge, attitudes and/or behavior, although with varying strengths and permanence (Hughes & Saunders, 2005; Madin & Fenton, 2004; Morgan, Absher, Sutherland, & Loudon, 1997; Munro, Morrison-Saunders, & Hughes, 2008; Weiler & Smith, 2009).

Before interpretive messages can have any impact, however, they must be first prepared and disseminated by agencies and organizations, who make decisions about content and presentation. Markwell (2001, p. 40) explains the important roles "tour operators, guides, authors of guidebooks and promotional literature, and protected natural area management authorities" play in guiding the ways people engage in (seemingly) first-hand experiences. Research about the production of interpretive messages, however – their content, form, and style – is lacking. The lack of research on this is surprising, given the resources some agencies and organizations dedicate to interpretation. But, decisions about what social, cultural, ecological, or historical processes, events, and timescales to highlight in interpretation – and how these are presented – demonstrates the potential power of interpretation, and the necessity for research attention to all aspects of communication processes in interpretation. There is a need for studies of environmental interpretation that have a more social orientation: while a few researchers have begun to

explore the strategic choices producers of interpretation make in crafting messages (e.g., Adler, 1989; Brito & Prata, 2015; Peterson, 1988; Xu, Cui, Ballantyne, & Packer, 2013), this topic or approach has not been well developed.

Thus, people's experiences in resource places, the construction of place meanings, and the ways managers communicate with visitors, requires further study as socially-situated interactive processes.

Qualitative Research

Qualitative research is motivated by the complex social practices that produce and reproduce meaning, whose analysis requires "methodologies which are able to represent and capture […] ambivalent and multiple characteristics" (Macnaghten & Urry, 1998, p. 3). Qualitative research focuses on words and meaning rather than the numbers, frequencies, and statistics that accompany positivist approaches (Henderson, 1991). Further, qualitative interpretive approaches tend to follow inductive lines of questioning. Aspects of qualitative research are often described in relation to "turning" away from quantitative approaches: the "qualitative turn" (Woods, 2010), "the turn to language," (Hall 2001), "the turn to discourse" (Wood & Kroger, 2000), the "linguistic turn" (Fairclough, 1992; Harré, Brockmeier, & Mühlhäusler, 1999), the "narrative turn" (Denzin & Lincoln, 2002), and the "rhetorical turn" (Billig, 1996). Research methods within this "turn" use data collected in observations, interviews, focus groups, and documents, and analyze data using a variety methods, many of which include attention to language and interaction (Henderson, 1991).

While there is great diversity in qualitative research approaches, what is necessary to understand relative to this dissertation is the distinction between qualitative studies that examine language as *reflective* of meaning, serving to communicate stable, and internally-produced content that can be analyzed to deduce those meanings, and those that examine language as a process through which meaning is produced interactively. The former is particularly prevalent in studies of parks and recreation management in which individuals' decontextualized language is often objectified. The latter is the qualitative perspective taken in this dissertation, in an attempt to broaden and enhance the analytical focus of the field's inquiry into social processes in outdoor recreation and natural resource management.

Social Constructionism

Social constructionism, the philosophy of knowledge developed by Berger and Luckmann (1966), posits that human experiences and their meanings are mediated through language within social interactions. As a result, meanings are not only in the minds of people, but are fluid, continually massaged, revised, and replaced in the interactional contexts of daily living. Further, the use of language is always social; a speaker is always "speaking to" someone within broader political, ideological, cultural, and economic systems (Billig, 1996; Eagleton, 1996). From this vantage point, the study of language-in-use (conversations, reports and written texts, public pronouncements, etc.) is the vehicle for understanding the variability as well as the stability of language practiced and negotiated across diverse settings – and from social action, meaning emerges. As Watkins (2000, p. 99) wrote, "knowledge or meaning is embedded in

participatory forms of social practice and is subject to the structuring influences of historical processes and sociocultural beliefs that surround those practices."

Within social constructionist theorizing, researchers have explored how the realities of the world are constructed and come to be often unquestioningly understood as natural or inevitable. A classic article in this tradition is Greider and Garkovich's (1994) analysis of the social construction of nature and landscapes. The authors examined the construction of landscape through social and cultural practices involving symbolic and material resources. They asserted that, "Our understandings of nature and of human relationships with the environment are really cultural expressions used to define who *we* were, who *we* are, and who *we* hope to be at this place and in this space" (Greider & Garkovich, 1994, p. 2).

Research in this tradition includes the exploration of the experience of a mountain as "conjointly constituted" by the interplay of social and physical factors – not of just one particular mountain, but the accumulation of general ideas about mountains and their uses (Freudenburg, Frickel, & Gramling, 1995). Other research has analyzed the social construction of place, finding that residents used comparisons and place metanarratives to positively construct the counties where they lived, in comparison to negatively-framed local alternatives (Alkon & Traugot, 2008). A study of lifestyle behaviors in a mixed-income urban housing development examined the ways low-income residents created a shared context of meaning that sustained common lifestyle patterns, such as the incorporation (or lack thereof) of physical activity (Carroll, Adkins, Foth, Parker, & Jamali, 2008). Using a symbolic interactionist approach, another study analyzed the

social construction of place attachment to a student-run dining establishment, finding that both memories of interactions and the perceived potential for future interactions imbued the site with meaning (Milligan,1998).

These studies highlight the social as important in two ways, which seems to be sometimes confused in the literature: social refers to the interactive process of construction (so, it is through social processes that meanings are constructed), and social also refers to the sorts of meanings that are constructed (places and experiences are meaningful because of the social interactions within them). In Stedman's (2003) study of the importance of physical landscape attributes to "sense of place" among residents of an amenity-rich area, he critiqued the way researchers have studied place as "just" a social construction, writing, "[t]here is a paradox at work here: Despite the constructed nature of place articulated in many writings, others assert the importance of the physical environment in creating places" (p. 673). Such a critique misses an important dimension of social constructionism. Examining place (or a resource, or an amenity) as a social construction does not discount its physical attributes or their importance – it simply emphasizes the social processes through which those attributes are made meaningful. Conceiving of anything in the world is unavoidably mediated through social and cultural experience (Berger & Luckmann, 1966).

Discourse

Discourse plays an important role in social constructions, in the active social practices and processes of meaning-making. There is great variability in definitions of discourse (van Dijk, 1997), but three compatible definitions are used in this dissertation:

> Chapter 2: "ways of representing [material, mental, and social] aspects of the world" (Fairclough, 2003, p. 124)
>
> Chapter 3: "the social activity of making meanings with language and other symbolic systems in some particular kind of situation or setting" Lemke (1995, p. 5)
>
> Chapter 4: "representing some particular part of the world […] from a particular perspective" (Fairclough, 2003, p. 129)

While these definitions emphasize different dimensions of discourse that are relevant to the three studies, they support and build off of each other, focusing on contextualized language. As Fairclough (2003, p. 8) observes, "we may textually construe (represent, imagine, etc.) the social world in particular ways, but whether…our construals have the effect of changing its construction depends on various contextual factors." Relative to contexts, all three studies follow Wodak (2008) in considering not only immediate, physical settings, but past and current social and linguistic situations that have bearing on contemporary discourse creation processes. Discourses are elaborated from spoken and written texts, as communicative objects (Wodak, 2008) formed from words and sentences.

Language users (individuals, and any variety of groups of people) construct, refine, and revise conceptions of and relationships in the world through the discourses they develop (Frouws, 1998; Greider & Garkovich, 1994). Discourses produce and reflect knowledge and power relationships that are both explicit and implicit in societies (Foucault, 1972), and serve as distinct types of social action that rhetorically direct and shape the fields of action in which people make decisions about resource management.

Discourse does not emerge out of a mass of individual, unrelated communications; individuals are always enmeshed in some sort of formal or informal social structures, and thus communicate with others based on their relative positions. Kuentzel and Ventriss (2012) demonstrate how communicative interactions are influenced by a host of social psychological factors, which shape how individuals communicate with each other in different social circumstances. Such critiques, pointing to the limitations of the rational ideal of communication, are part of a larger critique of cognitive social psychology and sociology and its naïve treatments of behavior and language (Wooffitt, 2005). For example, in social psychology, cognitive views of language often see attitudes as an entirely mentalistic phenomena, disregarding the rhetorical dimensions and complexity of attitudes (Billig, 1996).

In reaction to these reductionist approaches to language and behavior, there have been movements in the social sciences toward a theory of language and social interaction in its own right, rather than a theory of social problems that incorporates issues of language (Maynard, 1988); Gergen and Gergen (1988) imagine this theory to be diachronic and relational. As opposed to traditional social psychological perspectives that

consider language at its face value and as a cognitive process, Potter and Wetherell (1987, p. 6) encourage researchers to consider "how social texts do not merely *reflect* or *mirror* objects, events and categories pre-existing in the social and natural world. Rather, they actively construct a version of those things. […] And being active, they have social and political implications."

From this perspective, the study of discourse considers the nature of knowledge, cognition, and reality (Edwards & Potter, 1992). The study of discourse, as a social behavior and mode of interaction, then, becomes not about words as semantic units and the meanings that can be inferred from their use, with language as a mental abstraction or depiction of the world (Hutchby & Wooffitt, 2008). Instead, discourse approaches focus on the action-orientation of talk and writing, and the ways language functions to attribute accountability and order social interactions (Edwards & Potter, 1992).

From a textually-based linguistic perspective, discourse is a more micro-level interest. Fairclough (2003, p. 124) explained that discourses are "ways of representing aspects of the world" that arise from language-based patterns and processes in the ways people think, speak, and interact. Discourses are constituted by spoken and written texts – communicative objects that are "specific and unique realization(s) of a discourse" (Wodak, 2008, p. 6).

Discourse Analysis

Discourse analysis is a conceptual and methodological approach to understanding language as a social phenomenon, focusing on questions about the construction of social worlds. It approaches language as an active social practice, as a medium for interaction that is constitutive of reality, rather than simply expressive of it. Through language-based social practices, social structures and contexts can be reproduced or renegotiated. As Gee (2011) explained, language has three primary functions: it allows people to say things (e.g., to inform), to do things (e.g., to act), and to be things (e.g., to take on identities). Discourse analysis contextualizes any or all of these functions. The basic assumption of discourse analysis is that language, and the discourses to which it contributes, is a type of action. That is, language does things in the world, through both its content and its form (Wood & Kroger, 2000).

Discourse analysis encompasses a wide range of interpretive research methods for analyzing linguistic, social and cultural aspects of language, texts and discourses (Nikander, 2012). These share the goal of understanding how people use language to construct and elaborate meanings in discourses that support taken-for-granted social realities. Discourse analysis generally emphasizes the importance of language's dialogic use as a form of production, always directed toward some abstract or concrete "other" (Eagleton, 1996). Such approaches consider the content, referents, structure and style of a text, but also questions its intended purpose, focusing on the social functions of linguistic features and the relationship between macro and micro-level analyses (Wood & Kroger,

2000). It considers form as constitutive of content, and structure as an active social process (Fairclough, 1992).

Feindt and Oels (2005, p. 163) consider seven strengths of discourse analysis: awareness of the role of language; skepticism about claims of objectivity; the view of knowledge as relative; an interest in biases of language; the role of power in language and knowledge; practices as constitutive of power and knowledge systems; and the motivation to democratize knowledge production. These strengths are garnered from discourse analysis' ability to move between more micro-level linguistic analyses, meso-level textual analyses, and more macro-level foci on discourse.

Discourse analysis has been used to analyze competing constructions in resource management. These have tended to emphasize broad, macro-level discourses and critical theoretical positions, rather than the processes by which discourses become constituted from linguistic and social elements. For example, Lawrence, Phillips, and Hardy (1999) identified a common set of discursive strategies used by organizations involved in the Pacific Northwest whale watching industry, and theorized how these practices contributed to a framework for collaboration. Another discourse-based study found that strategic discourses used by external logging and development organizations restricted the abilities of local communities to determine their own desired forest management schemes in the Amazon (Medina, Porkonoy, & Weigelt, 2009). Similarly, research has found that conflicts between local communities' prioritization of cultural well-being and managers' prioritization of biodiversity outcomes led to ineffective management in the

Great Barrier Reef National Heritage Area in Australia (Nursey-Bray, Marsh, & Ross, 2010).

Other studies evaluate discourses on a finer scale, looking at the ways particular terms are used to conceptualize and direct management approaches. Researchers have studied how public discourse in the Adirondacks has been shaped around the construction of the ambiguous idea of the "working forest," which reflects contested processes in conservation planning and investment that often privilege pragmatic economic opportunities over other interests (Wolf & Klein, 2007).

Discourses in environmental policy making have been described as based in "specific cultural and political formations. They enable people to see and articulate certain practices but not others. They help to legitimate certain practices but not others. They are an element of power formations. In that way, they incorporate bias" (Fiendt & Oels, 2005, p. 163). Researchers have shown how scientific discourses are unavoidably imbued with evaluative language (Macnaghten & Urry, 1998). For example, Harré, Brockmeier, and Mühlhäusler (1999) discuss how the presupposition of temporality and the prevalence of semantic vagueness in terms such as "growth," "disposal" or "resources" inevitably orient scientific discourses and environmental issues in ways that preload meaning into any "scientific" communications. Simply put, words not only carry obvious, denotative meanings, but are also used to create and perpetuate socially-constructed meanings that contribute to broader discourses.

Approaches to Discourse Analysis Used in Dissertation

In the following section, an overview of the three approaches to discourse analysis used in this dissertation is presented: rhetoric and argumentation; multi-level discourse analyses that examine the link between linguistics, texts, and discourse analyses; and grammatical imperatives and the role of language in performance. While the three approaches share theoretical and methodological foundations, and follow a sequential analysis of textual data, they focus on different attributes of discourse, and therefore require different analytical approaches.

Rhetorical analysis and argumentation. Chapter 2 presents a rhetorical analysis of "expert" talk about night skies at Acadia National Park. Rhetorical analysis refers to the study of argumentative language. In its current popular use, rhetoric often has a negative connotation, attached to unfounded, but persuasive discourse (Billig, 1996). But rhetoric, traditionally, refers to the study of persuasive talk of all constitutions, and rhetorical analysis is the study of this argumentation, examining the organization, presentation, and types of claims that are made within persuasive discourses (Stokowski, 2013).

Rhetoric is "a defining feature of politics and of policy […] and is central to understanding policy and the governance of public institutions" (Morrell & Hewison, 2013, p. 59). Rhetorical analysis is a useful approach to studying managerial discourses because of the argumentation inherent in natural resource politics and decision-making, where agencies, interest groups, and community members make and contest claims about

resources, amenities, and place, thereby defending and defining them in the process (Cheng, Kruger, & Daniels, 2003; Stokowski, 2013). The study of rhetoric in management discourses can offer important insights into the meanings individuals and groups attach to their surroundings. Rhetorical approaches have often focused on overtly contentious issues, such as climate change or renewable energy siting (Barry, Ellis, & Robinson, 2008; Coppola, 1997; Frandsen & Johansen, 2011; Livesey, 2002), but of interest in the study in Chapter 2 are the implicit debates being perpetuated in less overtly polarized argumentation. The rhetorical analysis in Chapter 2 examines enthymemes, arguments that have a missing premise, as a way to consider the implicit assumptions in arguments.

Multi-level discourse analysis. The discourse analytic approaches taken in Chapters 2 and 4 consider specific textual and stylistic features of theoretical interest (argumentation and imperatives). Because of Chapter 3's focus on the processes of social construction, the study takes a broader approach, with a multi-level discourse analysis that considers linguistic, textual, and discursive patterns in language. This chapter draws upon linguistic and social approaches to discourse analysis (Schiffrin, 1994; Wetherell, 2001), departing from other studies that emphasize critical readings of macro-level discourses (e.g., Lawrence, Phillips, & Hardy, 1999; Medina, Porkonoy, & Weigelt, 2009; Nursey-Bray, Marsh, & Ross, 2010). The analytic methods for this study gave primary attention to the structure, functions and styles of language used by interviewees to reveal and interpret linguistic (words and phrases), textual (situated descriptions), and broader discursive patterns in the data (after Fairclough, 2003).

Imperatives. Chapter 4 is oriented around the analysis of imperatives, contextualized within the interpretive publications in which they were made. The imperative is a grammatical mood that commands the listener to do something or be something (Fairclough, 2003); it always includes a verb that "commands" the audience to do something (e.g., *brush* your teeth or *do* your taxes). The interest in imperatives in this dissertation is because they are a particularly active form of language used to direct people's experiences, thereby linking language to embodied experience. This linkage brings in the theoretical perspective of performance, which considers how people's embodied experiences of places, landscapes, and activities imbue those places with meaning (Edensor, 2006). Performances are studied not only as engagements "in" particular places, but as constitutive "of" places, with studies focusing on the performance of rural places, national parks, and activities such as birdwatching and hiking (Morse et al., 2014; Carolan, 2008; Lorimer, 2005; Markwell, 2001). Since activities are often guided by others, through suggestion, directive, or allusion, language becomes an important way the performance of particular places is directed. Thus, studying imperatives in relation to performance focuses the analysis on how managers seek to actively direct the "performances" of visitors through environmental interpretation.

Performance is approached through non-representational theory, which is based in the observation that some experiences are "below the level of discursive consciousness" (Carolan, 2008, p. 413), or "extradiscursive" (Stenner, Church, & Bhatti, 2012, p. 1717); language-based representations are theorized to only insubstantially represent the

meanings of human experience (Thrift, 2008). Some researchers have advocated for non-representational theory being more appropriately called "more-than-representational theory" since it is not that experiences of interest are *not* represented, but that there is *more* to them than their representations (Carolan, 2008; Lorimer, 2005). Lorimer (2005, p. 83) describes non-representational theory as "an umbrella term for diverse work that seeks to better cope with our self-evidently more-than-human, more-than-textual, multisensual worlds."

This non-representational approach is often critical of social constructionist thinking, which in its focus on language may overstate the importance of language-based representations (Carolan, 2008; Thrift, 2008; Woods, 2010). There is some debate about whether it is possible to access the non-representational through language (Carolan, 2008; Heley & Jones, 2012; Stenner, Church, & Bhatti, 2012; Thrift, 2008), but some scholars believe that language is needed for comprehensive analysis of performance. Some argue that studying embodied experiences inevitably requires some form of representation in order to communicate them: "It is not that we cannot represent sensuous, corporeal, lived experience but that the moment we do so we immediately lose something. Representations tell only part of the story, yet they still have a story to tell, however incomplete" (Carolan, 2008, p. 412). Others have taken this argument further, contending that non-representational theory "can be taken too far in a direction that neglects the interplay of experience and expression" (Stenner, Church, & Bhatti, 2012, p. 1715). The article in Chapter 4 adopts this latter stance, that some forms of language in particular (such as the imperatives studied) are used specifically to influence experience. Chapter 4

offers a further discussion of imperatives and their role in directing action, and their relationship to non-representational theory and performance.

Conclusion

The literature on people, place, and managerial communications in outdoor recreation and natural resource environments, qualitative research, social constructionism, discourse, and discourse analytic strategies provide the foundation for this dissertation. This literature review reveals three main themes that are central to the motivations for this dissertation's topical focus and research approaches:

- The treatment of language as reflective and representative of meaning in qualitative research, particularly in applied social science studies in outdoor recreation and natural resource settings;
- A focus on individual visitors, recreationists, or residents without a substantive consideration of their social contexts and interactions;
- An undeveloped understanding of the social, language-based processes concerning the ways meanings are constructed.

By addressing these issues, through the application and development of interpretive research methods, this dissertation seeks to develop the understanding of how individuals and organizations use language within discourse practices to create the reality in which socially- and culturally-important natural resource environments are managed and experienced. This understanding is critical for the accomplishment of resource

management goals that include enhancing and directing people's experiences in resource- and amenity-rich settings, as well building support for management actions.

CHAPTER 2: A RHETORICAL ANALYSIS OF NATIONAL PARK SERVICE AND COMMUNITY LEADER DISCOURSES ABOUT NIGHT SKIES AT ACADIA NATIONAL PARK

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Executive Summary

Dark night skies are becoming increasingly scarce as human populations increase and development continues to sprawl. Light pollution, and its ecological, social, and cultural impacts are transboundary, multi-jurisdictional issues that require planning and management involving multiple actors on multiple scales. This study examines management of dark night skies at Acadia National Park, where the park and community have worked to keep the night skies relatively dark. Park service managers and community leaders were interviewed, and qualitative methods were used to better understand how each group discursively made the case for the meaning and management of dark night skies at Acadia. In addition to analyzing the explicit content of interviews, enthymemes – arguments with implicit claims – were also evaluated. The rhetorical analysis also focused on the stylistic techniques that supported enthymematic claims; these included establishing legitimacy and credibility, positioning leaders relative to others, and ambiguity. This study showed that NPS arguments tended to frame the role of the community as "buying in" to NPS's efforts to uphold its new night sky-inclusive management policies, while community leaders argued that the night sky was an economic asset, discursively retaining their autonomous interests. Rhetorical discourses functioned to forge the semblance of agreement and the appearance of a "win-win" situation for both groups, even though the underlying premises of their arguments were often conflictual, relating to political or ideological understandings of the resource and the goals of its management. Other research has found that contested meanings can lead to substantial conflict over resource management, but in this case, contested meanings seemed to represent a case of adjustment and shared responsibility.

Key words: Acadia National Park, community, discourse, management, night skies, parks, protected areas, rhetoric

Pollution from artificial ambient light has become a topic of professional and popular interest and concern over the last 25 years, especially as it affects the quality of dark night skies (Klinkenborg, 2008; Rogers & Sovick, 2001). Research has indicated that two-thirds of the population in the United States lives in places where the Milky Way cannot be seen (Cinzano, Flachi, & Elvidge, 2001). Managing light pollution is complicated, involving transboundary and jurisdictional issues that require planning and management involving multiple actors on multiple scales.

Because they are managed for resource quality as well as human experiences, national parks are useful sites for the study of night skies. National parks have some of the darkest night skies in the United States (NPS, 2014a), but at the same time, their popularity can encourage development (and ancillary light pollution) in communities along their borders. Development even at great distances from parks – as far as 200 miles or more – can impact the natural darkness within a park (NPS, 2013). Strategies for measuring the quality of visitor experiences of the night sky are being developed (Manning, Rovelstad, Moore, Hallo, & Smith, in revision), but an understanding of institutions and individuals who make decisions that impact the quality of the night sky and night sky experiences is also needed.

The research presented in this paper addresses issues related to the management of night skies at Acadia National Park (Acadia) and the gateway town of Bar Harbor, on Mount Desert Island in Maine, USA. The research analyzes public discourses of

ownership, management, and stewardship that have emerged over the "newly discovered" natural resource of dark night skies. Two specific research questions are addressed: (1) In what ways do National Park Service managers and community leaders describe local night skies and night sky initiatives?; and (2) What are the rhetorical strategies used by representatives of these two groups to argue for particular conceptions of the night sky and how it should be managed? Answering these questions will improve understanding of the dynamics of park-community relationships, and thus improve the abilities of park managers to engage surrounding communities in night sky management efforts that require sustained community involvement.

Night Skies in National Parks

The significance of national parks in the US has included scenic, historical, ecological, and recreational values, and the evolution of these values has been guided by changing social and environmental conditions (Manning et al., in revision; Nash, 2014). As dark night skies have become increasingly scarce, their significance has been underscored, for ecological reasons, such as wildlife breeding, feeding, and migration patterns (Navara & Nelson, 2007) as well as for cultural reasons, such as systems of accounting for the passage of time, as well as myths and spirituality linked to celestial events (Collison & Poe, 2013; Rogers & Sovick, 2001). Dark night skies also have important recreational value, as people seek out nighttime experiences requiring natural darkness and the ability to view stars and planets, particularly in parks and protected areas, where skies are generally darker than in populated areas (Collison & Poe, 2013).

In 1999, the NPS created its Night Skies Program to manage natural lightscapes; the program was merged with the Natural Sounds Program in 2011 to form the Natural Sounds and Night Skies Division (NPS, 2012). NPS Management Policies explain that, "to prevent the loss of dark conditions and of natural night skies, the NPS will minimize light that emanates from park facilities," develop local partnerships, and work with visitors to "prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks" (NPS, 2006, p. 57).

Acadia is one national park where night skies are relatively dark (Albers & Duriscoe, 2001), although it has not been certified as an International Dark Sky Park (IDA, 2015). The park's 49,000 acres form a jigsaw puzzle pattern of land holdings, especially in its main section on Mt. Desert Island (NPS, 2014b). The park is directly adjacent to Bar Harbor (population 5,325 in 2010, according to the US Census), a hub for tourist-oriented businesses and services, making Acadia a park where community relationships are central to park management.

NPS efforts to protect and promote dark night skies at Acadia have included measuring night sky quality, installing night sky-friendly lighting in the park, and engaging park visitors in educational programming (Kelly, 2009). Efforts in surrounding communities have included municipal lighting ordinances that specify permissible types of outdoor fixtures and the brightness of lights, as well as voluntary business initiatives to retrofit existing lights and lighting fixtures. In 2009, following passage of the Bar Harbor lighting ordinance, a local Chamber of Commerce, in conjunction with NPS and local organizations, launched the Acadia Night Sky Festival – a four-day event to bring amateur astronomers, star gazers, and tourists to Acadia in late September to celebrate the

night sky. The Festival organizers advertise that "as the rapid loss of dark skies to light pollution receives national recognition, Maine is increasingly referred to as some place 'that still has stars'" (Bar Harbor Chamber of Commerce, 2014).

Discourse and Natural Resource Management

Social Constructionism and Discourse

Night skies are not only objects; they are also ideas, and so the theoretical perspective of social constructionism (Berger & Luckmann, 1966) is relevant for this research. Berger and Luckmann proposed that the reality of the world is constructed within social interaction, and that language is the foundation of personal and social behavior. Language uses signs and symbols to form meaningful ideas, moving from words to sentences to texts – but as Potter and Wetherell (1987, p. 6) stress, "social texts do not merely reflect or mirror objects, events and categories pre-existing in the social and natural world. Rather, they actively construct a version of those things. They do not just describe things; they do things." That is, language is intentional, oriented to performing actions, obtaining responses from others, and evaluating meanings.

Beyond its interpersonal functions, language is important at macro levels, as linguistic and non-verbal features of expression (images, sounds, performances) work together to organize discourses. Discourses can be defined as "ways of representing [material, mental, and social] aspects of the world" (Fairclough, 2003, p. 124), and can take many forms (e.g., scientific discourses, religious discourses, political discourses). As van Dijk (1997, p. 3) noted, discourse analysis focuses on the "strategic *accomplishments* of language users in action…speakers and writers are constantly engaged in making their

discourses coherent." In analyzing discourse, the structures, functions, and styles of language and symbol use are important because discourses are more than just their overt content. This paper specifically studies rhetorical discourses – instrumental texts oriented towards persuading audiences towards particular ends.

Rhetorical Approaches to Discourse Analysis

The term *rhetoric* refers to "how people within specific social situations attempt to influence others through language" (Selzer, 2004, p. 281). The study of rhetorical discourses can offer important insights into the meanings individuals and groups attach to their surroundings and to the strategies they use to make meaning through language (Billig, 1996; Kellert, Mehta, Ebbin, & Lichtenfeld, 2000; Suddaby & Greenwood, 2005). Rhetoric is "a defining feature of politics and of policy […] and is central to understanding policy and the governance of public institutions" (Morrell & Hewison, 2013, p. 59).

In analyzing rhetoric, researchers conduct critical readings of texts and discourses to assess how authors deploy persuasive strategies towards particular ends; the organization, presentation, and types of claims that are made are evaluated. Rhetorical analysis is useful for analyzing discourses like those evident in natural resource politics and management, where agencies, interest groups, and community members make and contest claims about resources, amenities, visitors, and place, defending and defining these in the process (Cheng, Kruger, & Daniels, 2003; Schöllmann, Perkins, & Moore, 2001; Stokowski, 2013). Studies of rhetorical discourses have often focused on overtly contentious issues, such as climate change or wind energy (Barry, Ellis, & Robinson,

2008), but of interest in the current study are the implicit claims perpetuated in less overtly polarized argumentation.

While research about discourse has received considerable attention from scholars studying natural and cultural resource management issues (see, for example, Cantrill & Oravec, 1996; Feindt & Oels, 2005; Wolf & Klein, 2007), the topic of rhetoric has received only limited attention; when used, it has often been applied in only general terms. Some scholars have specifically used rhetorical analysis methods in their work, however. Peterson (1988) studied the organizational symbols and myths inherent in Grand Teton National Park's interpretive program, in which the author identified myths related to the spiritual supremacy of nature and the passivity of visitors. Using more "ordinary" texts, Stokowski (2013) conducted a rhetorical analysis of comments written by respondents on mail questionnaires, analyzing their forms, arguments and claims, and stylistic features; these comments can provide insight into the opinions of discourse communities. Writing about cultural resource management, Spielvogel (2013) used rhetorical analysis to analyze how the National Park Service interprets (in the sense of interpretative visitor services) several important Civil War sites and their artifacts, influencing debates about public memory and meaning. Public memory has been an important arena for applications of rhetorical analysis (see Dickinson, Blair, & Ott, 2010, for examples), but often memory studies are published in fields other than recreation and natural resources, so their influence in this field has been limited. These writings do show, however, that there are many ways for conducting rhetorical discourse analysis. In this paper, our analytic focus is on enthymemes in rhetorical discourse.

Enthymemes

Among theories of rhetoric, Toulmin's Model of Argumentation specifically examines the functional relationships between the parts of an argument (Toulmin, 2003; van Eemeren, Grootendorst, Jackson, & Jacobs, 1997). Toulmin used the term "warrant" to describe the link between a speaker's stated assertions and the conclusions that may be drawn from it. An argument with a missing, or implicit, warrant is called an *enthymeme*. Enthymemes are one of the "more distinctively rhetorical forms of argument," and are often described as an "abbreviated syllogism" (Gill & Whedbee, 1997, p. 171). A complete syllogism, on the other hand, includes all of the premises of an argument, including the warrant.

An often-repeated example of the deductive logic of a syllogism is: *Socrates is a man; All men are mortal; So Socrates is mortal* (Toulmin, 2003, p. 100). The warrant that "all men are mortal" allows listeners to conclude that because Socrates is a man, he is mortal. In enthymemes, however, speakers assume that audiences will fill in the (missing) warrant that establishes the premise for the argument. In the above example, if the warrant "all men are mortal" were left out, it would be an enthymeme. Without inferring the missing link, the argument will appear incoherent. Gill and Whedbee (1997, p. 172) explain that, "in creating and responding to enthymemes, speaker and audience reveal their unstated beliefs and values; they reveal their ideology or 'implicit philosophy' about the nature of reality, the nature of their community, and their conception of appropriate social relations." Enthymemes are often taken for granted, going undetected by both the speaker and the listener, but their premises support implicit structures of legitimation (Heracleous & Barrett, 2001) that connect persuasive ideas to

broad social, cultural, and managerial perspectives. Analyzing enthymemes is a way to "read between the lines," to interpret what is assumed by a speaker about the conclusions to which her audience will likely come.

Van Eemeren et al. (1997, p. 213) describe how "the enthymematic quality of everyday […] arguments leads to one of the enduring problems of argumentation analysis: how to represent what is left implicit in ordinary argumentative discourse." Arguments occurring in informal and semi-formal verbal communication often have a "messy" quality, lacking the formal anatomy of linear, deductive reasoning, and often include extra facts, tangents, and incompletely-expressed thoughts. At the same time, informal verbal arguments are often strategic, using verbal maneuvering and omissions to make the arguments less overtly contestable. The methods outlined below describe the process of collecting, identifying, and analyzing the functions of these "messy" arguments.

The literature on social constructionism, discourse, and rhetoric provides the foundation for analyzing the social positioning and dynamics managers and leaders achieve through public discourses of ownership, management, and stewardship of dark night skies, and how those discourses impact park-community relationships.

Method

Rhetorical discourse analysis methods were used to study the content and form of interview-based data about night skies and night sky initiatives at Acadia and Bar Harbor. The analysis used qualitative research software, Microsoft Office tools, and manual sorting strategies to analyze the textual data. Interview transcripts were coded for

instances of argument, analyzed for content, and compared, focusing on the form of rhetorical strategies employed by NPS managers and community leaders. The analysis focused specifically on enthymemes as evidence of the assumed premises interviewees perpetuated in their arguments.

Sample and data collection

While more remote national parks, particularly those in the Western United States, have darker night skies (Albers & Duriscoe, 2001), Acadia was chosen for this research because of its recent history of park and community efforts concerning night skies and its relatively dark night skies near the major population centers of the Northeast. Interviews were conducted in early fall 2013 with 12 NPS employees at Acadia and 12 community leaders in Bar Harbor. The sample was deliberate; interviewees were chosen on the basis of their involvement in a wide range of park and community-oriented night sky initiatives. Representatives from a range of important organizations, and key people involved in night sky efforts were included in the sample. NPS interviewees included managers, rangers, education specialists, and other staff (all NPS interviewees are referred to here as "NPS managers"). Community interviewees included directors of conservation, education, and economic development non-profits, business people, and town government leaders (community interviewees are referred to here as "community leaders" or "CL"). The sample included 10 women and 14 men. To maintain confidentiality, the interviewees are referred to below by their position (NPS or CL) and their interview number.

Interviews were held at individuals' workplaces and local coffee shops, and ranged from 13 to 90 minutes in length. Interviews began with a set of questions about night skies and the respondent's agency/organization/business (e.g., Has your agency/community/organization undertaken any initiatives to address the quality of night skies?), followed by a set of questions about the respondent's personal experiences and interests in night skies (e.g., Are there any aspects of night skies that are of special interest to you?). Each interviewee was asked the same questions in the same order, but digressions and elaborations were common. Interview transcriptions produced 186 typed pages of single-spaced text, of comparable length for the NPS and CL interviewee groups (93.5 and 92.5 pages, respectively). It should be noted that the arguments in these interviews were neither formal, prepared arguments, nor did they arise in naturally-occurring conversation; the arguments were delivered in a staged interview context, and should be considered a semi-formal communication (Gummesson, 2000).

Data analysis

The analysis explores explicit and implicit rhetorical content and form of arguments within interview discourses; it was conducted by two readers using the same criteria to code and sort samples of the interviews. The first step in the analysis involved reading interview transcripts multiple times and coding transcripts for each instance of argumentation about the night sky and night sky initiatives. Coding followed van Eemeren et al.'s (1997, p. 209) definition of an argument: the use of "language to justify or refute a standpoint, with the aim of securing agreement in views." Undeveloped statements of opinion, offered without context and without elaboration or support were

not considered to be arguments. For example, "*Night skies are important to my business*" was not considered to be an argument because it offers no evidence and uses no persuasive strategies to elaborate the assertion.

The second step of the analysis identified the explicit content of argumentation by analyzing themes in the textual argumentation data. This was done using HyperRESEARCH, as well as Microsoft Word and Excel to organize the data, and manual sorting and coding the arguments identified in the previous step. This sorting process involved interpretive, iterative analysis that produced the final set of thematic categories of arguments about the importance of the night skies to various groups (e.g., "night skies as an economic asset").

The third step of the analysis involved examining the positioning strategies used by interviewees to direct their arguments towards their own or others' groups. Analyzing techniques of verbal positioning can reveal the nuanced efforts speakers use to make their arguments more or less personal. Arguments were coded to identify how interviewees positioned themselves relative to others, specifically their uses of first or third person pronouns.

The final step of the analysis considered implicit forms of argumentation, looking specifically at enthymemes. Microsoft Word and Excel were used to break each argument into its logical components, and the missing warrants that connected the components were inferred, and then analyzed across arguments. The enthymemes' implied premises were then used to reconstruct the conceptual arguments that underpinned the discourses. These were compared across the two interviewee groups and the thematic categories.

Results

The first step of data analysis involved identification of arguments about night skies and night sky initiatives; a total of 166 of these arguments were identified in the interview texts. These were nearly evenly distributed between the two interview groups (84 arguments made by community leaders; 82 by NPS managers), and they varied in length from a few lines to several paragraphs. Each interviewee made between 1 and 15 arguments, with an average of about 7 arguments per interviewee. Below, the first results section presents explicit arguments and the second analyzes enthymemes' implicit premises.

Contents and Themes of Arguments

The second step of data analysis was to sort arguments into themes based on their explicit content. While most arguments clearly articulated a single thematic area, 19 arguments (10.3% of the total number of codes applied) were counted in two different thematic categories. The seven most common argument themes are presented in Table 1, which also shows their distribution between the two interview groups (community leaders and NPS managers); these represent 74.6% of the argument codes applied. The remaining quarter of the codes were aggregated as "other" and not considered in the analysis.

Table 1. Common Argument Themes

Thematic Category	**TOTAL**	**CL**	**NPS**
Comparative quality of night skies at Acadia	28	13	15
Night skies as a difficult resource management issue	23	5	18
Night skies' alignment with NPS mission	20	3	17
Community interest in night skies	19	11	8
Night skies as an economic asset	18	11	7
Importance of education about night skies	16	7	9
Costs of addressing light pollution	14	11	3
Other *	47	30	17

*Arguments with fewer than 9 occurrences

In the most common thematic category, "comparative quality of night skies at Acadia," interviewees argued that visitors' experiences of night skies at Acadia were impressive because of the poor quality of night skies in their home communities. Interviewees' arguments in the *"night skies as a difficult resource management issue"* category made the case for the complexity of managing night skies. In the *"night skies' alignment with NPS mission"* category, interviewees made claims about the inclusion of night skies in NPS's management policies. In the *"community interest in night skies"* category, interviewees made the case that community members had their own interests in the night sky, apart from NPS initiatives. Interviewees' arguments in the *"night skies as an economic asset"* category made claims about the economic activity dark night skies generated for the area. In the *"importance of education about night skies"* category, interviewees argued that it was important to educate people about light pollution and the night sky. Finally, in the *"costs of addressing light pollution"* category, interviewees

made arguments for the costs and cost-savings associated with adopting night sky-friendly lighting.

Table 1 shows that community leaders made more arguments than NPS managers about perceived costs and savings associated with night sky initiatives (78.6% of arguments in the category), and how night skies are seen as an economic asset for the town (61.1% of arguments in the category), increasing tourism, particularly through the night sky festival. NPS managers made more arguments than community leaders about the management of night skies aligning with NPS's mission (85.0% of arguments in the category), and the difficulty of managing this resource (78.3% of arguments in the category).

Verbal Positioning within Arguments

Rhetoric is concerned with the public discussion of issues and ideas, and because the arguments discussed here are made by two groups of public leaders (NPS and community), data analysis should account for directionality in their claims. Thus, the third step in the data analysis was to evaluate instances of verbal positioning across argument themes and interviewee groups. One stylistic technique associated with positioning involved the use of personal pronouns. Even in thematic categories in which community leaders and NPS managers made arguments with a similar frequency, similarities in themes did not necessarily indicate agreement on issues. For example, this can be shown by analyzing claims within the most common thematic category of arguments (Theme: Comparative quality of night skies at Acadia). Community leaders

and NPS managers made a similar number of arguments within this category, often using similar positioning techniques, but drawing different conclusions from their arguments:

> *We had some people from New Jersey…I guess it was a lunar eclipse and so they went out in the middle of the street to get the biggest view, and one of the guys came back and said, "Gee do you always have this many stars?" And it's a common question: "Can you see the Milky Way?" "Oh yeah, you can see the Milky Way." "Well, where do I look?" And I go, "You just go out. And you look up." [laughs] So, it never occurs to them. […]When you live in places like […] Northern New England, you have to be careful not to let all this stuff become common place and ho-hum. Because most, not that many people have it. […] And when you look at the satellite pictures, you know, the night ones where you see all the light along the Eastern Seaboard. And then there's Maine. Well, it would be really nice to keep it like that. (*CL #4, Argument 148)

> *The light pollution…I guess it kind of depends where they're from, too. You know if you're from the city you probably aren't as impacted because it's whatever you're used to. You do go to a national park and I don't think a lot of people think of dark skies as a resource or something to protect. I think that's changing as the park service is really making an effort with dark sky initiatives and astronomy programs in a lot of parks. So I think that that's great that the word is getting out, how important that is.* (NPS #7, Argument 74)

In both arguments, the interviewee depicts "others" as naïve. In the first, the community leader presents visitors to the town as naïve, with himself in the role of local expert, advising visitors about how to view the night sky (*"You just go out. And you look up,*" because *"it never occurs to them"* otherwise). In the second, the NPS manager claims that people in general do not think of the night sky as a resource or *"something to protect,"* with NPS having the role of making sure that *"the word is getting out."* So while both interviewees make the same general argument about the ways people experience night skies, they are also discursively doing something much more subtle: positioning themselves as part of a knowledgeable in-group. Who constitutes that in-group differs in the two arguments.

The categorization of explicit argument themes gives insight into rhetorical discourses about the night skies. But this only tells part of the story: thematic comparisons address discourse content, but fail to consider more nuanced dimensions of argumentation that are achieved through form. The analysis of enthymemes shows the importance of form in rhetorical texts.

Implicit Arguments: Enthymemes

The fourth and final step of the analysis examined implicit forms of argumentation using enthymemes. In responding to interview questions about organizational and personal interests, interviewees used enthymemes to construct implicit arguments about the fundamental values of night skies and their management. Their arguments included implicit claims about: (a) the kind of resource the night sky is, (b) why the night sky should be managed, and (c) what is to be gained by managing the night sky. These arguments carry both the explicitly stated claims shown in Table 1, as well as implicit meanings communicated through enthymematic form.

In the discussion below, we identify a range of stylistic techniques used by interviewees to support their implicit and explicit arguments. Some of these strategies (such as positioning, discussed above) are obvious – while others (making ambiguous claims, or asserting legitimacy) were more subtle. These stylistic techniques will be further addressed at the end of this section.

Congruent with the findings of Barry, Ellis, and Robinson's (2008) rhetorical analysis, many of the enthymemes' implied premises are presented about the "naturally" occurring relationships between groups, industries and natural resources, and about the

interests of groups and institutions. While there may be multiple interpretations of any argument, some are more likely given the context of surrounding arguments. The enthymematic analysis presented here considered multiple interpretations of each argument and offers the most plausible interpretation.

What kind of resource is the night sky? Community leaders and NPS managers presented different perspectives about the significance of the night sky. Community leaders' arguments often included implicit assumptions about the positive values of experiencing the night sky for urban visitors, as well as the general population. For example, one community leader argued that people from urban areas were impressed by dark night skies at Acadia, assuming that seeing dark night skies is a positive experience.

> *I mean, we get tons of people from urban areas and, even my daughter, who grew up here, when she comes home now, she says, 'I haven't seen a star since the last time I was home' because it's so bright where she is. So, there are people, families that come with kids who have never seen stars 'til they come here. Never! Not once. This is like a first, first experience of, 'Yeah I've read about this, but they're really there.'* (CL #9, Argument 2, Theme: Comparative quality of night skies at Acadia)

The implicit premise – that visitors are having a positive, meaningful experience when they view the dark night sky – allows the major argument to be made. This is true (as the explicit argument follows) especially for families visiting from light-polluted areas who usually see a degraded version of the night sky. This is expected to be inferred by the listener, and is supported by the context. The community leader uses the stylistic techniques of hyperbole *(Never! Not once!)* and repetition (*first, first)* to make the positive experiential values of night sky resources come through, without explicitly stating these.

While this may seem like a commonplace premise that could be taken for granted, consider alternate arguments: that people may experience unfamiliar conditions negatively; that there is safety in avoiding darkness; that city skies lit up at night are a marvel of civilization. But, because of the ways individuals in this community have constructed the meanings of dark night skies, the use of an enthymematic argument means that potential counter-arguments do not warrant acknowledgment by the speaker. NPS managers, on the other hand, construct the positive values of night skies differently, pointing not to people's experience of the night sky, but to the mission of the national parks to preserve and protect natural resources. In contrast to the community leader above, the NPS manager relied on logic to support his claims – though his undefined use of the phrase "high quality" also incorporates ambiguity. For example, he argued:

> *Well, we view it as one of the many natural resources that [are] high quality right now and that we want to therefore protect that quality. That's part of our mission, our reason for being here, and so it's viewed of one of several, or one of many, important resources that we're out to protect.* (NPS #5, Argument 25, Theme: Night skies' alignment with NPS mission)

These two arguments illustrate different ways of constructing night skies: in the first, as a cultural asset that sets Acadia apart from other places, and in the second, as a natural resource whose quality needs to be protected. While there are circumstances in which these different constructions can contribute to overarching goals of resource protection, the issue of problem definition is potentially divisive. The implications of how the resource is constructed closely informs another set of enthymemes, concerning justifications for management.

Why should the night sky be managed? Textual data show that many of the NPS managers interviewed explicitly argue that managing the dark night sky as a natural

resource has become important to the NPS. Implicit in these arguments is the idea that managers have an imperative to actively define and manage resources that fit within its mission and policies. That the night sky is a relatively new concern for NPS was clearly articulated by most of the NPS managers interviewed. For example:

> *Well now I think it's really important. You know people have come to expect that the park will play a leading role in, in ensuring that we have a high quality night sky from here on in, and hopefully communities will play a big role, too. So I think our, our role is really important. I'm glad we use the night sky and natural sounds as a resource in parks now, which, you know, they weren't in listed in our management policies until more recently.* (NPS #10, Argument 34, Theme: Night skies' alignment with NPS mission)

This NPS manager emphasizes the newness of night sky efforts: people *"have come to expect"* that NPS will lead "*from here on in*." But, it wasn't *"until more recently"* that NPS *"listed [them] in our management policies"* and began to "*use the night sky […] as a resource."* The implicit premise in this statement is that NPS has the knowledge and authority to define the night sky as a resource needing management.

Most community leaders, however, did not discuss what NPS seemed to see as its legitimate role in defining resources and setting the management agenda, even though NPS management of the night sky is related to activities that happen outside of its borders. Most of the community leader arguments lacked explicitly political or ideological claims. Instead, community leaders emphasized the importance of dark night skies to their community, including evidence such as their support for passing the lighting ordinance and the night sky festival. Many described Bar Harbor's involvement in night sky initiatives as unrelated to NPS's efforts. For example, one local leader made the case for interest in night skies, dating it back to before the NPS was formally involved in

efforts around night skies. He establishes credibility by pointing out his personal experiences while living in the community for many years:

> *I mean, the town has adopted a dark sky ordinance. All the facilities the town builds are night sky compliant. And the existing lighting, we're moving in that direction, as we can. So it's just very important here […] I've lived here for 27 years and throughout that time, it's been a discussion, just of how much we need to, how much people appreciate the night sky.* (CL #10, Argument 160, Theme: Community interest in night skies)

Inversely, NPS managers did not argue for the town's appreciation for dark night skies or for their own interests in tourism, although these were sometimes described as a benefit for others. Instead, NPS managers matter-of-factly assumed that their organizational charge encompassed protecting night skies. This division of emphasis in discourse may protect the special interests of each group, reducing the potential for conflict and allowing for collaboration.

What is to be gained by managing the night sky? Competing enthymematic assumptions were seen in arguments about the outcomes of efforts around night skies. Many community leaders explicitly argued that dark night skies, and activities celebrating them, drew tourism to the community. One community leader presented several kinds of evidence in her argument that tourism had increased since promotion of night skies began, though she never explicitly asserted that increased tourism is a *positive* outcome of night sky efforts. One of the ways the implicit in enthymemes was made visible was through verbal positioning; this community leader repeatedly used the first person plural pronoun, "we," to verbally position herself as part of the effort and benefits gained.

> *But there's this whole new door that's opened with the tourism industry, since **we** started highlighting this area as a stargazing, or an astrotourism destination.[…]**We** have seen, with this festival alone, I mean **we** draw in 3,700 attendees, I mean […] **we**'re hoping for at least 4,500 this year. Most of those people are actually traveling from different parts of Maine, or from actually out of state. So **we** do have a huge local involvement and local attendance. **We** do surveys at all our events, and you know, usually it's just, write down your zip code so **we** can get a sense of where you're from. And about 70% were from out of town. Which was fantastic for us. So I think if **we** started boosting this, that's a huge market at a very important time in this community. […] I don't think it's the majority portion of the tourism industry, here, it's definitely a growing sector. […] **We**'ve actually been able to extend, uh, because of some of these late season events, that **we** run […] the season's been extended by, like, 38% Because you know now, businesses are closing at Columbus Day, instead of Labor Day. Yeah, when you have a peak season that last three months a year, and that's when the majority of people make their money, you know, an extra month makes such a difference. (*CL #3, Argument 122, Theme: Night skies as an economic asset)

This leader uses the stylistic technique of selective focus to set up explicit "proofs" in her argument to show that tourism has, in fact, increased (e.g., *"the season's been extended by, like, 38%")* but does not put her implicit assumption – that the town needs tourism to survive – up for scrutiny. Statistics about visitor numbers and season length may be seen as more "scientific" and harder to dispute than more normative judgments about the desirability of different types of tourism promotion and growth, and their community-level implications.

In the previous example, who exactly the "we" refers to is ambiguous, but indicates personal involvement. This can be contrasted to NPS managers, who, when arguing for the tourism benefits that dark night skies brought to the area, almost exclusively attributed benefits to a third person plural, "they." For example,

> *In the business community, you know, through the Chamber, I think is an important…because **they** see it as an asset, another characteristic of Acadia that can attract business. You know it's something that not everybody has and **they**, I think **they've** finally gotten on board with this is a great opportunity to promote this area.* (NPS #6, Argument 3, Theme: Night skies as an economic asset)

Here, the NPS manager verbally positions himself as separate from the positive outcomes for the business community. NPS managers were more likely to argue that their desired outcomes of night sky initiatives were related to good resource protection and maintaining agency identity. By setting up the question of who will gain from night sky initiatives with two distinct outcomes (tourism and resource protection), benefitting two distinct entities (them and us), the NPS manager was able to argue that it was simply beneficial to all involved parties. This selective focus overlooks the relationships involved in managing a transboundary resource, and how it benefits NPS to have the town "on board" in furthering its mission.

Summary: Enthymemes in rhetorical discourse. The presentation of results shows how content, form, and style aspects of communication work together in creating coherent arguments and thus constructing meaningful realities for speakers (and potentially their audiences). Overall, both explicit and implicit argumentation strategies were used by park service as well as community leaders. Relative to the importance of enthymemes in argumentation practices specifically, the data reveal a variety of linguistic and discursive stylistic techniques (sometimes used concurrently) that enhanced and supported the implicit claims made in enthymemes; the primary ones are summarized in Table 2.

Table 2. Stylistic techniques used to carry out inferred content in enthymemes

Technique	**Description**	**Example argument**
Verbal positioning	Assigning in/out group affiliations	#3
	Using plural pronouns: “we” / “they”	
Value judgements	Using hyperbole, repetition	#2
Legitimacy assertions	Emphasizing formal, mission-driven charges	#34
	Using logic to structure arguments	
Focusing selectively	Avoiding contentious issues and potential counter-arguments	#122
Making credibility claims	Presenting personal observations as evidence	#160
	Claiming local knowledge	
Ambiguity	Using terms that have both general and specific denotations	#25

Discussion

The study described in this paper showed that the most common arguments made by NPS managers concerned the difficulty of managing night skies, while community leaders’ most common arguments were about the comparative quality of visitors’ experiences of night skies (Research Question 1). In making these explicit arguments, both park service mangers and community leaders used enthymemes in rhetorical discourse to argue for particular conceptions of the night sky, and why it should be

managed (Research Question 2). Enthymemes are an implicit form of argumentation, and their effectiveness is facilitated by applications of a variety of stylistic techniques, including uses of ambiguous language, group positioning, credibility claims, and other techniques described in Table 2. Together with the explicit aspects of arguments, enthymemes offer a perspective on how speakers in public settings contribute to processes of reality construction. Below, we discuss issues related to the broader scholarly and practical aspects of enthymemes specifically, and rhetorical discourse generally, in outdoor recreation research.

The role of ambiguity

Interviewees used explicit content, enthymematic forms of argument, and a variety of stylistic techniques to carry out their persuasive discourses. By strategically using plural pronouns to position themselves as part, or not part, of groups they referred to, interviewees were able to make arguments without addressing questions of community inclusion. This achieved a division between "locals" and agency staff in public discourses. Using ambiguous terms that have multiple meanings such as "assets," "characteristics" and "resources" allowed the interviewees to appear to be talking about shared values, even if there were implicit tensions.

Previous research has shown that ambiguity can play an important role in persuasive discourse. The general use of terms such as "leadership" or "management" can be rhetorically beneficial, since these are hard to dispute, and can be manipulated to have desired meanings at opportune times (Morrell & Hewison, 2013). In terms of community relationships, ambiguity of meaning can create a façade of agreement, even

when ingrained differences may exist (Polletta & Lee, 2006). Additionally, pronouns can either position the speaker as part of or distanced from a group (van Eemeren et al., 1997), as shown in the data presented here.

Because they are implicit, enthymemes are inherently ambiguous. Some reasons why arguments might not be spelled out are practical; it is more efficient to not have to articulate every single premise of an argument, and doing so may be perceived as patronizing or belabored. But, enthymemes can also have a political function in hiding or utilizing power dynamics to one's advantage (Foucault, 1972). The missing link may be controversial, so from a speaker's perspective, it may be desirable to strategically bypass (Feldman & Almquist, 2012).

In this study, the enthymematic analysis pointed to the avoidance of naming presumably more contentious issues. Why be vague about the role of tourism in a place that has a robust tourism economy? Why might NPS managers avoid explicitly discussing power dynamics of an initiative that seems to be supported throughout the community? The answers to these questions are related to deeper seated issues, such as of who benefits from tourism, and who doesn't; who is in charge of developing and directing tourism (and to what end or benefit); what personal freedoms need to be given up in order to achieve commonly-desired outcomes; and whether the town or the park is responsible for commonly-valued, or common property resources. While these questions form the subtext of the arguments interviewees put forth, these were not part of the explicit arguments made. Instead, arguments were made about *how much* tourism has increased; that *it is difficult* to manage a resource that can be impacted from outside the park's boundaries; that there are *positive but separate* outcomes for both the community

and the park from the night sky being dark. Such rhetorical strategies create common ground, which likely support more effective working relationships and partnerships in the community.

The avoidance of the political

In this study, the implied meanings interpreted from the analysis of enthymemes were almost always more politically contentious than the explicit arguments categorized in the thematic analysis. For example, the contradiction between promoting tourism by maintaining a superlative resource, and promoting the widespread preservation of a dark night sky in general (thereby making the local resource less superlative at the cost of potential tourism profits) was concealed. The power dynamics between a small town and its neighboring national park were avoided. While the actions of resource management agencies, town governments, and community organizations are inevitably political (if only because they directly relate to questions of the scope and power of government), these issues were not explicitly expressed in the discourses about night skies.

Enthymemes were a discursive strategy for moving forward without resolving ideological or political disagreements: "If every policy document outlined all the assumptions underpinning a reform, it would be difficult to craft a definitive, persuasive or authoritative message. It would mean that one might never move beyond some ideological differences" (Morrell & Hewison, 2013, p. 66). On one hand, being able to move forward in planning may be beneficial for night sky initiatives, but on the other, this has the potential to set an unrealistic precedent, particularly in terms of how a town and an agency might work together on other issues (e.g., water supply, transportation in

the park, visitor management). Even if discursive and rhetorical strategies can successfully smooth or hide tensions in a particular type of partnership, this may set unrealistic expectations for other circumstances.

Competing constructions

In addition to revealing the political undercurrents of arguments, at the core of the discourse analyzed is the presence of competing constructions of social and economic processes. This study's rhetorical analysis of enthymemes helped to identify taken-for-granted, monolithic constructions about the nature of tourism and resources that were reinforced by community and NPS leaders, many of whom have social and political power. Some of these constructions are about assumed "natural relationships" (Barry, Ellis, & Robinson, 2008) – the relationship between tourism and prosperity, dark night skies and visitor experiences, and management and power. These constructions are embedded in the cultural context of local community processes and institutional discourses.

Monolithic representations of social phenomena can have real, negative impacts on management practices and power dynamics (Ghoshal, 2005). Which constructions of reality are applied in community-level and park-level planning has consequence, and acknowledging these is critical to understanding the foundations upon which resource management and community development decisions are made.

Future research

While this study focused on the content and form of spoken language in interviews, future research should consider analyzing the discourses of multiple modes of communication, including management plans, interpretive programs, tourism promotion materials, policy documents, and blogs. Interviews provide responses to specific questions, but can be influenced by how interviewees judge the interviewer and interpret questions. The design of interview questions may also lead to more or less argumentation. Future research would also benefit from looking at differences not just across stakeholders involved in one effort, but also at similar managerial efforts elsewhere.

Research that only conducts content and thematic analyses misses significant insight about the social action that occurs through discourse. This study's analysis reveals how agencies and communities attempt to make sense of the world within their own domains, while trying to persuade others about the "rightness" and inevitability of their views. The findings of this study raise questions about how these social and cultural values are dealt with managerially. Is an institutional sensitivity to cultural significance sufficient for "accounting for" such values in management decisions? As this study showed, conceptions of what a resource is, and why it should be managed, varied across interviewees. This suggests the need for more attention to divergent narratives and constructions in collaborative resource management work, as also suggested by Dvorak and Brooks (2013).

Conclusion

This study's findings raise questions about the social construction of natural resources, how this relates to why different entities may be interested in protecting them, and what the desirable outcomes of that protection might be. While this study focused on night skies as one of the new park resources NPS is interested in promoting and managing, many of the issues raised here may be applicable for other resources or amenities with aesthetic dimensions, such as rural and cultural heritage landscapes. These, like night skies, are often seen as commonly-shared amenities, which often results in their meanings being highly contested. This sort of contestation may arise as scientific agendas seek to "scale up" conservation. Other research has found that contested meanings can lead to substantial conflict over resource management (Cheng, Kruger, & Daniels, 2003), but in this case, contested meanings actually seemed to represent a case of adjustment and shared responsibility between the two parties.

One reason why this might seem to "work" in the current study is that night sky-oriented visitation has not come close to its carrying capacity at Acadia, unlike other concerns about daytime crowding and overuse at Acadia and other national parks (Manning, 2007). Since the stresses of overuse during the night hours doesn't seem to have become an issue, the park and community may share a mutual desire to increase visitors' interests and experiences of the night sky. At a certain point, however, if interest in the night sky and related park uses continues to increase, tensions may develop between community desires for the economic benefits of increased visitation and tourism, and park management desires to manage the level of visitor-related impacts in order to protect park resources. Understanding the dynamics between NPS and the community

groups that this study analyzed will help resource managers to navigate and manage those tensions.

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CHAPTER 3: THE SOCIAL CONSTRUCTION OF NIGHT SKY EXPERIENCES: A STUDY OF VISITORS TO ACADIA NATIONAL PARK

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Abstract

This article analyzes the ways visitors to a national park construct meanings of night sky experiences. The research theorizes that people are engaged in on-going processes of socially constructing night skies, drawing from personal, social and cultural experiences as well as the immediate setting and historic circumstances. The analysis shows that visitors used a range of creative and imaginative strategies to construct meanings, as a way to surmount linguistic struggles in articulation. Experiences were constructed as meaningful for personal and social reasons, with positive, visual, and transcendental values. “Everyday” and “everywhere” experiences of night skies were commonly presented as being particularly meaningful; there was not a prominent focus on national parks in these experiences. A discussion of night skies in relation to place and intangible values is offered, in addition to practical suggestions for promoting night sky experiences in national parks.

Key words: Acadia National Park, discourse analysis, language, night sky, social construction, texts

Since the National Park Service (NPS) began its night skies program in 1999, night skies have been considered "important components of the special places the National Park Service protects" (NPS 2014). NPS describes national parks as "hold[ing] some of the last remaining harbors of darkness and provid[ing] an excellent opportunity for the public to experience this endangered resource" (NPS 2014). Official NPS discourses describe night skies as new resources to manage against the threats of encroaching light pollution (author in revision).

But, night skies – which exist everywhere in the world, not just above national parks – are not new to most people's experience. Meanings people hold for night skies are developed from within social encounters and experiences occurring in familiar as well as extraordinary settings. This suggests social constructionism as a potentially useful theoretical research perspective. In contrast to theories that consider meaning to reflect internal states in the minds of individuals, social constructionism emphasizes the creation of reality and meaning within social interaction (Gergen 2009; Lehtonen 2000). As Potter (1996, 98) explained, "reality […] is constituted in one way or another as people talk it, write it and argue it." Meaning, then, arises from language use.

This paper theorizes that visitors to national parks are engaged in on-going processes of meaning-making about night skies, drawing from personal, social and cultural experiences, immediate settings, and historic circumstances. As dark night skies become increasingly scarce (Klinkenborg 2008), it is important to study people's experiences to consider how national parks might broaden society's understanding and appreciation of these natural features of cultural and historic importance.

With social constructionism as our philosophical perspective, we use textually-oriented discourse analysis (Fairclough 2003) as the analytical method. Drawing from interview data with park visitors, we analyze the ways visitors use language to develop meaningful discourses about night skies. Two research questions, concerned with the *product* and *process* of social construction, are addressed: (1) What meanings of night sky experiences do park visitors construct in their talk about night skies?; and (2) How do visitors construct those meanings? Answering these questions will offer theoretical and practical insight into the social construction of night skies experiences.

The research presented here was conducted at Acadia National Park, Maine, which has an active night sky initiative involving education, lighting reduction measures, and community partnerships. Acadia is one of the most iconic national parks in the northeastern United States, and NPS managers and local leaders in the adjacent town of Bar Harbor are proud of its dark night skies, which are described by the town's Chamber of Commerce (2015) as an amenity resource for visitors to experience: "Maine's spectacular rocky coast is home to […] some of the last pristine, star-filled night skies in the eastern United States. Here, the Milky Way shines bright in the largest expanse of naturally dark sky, east of the Mississippi."

Situating the Study

Social constructionism

Social constructionism, the theory of knowledge developed by Berger and Luckmann (1966), posits that human experiences and their meanings are mediated through language within social interactions. As a result, meanings are not in the minds of people, but are

fluid and continually shaped within the interactional contexts of daily living. Thus, the use of language is always social; a speaker is always "speaking to" someone within broader political, ideological, cultural, and economic systems (Eagleton 1996, 101-102). Further, the study of language-in-use (e.g., conversations, written texts, public pronouncements) is the vehicle for understanding the variability as well as the stability of language practiced and negotiated across diverse settings. From social action, meaning emerges.

Within social constructionist theorizing, researchers have explored how realities of the world are constructed and come to be often unquestioningly understood as natural or inevitable. A classic article on this topic is Greider and Garkovich's (1994) analysis of how meanings of landscape are socially constructed through cultural practices involving symbolic and material resources. The authors assert that, "Our understandings of nature and of human relationships with the environment are really cultural expressions used to define who *we* were, who *we* are, and who *we* hope to be at this place and in this space" (Greider and Garkovich 1994, 2). Other research in this tradition includes Freudenburg, Frickel and Gramling's (1995) exploration of the experience of a mountain, which the authors see as "conjointly constituted" by the interplay of social, cultural and physical factors related to this mountain and mountains generally. Others have examined the social construction of place relative to language within social relationships in indoor and outdoor settings (Alkon and Traugot 2008; Davenport and Anderson 2005; Milligan 1998).

Social constructionism in outdoor recreation research

Outdoor recreation studies applying a social constructionist perspective often interpret meanings as individual qualities that are later related to social settings (Stokowski 2008), and much of this work addresses the study of place attachments and meanings (Trentelman 2009). For example, Lee (1972) offered a sociocultural analysis of place, evaluating the power of shared images of places to organize everyday social behaviors. Kyle and Chick (2007) studied senses of place expressed by long-time attendees of an agricultural fair, finding that interviewees seemed to bond primarily to the social interactions and constructed meanings of the experience, rather than to physical attributes of the fair.

Using hermeneutic approaches, Patterson, Watson, Williams and Roggenbuck (1998) examined how visitors to a wilderness area constructed the meaning of a particular canoe run. They concluded that conversations which took place directly after groups completed the run were "important for sorting through the meaning of the experience […] the opportunity to reflect on, relive, define the meaning of the experience, and even share the experience at the landing was an important phase of the experience" (Patterson et al. 1998, 447).

The centrality of social interactions for outdoor recreation experiences was also described by Brooks, Wallace, and Williams (2006), who used a "relationship metaphor" to examine the active construction of place in Rocky Mountain National Park. The authors found that social and physical interactions with the site were intertwined in meaningful relationships to the place, emphasizing the social processes through which physical attributes are made meaningful.

Discourse analysis

There is considerable variability in definitions of *discourse* (van Dijk 1997), but the one used in this paper is that of Lemke (1995, 5): "the social activity of making meanings with language and other symbolic systems." Fairclough (2003, 124) explained that discourses are "ways of representing aspects of the world" that arise from patterns and processes in the ways people think, speak, and interact. Discourses are constituted by spoken and written *texts* –communicative objects that are "specific and unique realization(s) of a discourse" (Wodak 2008, 6). Texts are formed from words and sentences (and other verbal and non-verbal signification practices not addressed in this paper; see Lehtonen 2000), and are shaped by *contexts*, which include not only physical settings but past and current social and linguistic situations that have bearing on discourse creation processes (van Dijk 1997; Wodak 2008). For purposes of this paper, the texts under consideration are interview data; the discourses studied here are the social practices and processes of meaning-making related to visitors' night sky experiences.

Discourse analysis encompasses a wide range of interpretive research methods for analyzing linguistic, social and cultural aspects of language, texts and discourses (Nikander 2012). These share the goal of understanding how people use language to construct and elaborate meanings in discourses that support taken-for-granted social realities. While there are many methods for conducting discourse analyses, we draw upon linguistic and social approaches (Wetherell 2001; Schiffrin 1994), departing from other studies that emphasize critical readings of macro-level discourses.

Methods

Data collection and sample

In August 2013, 76 interviews were conducted with visitors to Acadia National Park. The sample was opportunistic, conducted at heavily trafficked areas during a peak visitation time. A wide range of visitors were approached: people alone as well as in groups, a mix of men and women, and younger and older visitors. Approximately half of those approached agreed to be interviewed; those who declined cited a lack of time or interest. While each group had a principal interviewee, other group members sometimes contributed comments.

The interview included questions about individuals' experiences, memories, and interests related to night skies generally, and night sky experiences while visiting Acadia. Interviews ranged from 4 to 26 minutes, with an average length of about 9 minutes (a total of about 11 hours of recordings). Interviews were transcribed by a graduate student, with three interviews discarded due to poor audio quality. Thus, 73 interviews, transcribed into about 265 pages of single-spaced text, form the data set.

Table 1 shows select demographic characteristics of the sample. Evenly split between men and women, nearly half (45.2%) were first time visitors, and most lived in New England and the Middle Atlantic States (72.6%). Compared to a random sample of park visitors (Manni, Littlejohn, and Hollenhorst 2010), the interview sample had a slightly larger percentage of international visitors (9.6%, compared to 6%), fewer first time visitors (45%, compared to 50%), and a greater percentage of visitors aged 36-65 (70% compared to 53%).

Table 1. Sample Characteristics (n=73)

Characteristic	**Interviewees**
Gender	49.3% male; 50.7% female
Age	16-77 (average 49)
Race/Ethnicity	97.3% White
% first time visitors	45.2%
Number of return visits	2-50 (average 9.8)
Number of visitors in group	1-19 (average 3.8)
Place of residence	39.7% New England; 32.9 % Middle Atlantic; 17.8% US elsewhere; 9.6% international (Canada, Europe)

Data analysis

Beyond instructions to interviewees that the study was focused on the time between sunset and sunrise, the term "night skies" was not pre-defined by researchers. So, an initial content analysis of the interview data was conducted to identify topics visitors referenced, providing basic categories and contexts related to how visitors spoke about night sky objects and experiences. Two researchers conducted iterative readings and coding of the interview transcripts. At this stage, visitors' words were taken literally (denotations).

After initial coding, the data were again reviewed to identify patterns in how language was used by interviewees in describing night sky experiences, and to identify the discursive strategies they used in constructing meanings about their experiences. The researchers conducted close readings of the transcripts over several months, frequently discussed emergent findings, and together wrote analytic drafts intended to reveal and interpret linguistic, textual, and discursive patterns in the data (after Fairclough 2003).

Primary attention was given to the structure, functions and styles of language used by interviewees. While much of the analysis occurred by manual clipping and sorting within the paper copies of the interview transcripts, the qualitative analysis software HyperRESEARCH was also used to search the interview transcripts for words and phrases related to patterns of interest, to identify adjectives used by visitors to describe night skies, and to generate a word cloud of adjectives.

Results

What meanings did interviewees attribute to night skies experiences and how are these meanings constructed and contextualized? Discourse analysis identified three interlinked processes used by visitors, giving insight into the cumulative products and processes of social construction: (1) at a linguistic level, interviewees used words and phrases to describe night sky experiences as the process of gazing upon celestial objects and skyscapes; (2) at the text level, they situated night sky descriptors within multi-sensory, emotional personal experiences; and (3) at the discourse level, they used memory and socio-cultural references to develop broader discourses about night skies.

(1) Constructing night sky experiences: The language of gazing upon night skies

What did visitors discuss when they talked about their experiences of night skies, and how did they describe the night skies they were experiencing? At the linguistic level, many visitors described experiences of night skies in reference to viewing discernible objects "up there." They talked about seeing stars, constellations, the moon, planets, meteors, and satellites. Sometimes the objects of interest were less precisely bounded

(e.g., the aurora borealis, the Milky Way), but these were still characterized as objects to view.

Objective conceptions of night skies were linguistically imprecise; visitors seemed to lack vocabularies for talking about night sky experiences. This was especially evident in their use of vague adjectives. Visitors relied on words such as *interesting*, *beautiful*, and *important* – adjectives that denote general importance and positive sentiment, but lack specificity. A word cloud of the 60 most common adjectives used to describe night sky experiences (Figure 1) shows that the most frequently-used adjectives were *good* (112 uses), *little* (108), *big* (99), and *important* (92).

Figure 1. Word cloud for the most common adjectives used to describe night skies (text is sized by its frequency of usage)

The use of imprecise adjectives to describe views of the night sky is demonstrated in the following interview excerpt, from a 23-year-old Pennsylvania man:

> *Last night, we […] were about to get into the tent and [I] looked up and like, oh my gosh, like it's just beautiful […] we were obviously tired last night, but yeah we had about a good minute or so, just kind of staring up there and [it] looks, looks beautiful.* (I-20)

In this excerpt, beauty is visually ascertained (the night sky is "just beautiful"), but not specifically elaborated. Along with phrases like "oh my gosh," these words emphasize the lack of suitable terms for an articulate expression of meaning. This form of speaking provides an economy of expression for unmeasured, variable perspectives whose meanings are assumed to be shared (Sacks 1992).

A lack of suitable language for describing experiences of the night skies was something with which many interviewees struggled, and demonstrated by inserting stalling clauses such as "that's tough," "I don't know" or "ummm." One interviewee, a 20-year-old woman from Connecticut, explicitly acknowledged this difficulty in responding to a question about how it would affect her if dark night skies became harder to find:

> *You know, it's like [pause] it's like something that's just supposed, it's supposed to be there. I, that's a hard question. I wish I could verbalize it better so you'd have something more of substance to write down.* (I-28)

The same visitor suggested that people lacked verbal precision because they had little experience in talking about night skies – implying that language and meaning-making are practiced skills:

> *I think it's something that we really take for granted […]Um, no one I know has [a] super, like, verbal appreciation […] cause it's that sort of thing where like you can just go out together and you can both just stop and look up for like five minutes and like you don't say anything, you're like, "that's kind of cool."* (I-28)

Vague language about the night skies was accompanied, however, by quite precise identification of the sites from which interviewees gazed upon skies. Interview questions asked explicitly about everyday experiences, experiences while visiting Acadia, and memorable night sky experiences anywhere. Across this broad geographic scope, night sky experiences associated with national parks were infrequently mentioned or elaborated (surprising given that these interviews were conducted in a national park). Rather, the night sky experiences that visitors tended to expound upon occurred in close-to-home, everyday places. As one 54-year-old Massachusetts man explained,

> *We're going to have to control […] where we don't allow light pollution […] The national parks is a good place, but they aren't everywhere, you know. And there's, you know, very few national parks in the Northeast.* (I-75)

Visitors occasionally described night sky viewing experiences at national parks like the Grand Canyon, Bryce Canyon, Cape Cod National Seashore, and Acadia – but for interviewees, night sky experiences occurred predominantly elsewhere.

In summary, content data show that interviewees linguistically described their night sky experiences in terms of passive gazing behaviors, referencing a general spatial location ("up there"), and using imprecise adjectives to explain what night sky experiences meant to them. Further, for this sample, night sky experiences were common events, not specific to national parks. These details of personal experience contribute to texts constructing night sky meanings, which are discussed next.

(2) Constructing night sky experiences: Extending meaningful texts with emotion, comparison and analogy

Interviewees' linguistic descriptions of gazing upon objects "up there" were further extended in discussions of emotions felt "down here" on Earth. Processes of meaning-making were also seen in the ways interviewees expanded their comments to discuss shared experiences of non-visual sensory qualities of night sky experiences. Applications of the discursive techniques of comparison and analogy were also especially prominent in these texts.

The *emotions* associated with night sky experiences were elaborated in the texts. For example, a 59-year-old woman from Quebec emphasized the non-visual dimension of dark night skies, referring to light as "noise":

> *The darkness, it gives us rest […] that intangible sense of depth, quiet, the light is somehow noise. [Man: There's also, it's one of the important things we have to be…] In awe. [Man: Yeah, in awe. It's one of the foundations of like being on a mountain, up high, it's just.] A sense of wonder. [Man: Yeah, exactly!] Yeah.* (I-68)

In addition to drawing attention to its emotional content, this excerpt highlights the interactive, jointly-constructed processes of meaning-making, as the interviewee's male companion chimes in to confirm and expand her responses. They discuss, develop and confirm each other's ideas, shaping and fine-tuning their meanings.

Visitors' accounts of memorable experiences "showed" rather than "told" the emotion of night sky experiences. A middle-aged man from Massachusetts described a camping trip he and his wife had taken, and what had happened when he "looked up." His wife introduces the memory, reminding him of the experience.

> *[Wife: Our Nova Scotia experience was great.] Oh yeah this is a great one, this really a good one. We're from, grew up in New York City alright and so with the fog and […] that kind of stuff, you don't really see much. The first time, just after Caroline and I were married, we went camping in Nova Scotia. And during the middle of the night I got up and left the tent and I looked up and there was like the Milky Way for the first time and I started yelling and screaming, "come out and see this." And that was it.* (I-5)

In this excerpt, the man tells a story that shows the lack of words he experienced when he looked up and saw the Milky Way for the first time. Yelling for his wife in the middle of the night to come out and see it can be seen as default, imprecise expression of emotion, to express excitement about what he was seeing in the sky.

The analysis of interview texts also reveals the extensive use of *comparative language* in interviewees' talk about night skies – both in reference to differences observed between night skies in different places, and about the changing quality of night skies over time. Time and place comparisons were dominant textual features in the ways interviewees gave meaning to their experiences of night skies. For example, interviewees applied place comparisons strategically to highlight differences in the appearance of night skies. A 61-year-old woman explained:

> *I think probably North Carolina is not a great place for looking at skies because not only is there a lot of light pollution […] we live in Raleigh […] but also it's warm and wet there and it gets in the way. The humidity, cloud cover [...] we were in Vermont a few days earlier, much better for the night sky. Um, my father lives in Denver […* that's a] *much better place for checking out constellations.* (I-52)

In this excerpt, the naming of recognizable places functions to differentiate night sky quality, expanding the "reach" of the language used. Using the word "better" to describe the skies both in Denver and Vermont emphasizes the extensiveness of this woman's experience and confirms her credibility. Comparison is a textual device that

functions to help audience members infer meaning during conversation, and it was used to emphasize differences in the visual quality of night skies in urban and rural places. For example, a 54-year-old man demonstrated the importance of seeing stars by discussing his choice of residence:

> *I like seeing stars. I live in the western part of Massachusetts. We have […] very little light pollution where I am […] I work over at the University of Massachusetts and look at the night sky there; you can hardly see it, because of all the lights […] everywhere. Or go to the city it's the same thing. You can't see anything […] I live where I live because I like to be away from all that.* (I-75)

The function of this commentary moves beyond establishing empirical differences in darkness or brightness to provide reasons for life choices that also support claims about identity.

Beyond place comparisons, the passage of time was also used to assert the importance of night skies. Interviewees contextualized negative judgements about the degradation of night skies in particular locations by describing their personal history as an exemplar. For instance, a 57-year-old man who had lived a Virginia town for more than half his life shared,

> *Yeah, I'm definitely disappointed that [skies are] getting encroached upon so much […] where we live in Haymarket, Virginia, thirty years we've lived there, and thirty years ago it was just so beautiful and now [it's] maybe fifty percent degradation of that.* (I-24)

This excerpt shows how the uses of imprecise adjectives (disappointed, beautiful) discussed earlier were textually linked by speakers to time and place comparisons, suggesting deeper connotations for night skies experiences. Interviewees specifically volunteered place comparisons in response to many different interview questions; the

prevalence of this textual strategy talk demonstrates the importance of comparison in constructing meanings.

Another strategy used by interviewees to contextualize their experiences was use of *analogies*. Analogies draw attention to similarities between two otherwise distinct concepts, and like comparisons, develop meanings by drawing on concepts popularly understood to have certain connotations. Study participants used a wide range of analogies, pointing out similarities between night skies and an umbrella, the ocean, and other objects (Table 2).

Table 2. Examples of analogies visitors used to contextualize night sky experiences

Night skies analogous to:	Demonstrative excerpt	Interviewee
an umbrella	*That's the sky; that's the umbrella we're all under so that's essential.*	56-year-old woman (I-30)
a cave	*I would feel like I was living in a cave [if dark night skies became harder to find]*	20-year-old woman (I-28)
the ocean	*It's like the ocean, why do you like the ocean? Because it makes you feel small that you are just a piece of a much larger, ah, system, and the, the stars are the same way.*	54-year-old man (I-47)
running water	*I just think you know it's just something that you can take it for granted cause it's just, it's there every day, just like running water.*	43-year-old woman (I-74)
an art form	*It seems almost like a natural art form.*	63-year-old man (I-25)
a human	*It was neat to […] look at the sky and think of the stars kind of as, like, you know, freckles on a beautiful human.*	23-year-old woman (I-27)

Analogies connected generalized aspects of night sky experiences to tangible personal experiences, emphasizing the taken-for-granted nature of night skies (like running water), their familiarity (like a human body), their ability to expand the imagination (the ocean, an art form, the antithesis of a cave), and their sense of inclusion (an umbrella). The use of these particular analogies was integral to the process of social construction, functioning to impart texts with deep, substantive meaning.

In summary, park visitors used strategies of comparison and analogy to demonstrate, not just tell, the emotion and significance of night skies. These strategies differentiated between the qualities of night skies in different places and in different times, and drew upon popular knowledge to make the abstract values and qualities of night skies more familiar. Shared associations at the textual level call upon both social and cultural qualities, and provide a basis for the construction of meaning on broader discourse levels as well.

(3) Constructing night sky experiences: Elaborating discourses with memories and symbolism

At the level of discourse, visitors connected their personal and interpersonal experiences of night skies to broader philosophical and practical issues using two major discursive strategies: recounting *memories* to expand the meaning of discrete experiences, and using *symbols* to illustrate the degradation of night skies and the natural environment generally.

The recounting of memories featured as a prominent discursive strategy by which visitors elaborated the meanings of night skies experiences beyond immediate contexts. A 61-year-old woman from Florida explained that she thought night sky experiences were

related to people's attachments to "constants" of the landscape, developed in formative years. Thus, memories are part of the connective tissue of people's attachments to night skies:

> *There's something about knowing those constants, whether you're talking about the rocks or the forest or […] the sea. […] There's a lot of things that I've read about our attachment to the natural features of our landscape [like] bonding with the […] area where we […] grew up. I think the skies [are] part of that.* (I-54)

Interviewees explained that night sky experiences also connected them to others, notably close relatives. Described memories often featured a grandparent or parent teaching the visitor's childhood self about night skies, or parents wanting to provide young children with meaningful night sky experiences. Others were valued for their knowledge about objects in the sky, and also as facilitators of meaningful experience. A 44-year-old man from Massachusetts shared,

> *My grandfather used to take us out to go out in the woods and stuff like that and so, so it's got a strong kind of soulful connection […] Whenever there were stars or anything like that he knew where everything was and he had stories for all of them and they were just stunning […] I keep wishing that I had that ability to pass on to my kids, but I don't.* (I-19)

Some night sky memories were about the contemporary self. For example, a 23-year-old woman from Maine told a story about a time she lived away from home, and how she had used the sky to re-connect herself during a difficult time.

> *I lived in Iowa this fall for, like, a period of months and I was stuck there for Thanksgiving […] I was living in the city, [and] I just want to see, like, open space, so I, like, drove for many hours, like, to the middle of nowhere and the sun was setting and it was really nice, um, and I just like kind of sat there and looked at the cornfields and looked at the sky and it was really good. […] I hated my job there. I love Iowa, but I hated my job and I was really, like, upset and you know not near any, like, close friends or anything, but I was just like: the sky, the sky is good and everything's gonna be OK.* (I-27)

In this memory, the woman focuses not on *what* she saw in the night sky (beyond that it was "really good") but rather on feelings and symbolic meanings which emerged from her experience. In recounting this story, she showed how the night sky had symbolically served as one of the "constants" that [I-54] had mentioned, a positive, stabilizing, connective force in her life.

Visitors also specifically used symbolism to connect abstract concerns about night skies to broader discourses of environmental quality. Though articulated in many different ways, a dominant theme in the interviews was that dark night skies were symbolic of a healthy environment – a part of a whole whose parts required equal protection. A 31-year-old Florida woman explained how she considered night skies as an indicator of environmental quality:

> *One of the reasons why we chose where we live was because it was away from the city and not a lot of lights […]. And then, two, wherever you can see the night sky you know it's a healthier environment.* (I-36)

Visitors described light pollution as "part of the same package" of suburban sprawl and global warming, symbolic of the fact that people were poor stewards of the Earth and part of a self-absorbed culture that sees itself apart from nature. But this abstract symbolism also made it difficult for some visitors to make sense of how these connections functioned in practice. A 65-year-old woman from New York mused about this:

> *It's hard to say how's it going to affect you […] if there are fewer squirrels or you know, you don't hear, I'm just realizing the other week that I haven't heard any crickets this summer and it's just one less thing, one less good thing.* (I-11)

On the surface, this woman talks about ideas unrelated to night skies but symbolically linked to environmental concerns. Yet her commentary is crafted to show

that the loss of dark night skies is “one less good thing.” Drawing upon cultural symbols and making speculative statements, this excerpt suggests a deep-felt concern about light pollution and the degradation of night skies, but also an uncertainty about the exact meanings that such a loss holds.

In summary, analyzing interviews from the perspective of discourse reveals uses of memory and symbolism to contextualize personal and interactional aspects of night sky experiences, and invest them with broader social and cultural meaning.

Discussion

This study has analyzed the social construction of night sky experiences by national park visitors. The analysis was organized to show how interviewees used language within social interaction to apply specific kinds of linguistic tools, then crafting texts and further elaborating discourses using specific language forms and styles. Night sky experiences were constructed as positive, abstract, visual, and transcendental, related to “objects seen up there” and “experiences felt down here.” They were described as personally and socially meaningful, and discussed as symbols of overall environmental quality. “Everyday” and “everywhere” experiences of night skies were commonly presented as being particularly meaningful; national parks did not feature prominently in night sky experiences.

For these interviewees, the meanings of night sky experiences went beyond explicit denotations to include structural, functional, and stylistic aspects of the language used to shape discourses. Common textual strategies that contributed to meaningfulness included making comparisons, using analogies, and recounting memories to “show”

rather than "tell" the significance of night sky experiences. In sum, visitors used a range of creative, imaginative strategies to construct the meanings of night skies, often as a way to surmount linguistic struggles in articulation.

These finding raise many interesting questions about outdoor recreation and resource management, and offers insights to inform future research about place, intangible values in outdoor recreation, and promoting meaningful night sky experiences in national parks.

Night skies and the social construction of place

There has been considerable discussion about the interplay between physical and sociocultural factors in social construction (Stedman 2003; Kyle and Chick 2007; Sampson and Goodrich 2009). In evaluating how visitors incorporated qualities of night skies into social constructions, we found that the physical qualities of night sky experiences (the brightness of stars, darkness of the night and visibility of the Milky Way) did feature in meaning-making. In this sense, the study's findings confirmed Sampson and Goodrich's (2009) results, but contradicts their assessment that a social constructionist perspective is inadequate in accounting for the physical environment. Using social constructionist theorizing, we found that the physical is made meaningful through social processes: language and social interaction were paramount in linking physical, perceptible qualities and their (constructed) social, cultural, and ecological significance.

Were night skies constructed as a place? In some ways, the analysis showed that they were constructed as "placeless," as something "universal" that connects people,

times, and places. Given the common definition of place – differentiated, physical space imbued with meaning (Tuan 1977) – night skies *could* be envisioned as a place, if they were somehow differentiated from other "space." But, while some visitors talked about the spatial dimensions of the skies, most visitors did not talk about night skies as a specific place, but rather as something to be seen or experienced from particular places – their backyard, a field by their home, or their campsite. These terrestrial places were presented as meaningful in part because of their opportunities for night sky experiences. Further research should examine the subtleties of place in the construction of night skies.

Promoting night sky experiences in national parks

As part of the country's natural and cultural heritage, the NPS has an interest in protecting and promoting night skies in national parks (NPS 2014). This study's findings suggest that in promoting night skies at national parks, it is important to not de-emphasize the meaningfulness of everyday night sky experiences, even if they occur in light-polluted areas. Making connections between what can be seen at a park and what can be seen in the places where people live is important. Night skies can be experienced everywhere, and this connection is integral to their broader meanings. NPS can also use differences in night sky quality as an opportunity to inspire support for reducing light pollution in visitors' home communities.

Knowing how visitors conceptualize and find meaning in night skies can help managers "meet" visitors where they are discursively. While a focus on dark night skies as culturally- or historically-important may resonate with some visitors, this study suggests the centrality of social connections in fostering night sky meanings. This study

confirms research findings that inter-generational experiences are important components of leisure activities (Hebblethwaite and Norris 2010); thus, night skies programming should be designed to encourage visitors of a range of ages to interact together in night sky experiences.

Meaningful social connections occur not only in national parks, but in everyday places, and managers should take this into account in developing night sky programs and interpretation. This also suggests an opportunity for NPS to get people interested and involved in night sky activities in their home communities, as a bridge to introducing visitors to darker, brighter skies that can be experienced while visiting national parks. Park visitors' experiences were not exclusively visual – the experiential, "felt" dimensions of night skies played a prominent role in visitors' experiences. As park managers seek to provide meaningful night sky experiences for visitors, it is important to recognize that night skies are not just something that tourists will "visually consume" through the "tourist gaze" (Urry 1992). While there is a visual dimension to night sky experiences, this study demonstrated how the meaning of night sky experiences is constructed from interactive, social experiences that mediate, and give meaning to, what is seen.

Managing the intangible

This study's findings suggest that intangible, symbolic values of night skies are meaningful to visitors. Physical qualities of recreation places – how wide a trail is, how many visitors are on-site, and even how dark it gets at night – impact the quality of visitor experiences and can be controlled to some extent through technical or regulatory fixes

(Manning 2011). But experiences are also impacted by nonmaterial, intangible dimensions of human-environment relationships, which are challenging in their complexity (Gould et al. 2014). At times, planning emphasizes only "the economic and, sometimes, ecological values, while ignoring the emotional, symbolic, and spiritual values of wildlands" (Williams, Patterson, Roggenbuck, and Watson 1992, 44). Addressing what can be physically managed is often the primary goal, but this has the potential to marginalize other values.

This study suggests that the difficulty of managing the intangible is at least partially a problem of language. This is not without consequence; as Hull, Robertson and Kendra (2001, 338) argue, "Society will be better able to engage in sophisticated discussion about which nature we want and why we want it if we have more explicit examples of the social constructions of nature, environmental quality, and desired future conditions." This suggests that visitors' "naïve" language needs to be more critically studied in order to address management issues related to the intangible values and meanings of resource places. This study's finding that park visitors had poorly-developed vocabularies for talking about night skies raises questions for future research regarding the ways people talk about intangible values, particularly in relation to their "home" frames of reference. Does the fact that people are increasingly living in light-polluted cities (Klinkenborg 2008) relate to a more restrictive language of night skies?

Further, this study's findings relative to the strategies visitors used to construct meaning are not necessarily specific to night skies; in fact, we would expect that these and similar strategies would be prominent in talk about the values of other places, amenities, or resources, particularly related to the intangible values of cultural ecosystem

services. This study provides a structured way to approach such analysis in a wide variety of settings and resources.

Conclusions

The contributions of this study notwithstanding, future research would benefit from using research methods that allow for social interaction among participants and opportunities for discursive elaboration. The triangulation of analysis with other spoken and written texts (interpretive programs, interviews with managers and leaders, policy documents) would provide richer contexts for the analysis. While qualitative data collection and analysis are time-intensive, they are important for deep understanding of public values, meanings, and discourses about public lands and resources, and critical to continued public support and relevancy.

The research presented in this paper has demonstrated the value of interpretive analytic approaches to better understand the products and processes of social construction of reality in context of night sky experiences. We have shown that meanings arise from linguistic, textual and discursive foundations within social interaction. This research advances outdoor recreation research beyond the study of experience and meaning as individualistic, decontextualized phenomena. Not only is this important for outdoor recreation managerial practice, it will also foster future development of social theories that attend to social constructions of meanings.

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CHAPTER 4: DISCOURSES OF VERMONT FORESTS: A PERFORMANCE THEORY PERSPECTIVE ON ENVIRONMENTAL INTERPRETATION

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Abstract

Motivated by a lack of scholarly attention to the substance of interpretive messages and materials, this study uses the theoretical perspective of performance to analyze interpretative brochures available at forest sites in Vermont. Directive statements that instruct visitor experiences and other brochure features were examined to understand how visitor performances of forests were guided. Across the brochures, four performance-related discourses were identified: the natural forest, the recreational forest, the productive forest, and the dependent forest. Consideration of intertextuality revealed a hybrid discourse that linked forest performance 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 visitor performances at particular sites, and to direct larger-scale cultural performances.

Keywords: discourse, environmental interpretation, forests, performance, 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 footstep of the region's first inhabitants and early settlers; and much more.* Moosalamoo National Recreation Area Brochure

Introduction

Environmental interpretation at recreation resource places – ranger-led walks, campfire talks, brochures and newsletters, museum exhibits, living history enactments – is commonly provided in an effort to engage visitors, encourage attention to particular features of or stories about a site, and influence on-site behaviors (Tilden, 1977; Ham, 2013). In addition to the goals of improving visitor appreciation and understanding, resource managers also use environmental interpretation to accomplish managerial objectives (reduce vandalism, or coordinate visitor use patterns) and to promote an agency's image (Ham, 1992; Beck & Cable, 2011). Interpretation differs from more formal types of 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 generally focused on visitor reception of agency-produced messages; primary attention has been given to analyzing the cognitive, attitudinal, and behavioral effects of interpretive messages (Munro, Morrison-Saunders, & Hughes, 2008). Exposure to interpretive messages has been found

to positively impact visitors' knowledge, attitudes and/or behavior to varying degrees (Hughes & Saunders, 2005; Madin & Fenton, 2004; Morgan, Absher, Sutherland, & Loudon, 1997; Munro, Morrison-Saunders, & Hughes, 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 & Prata, 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 agencies and organizations in their efforts to achieve audience effects. As Markwell (2001, p. 40) explains, "tour operators, guides, authors of guidebooks and promotional literature, and protected natural area management authorities" 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. The term "self-guided interpretation" refers to mediated interpretive programming (publications, signage, websites, audio technology) that visitors can elect to supplement their experiences of resource places; these are in contrast to conducted interpretive services (e.g., guided tours, public talks) that are led by agency 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 (emphasis added to verbs). Directives tell visitors how they should move through a resource place (or not), 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. Contextualized with images (pictures, logos, maps) and surrounding text, directives are stylized messages produced by agencies to influence the ways visitors experience a place. That is, textual directives instruct visitors about how to "perform" a site in specific, guided ways.

Theories of *performance* provide a perspective from which researchers can investigate the production of agency-crafted messages in environmental interpretation. Although originally developed within sociological theory (Goffman, 2013), the contemporary literature on performance has arisen primarily in geography, emphasizing people's embodied experiences of places, landscapes, and activities. Studies in this tradition have analyzed the performance of rural places, national parks, and activities such as birdwatching and hiking (Carolan, 2008; Edensor, 2006; Lorimer, 2005; Markwell, 2001; Morse et al., 2014). Much of this research has considered the non-representational dimensions of experience (Thrift, 2008) – that is, a person's multi-sensory experiences of place beyond what can be described verbally – examining the range of material and immaterial performances of a place, including the exploration of

sensory experiences, such as the smell of cow manure (Carolan, 2008), and the feeling of corporeal exhaustion in climbing a mountain (Markwell, 2001). Performances are studied not only as engagements "in" particular places, but as constitutive "of" places (Morse et al., 2014).

In this article, we extend these contemporary approaches to performance theory, observing that embodied experiences of places do not usually occur in isolation but are contextualized within general and specific discourses across society. The embodied experiences of recreationists on-site are influenced by discourses about appropriate ways to perform places – discourses produced by resource management agencies, and delivered within environmental interpretation programming and services. Thus, discourses and embodied performance are intertwined within communicative processes, linking sources who craft messages (agencies that produce interpretive messages) and recipients of those messages (visitors and other audiences). The outcomes of these interactions include the mediation of a range of behaviors that together constitute the performance of places.

To investigate how agencies and organizations attempt to direct visitor performances at forest places, this study analyzes textual and contextual aspects of interpretive brochures about Vermont forests. Forest-related interpretive sites are of interest because of their historical and contemporary cultural, ecological, and economic importance to Vermont. 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 19th century (Albers, 2000). Today, 75% of the state is forested (Morin et al., 2007),

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 (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 for recreation, tourism, and environmental interpretation.

To study performance-related 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 acceptable forest performances, supported by contextual and stylistic features of texts? Second, on a macro-level, how do brochure texts in the aggregate collectively constitute specific kinds of discourses about performing Vermont forests? Our overall goal is to offer theoretical and practical insights to guide the future production of environmental interpretation materials.

Performance and Language

Performance is often approached through the perspective of non-representational theory, which has emerged in juxtaposition to a longstanding focus in the social sciences on "representational" dimensions of experiences – generally those that rely on language to describe and explain human phenomena and experiences (Thrift, 2008). Non-representational theory is based in the observation that some experiences are "below the

level of discursive consciousness" (Carolan, 2008, p. 413), or "extradiscursive" (Stenner, Church, & Bhatti, 2012, p. 1717). Lorimer (2005, p. 83) describes non-representational theory as "an umbrella term for diverse work that seeks to better cope with our self-evidently more-than-human, more-than-textual, multisensual worlds." This perspective highlights the embodied experience of the world as having meaning beyond its representations, which are suggested to only insubstantially express the depth of human experience (Thrift, 2008).

Researchers have studied performance as a way to understand the embodied dimensions of people's experiences, particularly in reference to the concept of *place* – a term commonly defined as physical space that is differentiated by the meanings people attribute to it (Tuan, 1977). In his study of rural places, Edensor (2006) describes how ideas about proper ways to act come from a variety of norms that have both practical and symbolic value. These norms command "which clothes, styles of movement, modes of looking, photographing and recording, expressing delight, communicating meaning and sharing experiences are deemed to be appropriate in particular contexts," which, as they are internalized, initiates outsiders into performing the place as well (Edensor, 2006, p. 486).

Researchers have debated whether it is possible to access non-representational action and meaning through language (Carolan, 2008; Heley & Jones, 2012; Stenner, Church, & Bhatti, 2012; Thrift, 2008). Non-representational dimensions of experiences almost inevitably require some form of representation in order to communicate them: "It is not that we cannot represent sensuous, corporeal, lived experience but that the moment

we do so we immediately lose something. Representations tell only part of the story, yet they still have a story to tell, however incomplete" (Carolan, 2008, p. 412). Some researchers believe that language is needed for comprehensive analysis of performance, and that non-representational theory "can be taken too far in a direction that neglects the interplay of experience and expression" (Stenner, Church, & Bhatti, 2012, p. 1715). This stance is more closely aligned with perspectives on language taken in this article, which emphasize the ways language does more than represent or reflect experience, actually playing an active role in constituting it.

Much of the research on performance 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). But, individuals' activities are often guided by others, through suggestion, directive, or allusion – and place-specific performances are always situated within more wide-ranging societal and cultural symbols and discourses, and with reference to a real or imagined social response. Thus, this study adopts the perspective that performance and language are necessarily intertwined in producing meaning, since performance is often guided by the materiality of texts and discourses aligned with places. In this respect, environmental interpretation should be reconceived as a specific managerial practice that not only represents meanings of forests in written texts such as brochures, but also encourages and directs visitors to perform forest places in specific ways.

Methods

The researchers visited 62 forest and tourism sites in seven 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 federal (national forests and parks), six 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, and one was a for-profit site. Non-profit sites included chambers of commerce, visitor centers, museums, and nature centers. The for-profit site was a museum/gift shop; other interpretive publications produced by for-profit organizations were collected from chambers of commerce and visitor centers. 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 those collected. We defined *brochures* as visitor-oriented communications media that included flyers, trifold brochures, and small non-bound visitor site guides – but not magazines, stand-alone maps, or agency reports. Further, based on common definitions of interpretation (Ham, 1992), we limited interpretive brochures to those that had narrative text beyond simple lists, that stated more than basic facts about a site (e.g., lists of attractions, or travel directions). 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 displayed at least some interpretive characteristics (i.e., they were more than informational in nature).

Of the 52 forest-related interpretive brochures in the sample, the most were produced by or in affiliation with a non-profit organization (44.2%). Others were produced by or in affiliation with a federal agency (32.7%), a state agency (25.0%), a business (17.3%), and a town (3.8%). These percentages do not sum to 100 because some brochures (21.1%) 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 in linguistic and textual discourse analysis (Lehtonen, 2000). Three performance-related aspects of the interpretive brochures were assessed: directive statements were identified and analyzed; other textual features of the brochures (topical content and images) were assessed; and brochure texts were evaluated for their meaningful discursive qualities. 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 the imperative grammatical mood; directives are commands accomplished by verbs in sentences. Directive sentences in interpretive texts (for example, "***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 interpretive topics (Ham, 1992) 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 agency logos were considered to generally be formulaic materials whose inclusion was mandated, and were not considered in the current analysis). Then, features of the images related generally to forests were recorded: the presence of trees, animals, and people in each image.

Finally, results of the detailed analysis of the collected set of interpretive brochures were considered in the aggregate, to evaluate how the directives, topics and images contributed to broad discourses that structured specific performances of Vermont forests. Following Fairclough (2003, p. 129), we used the term *discourse* to refer to "representing some particular part of the world […] from a particular perspective." In this study, analysis of discourses involved comparisons across brochure texts and contexts to

derive thematic patterns illustrating specific ways of structuring performances of Vermont forests.

Findings

Research Question 1: Directing Performance in Interpretive Brochures

Directive language was common in the 52 interpretive brochures under study, with 94.3% of brochures giving at least one visitor directive. 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%) 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 published regulations or norms at a site, were the most common (26.3%) 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%), and directed visitors to interact with other people or groups, particularly in terms of attending events or joining organizations. Sensory verbs (15.6%) 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% of the verbs comprised the experiential/stationary, movement-oriented, cognitive, and emotional categories of directive verbs.

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

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, with three topics appearing most frequently: recreational uses of forest places (57.7% of brochures; e.g., opportunities for hiking),

animals (25.0% of brochures; e.g., bird identification), and plants (25.0% of brochures; e.g., plant physiology). These three categories, along with three others – commercial forest products (21.2%), land use history (19.2%), and land stewardship (9.6%) – accounted for 88.2% of the topic codes derived across 52 brochures.

Content analysis showed that four of the six most prevalent brochure topics involved people (all but the "plants" and "animals" categories). All but two of the brochures (96.2%) developed at least one of the four explicitly human-related interpretive topics. These topics were aligned towards 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.

Beyond topical information, brochures also included visual images, usually photographs or drawings. Overall, images were utilized extensively: 86.5% 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%) 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 interest. Images of people were included in about half of the brochures (55.8%), and just over a quarter (28.8%) of the 444 total images in the 52 study brochures contained people. While the "peopled" images in the

publications varied by organizational type (ranging from about 21-43% of the total images), there were no organizational types in which imagery of people played a dominant role.

The de-emphasis on people in the brochure imagery was made even more apparent when compared to the prevalence of wild and domesticated animals in the images. The number of brochures containing images of animals (26), was similar in number to those containing images of people (29) – yet, the percentage of brochures containing animal-related topics (26.9%) was less than a third of those containing people-related topics (96.2%). Thus, animals were more frequently represented relative to interpretive topics than were people: they, like trees, symbolized the forest.

Research Question 2: Discourses about Performing Vermont Forests

The analysis of directive sentences, brochure topics, and images shows that directive forms of interpretation seek to influence visitors' experiences. 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, who were directed to engage with sites in non-impactful ways, were shown images of forests in which people were often absent.

Analysis of directive sentences, topics, and images can illustrate how individual brochures are designed by or on behalf of agencies in an effort to direct and influence visitor performances of forest places. But, beyond their individual qualities, the interpretive brochures studied here also have collective weight: as public communications, they contribute to widespread cultural 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 make claims about *what* forests mean in Vermont and *how* they should be used. Four distinctive discourses about the performance of 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 both constitute and demand different performances.

The natural forest. The natural forest discourse builds on the premise that forests are natural systems, dominated by ecological processes. Visitors are directed to perform the natural forest through specific types of passive observation and following the rules of the forest. 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 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. Performing the recreational forest means moving through it; 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 texts 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 in this discourse. Interpretive directives, however, instructed visitors to "access" the productive forest not through "working" it, but through general leisure pursuits. In other words, performing the productive forest for visitors means experiencing and purchasing 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 Forest Performances

Every discourse exists in relation to other discourses (Lehtonen, 2000) – and it is important to note that the four performance discourses described above do not occur in isolation. 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.

One publication that demonstrates the intertwining of performance-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 contained two directive sentences:

> ***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 perform 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 be performed in the same "place" – and from an organizational perspective, to support the same outcome: tourism. The plausibility of the scene is questionable in reality; 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.

The use of the word "Vermont" was not uncommon across the collection of brochures analyzed. 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. Thus, 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 from Vermont: maple sugaring, fall foliage, skiing, and patch-worked landscapes of farms and forests.

The salience of Vermont-as-adjective is one of the discursive features that unifies the directed performance of forests. Even when the word “Vermont” isn’t used, imagery is 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” becomes the performance supported by the forest-related discourses – and the directives play the role of commanding visitor performances that align with the symbols, practices, and landscape of Vermont. The performance of forests in these interpretive brochures accordingly becomes a performance of Vermont as a unified, symbolic place.

Thus, the data show how agencies and organizations draw on language, symbols, imagery and popular discourses of Vermont to convey implicit and explicit meanings about both Vermont forests and the state. The cumulative effect of the discourses, as demonstrated in the Ski and Maple brochure, is the performance of not just forests, but of Vermont as a distinctive place.

Discussion and conclusions

Guided by a performance theoretical approach, this study has shown how performance-oriented discourses are developed across a set of interpretive brochures. These forest-

related brochures illustrate the relational qualities of discourses which not only direct visitor's activities on site, but also guide more expansive, culturally-salient productions. In addition to offering practical insights for agencies that produce environmental interpretation, this research contributes a new theoretical basis and methods for analyzing interpretive brochures, exploring the ways language not only represents embodied experiences, but seeks to direct them.

Results of this study show that visitors' embodied performances of forest places are directed in a variety of ways through written environmental interpretation media. In analyzing individual 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, for this set of forest-related brochures, visual images were used extensively, but images of people were less common than "natural" features. At the aggregate level, four different forest-related performance-oriented discourses could be identified; each incorporated directives, topics, and images in unique ways. Additionally, discourses were sometimes interwoven in a brochure, producing idiosyncratic meanings that shifted forest performances, linking them to broader social and cultural performances.

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 the 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, and Devlin (1998, p. 257) suggest that "interpretation aims to stimulate, facilitate and extend people's understanding of place so that empathy towards conservation, heritage, culture and landscape is developed." The authors suggest that theory-informed approaches to interpretation can help to accomplish the goal of empathy and developing 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 towards empathy 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 what agencies and organizations seek to accomplish through interpretation, and their motivations for using stylistic features such as imperatives. This study has shown that different kinds of language, even different kinds of imperatives, have different functions in environmental interpretation.

This study found that forest-related interpretation relied strongly on "natural" images in supporting brochure texts; trees were an important part of the imagery and symbolism of these interpretive publications. As Pearce, Davison and Kirkpatrick (2015, p. 1) observe, "Trees play an important role in human history as vessels of meaning, metaphor, symbology, tradition and place-making." The four discourses about forest-related performances 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

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 if this is the case, and to assess the power of this textual command. If directives are not acted out, do they still "do" something communicatively?

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?

Future research should also consider visitors' interactions with the physical attributes of resource places, such as the natural and built setting, that also work to direct performance (see Dickinson, 2011; Markwell, 2001). Performances of the forest are not confined to forests, either. As Carolan (2008, p. 410) explains, "our understanding of trees is wrapped up in more-than-representational forms of knowledge that come about through our doings with all things wooden, such as taking walks in the forest, climbing trees, laying hardwood floors and erecting wooden fences." People come to know and perform forests through many means, one of which is environmental interpretation in

forest resource places. Future research on interpretation would benefit from analyzing these multiple modes of engagement, examining the interplay among language, material objects, and embodied experience.

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