# Toward an Interdisciplinary Understanding of Place: Lessons for Environmental Education

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#### Abstract

Sense of place is lauded as critical to developing an environmentally conscious and responsive citizenry. Calls for place-based education have often arisen from an emotional plea to reconnect to the land, become rooted, and conserve natural places. However, in reality, sense of place encompasses a multidimensional array that is not only biophysical, but also psychological, sociocultural, political, and economic. This paper reviews the sense-of-place literature and argues for an integrated, holistic view of place, particularly as it applies to environmental education. Recognizing these interconnected dimensions encourages environmental education that more effectively, practically, and honestly integrates sense of place with realworld issues of environmental learning, involvement, action, and community-based conservation.

#### Résumé

On louange la notion d'espace en tant qu'élément critique au développement d'une conscience écologique et au déclenchement d'une bonne réaction de la part de l'ensemble des habitants. Les considérations d'éducation basée sur l'espace ont souvent résulté d'un plaidoyer émotif en vue de se lier de nouveau à la terre, pour s'enraciner et préserver les endroits naturels. Cependant, en réalité, la notion d'espace comprend un étalage multidimensionnel qui est non seulement biophysique, mais aussi psychologique, socioculturel, politique et économique. Le présent texte examine la documentation sur la notion d'espace et plaide en faveur d'une conception intégrée et holistique de l'espace, particulièrement dans ses applications à l'éducation écologique. Reconnaître ces dimensions intimement liées encourage une éducation écologique qui intègre plus efficacement, pratiquement et honnêtement la notion d'espace, au moyen de questions provenant du monde réel sur l'apprentissage écologique, la participation, l'action et la défense de l'environnement axée sur la collectivité.

*Keywords:* sense of place; place attachment; interdisciplinary; environmentally responsible behaviour; environmental education

Many cultures celebrate a sense of place created and recreated through personal experience, fathers' stories, and grandmothers' songs. Sense of place is elusive, subjective, and personal. While constantly changing, sense of place often appears to be fixed. This complex phenomenon results from myriad interacting factors—situational, historical, cultural, political, environmental, personal, and social, among others. Sense of place does not describe only a physical reality—rather it represents belief in the spirit of a locale, the living force that makes "undifferentiated space [become] place as we get to know it better and endow it with value" (Tuan, 1977, p. 6).

"Place" as a concept has been explored within a variety of disciplines as diverse as geography (Harvey, 1996; Massey, 1994), cultural anthropology (Altman & Low, 1992), architecture (Galliano & Loeffler, 1999; Hayden, 1997), leisure studies (Bricker & Kerstetter, 2000), and forest science (Cheng & Daniels, 2003; Williams & Vaske, 2003) to name a few. Additionally, as the internet becomes more prominent in the daily lives of so many people, explorations of emerging areas such as educational technology, communities of practice, and virtual places are also on the rise.<sup>1</sup> Each field of study seeks to understand how people relate to places and what connection to place means. Some explore action-related implications, such as examining how relationships with place affect conservation and resource-management strategies (Cheng, Kruger, & Daniels, 2003; Farnum, Hall, & Kruger, 2005; Stedman, 2003). However, one of the greatest barriers to clarity and continuity in placerelated studies has been developing a unified theoretical framework and common agreement on the "meanings of core concepts related to the ways in which people connect with places" (Stedman, 2002, p. 561).

## **Defining Sense of Place**

Although "few fields of inquiry are so clearly interdisciplinary in nature" (Shumaker & Hankin, 1984, p. 60), researchers often approach sense of place from a distinctly disciplinary perspective. Psychology, for example, focuses on personal identity (Proshansky, Fabian, & Kaminoff, 1983; Twigger-Ross & Uzzell, 1996), while sociology examines social processes and place characteristics (Gustafson, 2002; Mueller Worster & Abrams, 2005). Anthropology looks to cultural symbols (Feld & Basso, 1996; Low, 2000), while geography pursues concepts such as rootedness, uprootedness, and notions of how "lived experiences" create places (Heidegger, 1971; Relph, 1976; Tuan, 1977). Political science considers place as an impetus for community action and empowerment (Agnew, 1987; Kemmis, 1990). Environmental studies, which are often inherently interdisciplinary, speak to the importance of firsthand experiences with nature to create a place-based sense of connection and compassion (Kellert, 1997, 2005; Orr, 1993; Pyle, 1993, 2002; Snyder, 1990; Thomashow, 1995). Hummon (1992) attributes the "theoretical complexity" of place research to the fact that "the emotional bonds of people and places arise from locales that are at once ecological, built, social, and symbolic environments" (p. 253).

Each of the aforementioned disciplines recognizes a range of factors that contribute to creating a robust connection with places. However, few rigorously tackle place as a holistic, multidimensional concept. Through an extensive interdisciplinary literature review and preliminary field-based research, four consistent dimensions of "sense of place" have emerged: the biophysical environment; the personal/psychological element; the social and cultural context; and the political economic milieu. (See Figure 1.)

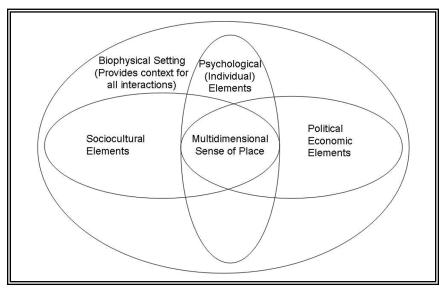


Figure 1: Dimensions of sense of place.

# The Biophysical Dimension: Providing a Context

Without the physical environment as a context, there could be no sense of place. Pyle (1993) asserts, "When people connect with nature, it happens *somewhere*. Almost everyone who cares deeply about the outdoors can identify a particular place where contact occurred" (p. xv, emphasis original). However, sense of place as it relates to the biophysical dimension does not occur only in the outdoors; rather, the built environment also provides a powerful physical context. Kellert (2005a) describes a process of restorative environmental design, which moves beyond minimizing the built environment's negative impact on the natural environment and strives to enhance the human-nature relationship, an important element of which is a connection to place.

Certain places evoke an almost-immediately intimate and emotional connection, creating what has been termed a *spirit of place* (Kellert, 2005a, p. 58). Magnificent vistas, from the Grand Canyon to the Great Rift Valley, and sparkling shores, from Lake Tahoe to the Caspian Sea, represent landscapes

and biophysical elements that seem to be innately attractive to humans. Steele (1981) describes places "so potent that they evoke similar responses. . . . These settings have what we call a strong spirit of place that acts in a powerful, predictable manner on everybody who encounters them" (p. 13).

Despite the seemingly obvious importance of the biophysical environment, both natural and built, its impact is often ignored. In many studies, the biophysical environment is either mentioned only in passing or not considered at all in relation to the development of place attachment, place identity, or sense of place (e.g., Cuba & Hummon, 1993; Hay, 1998; Hidalgo & Hernandez, 2001).

While the social, cultural, and psychological elements are undoubtedly key, they cannot stand alone. Says Stedman (2003), "Although social constructions are important, they hardly arise out of thin air: The local environment sets bounds and gives form to these [social] constructions" (p. 671). The physical setting provides the context—as some have called it, the "stage" (Basso 1996b, p. 66; Steele, 1981, p. 14)—for human/environment interactions. Moreover, deep and meaningful human connections with the biophysical world arise from direct experience with places (Pyle, 1993; see also Kellert, 2005b). Therefore, it is critical to continually consider the biophysical setting in which "places are sensed" (Feld, 1996, p. 91).

### Psychological Dimensions: The Individual

Located within a particular biophysical setting, all humans first—and most directly—experience places as individuals. Because this is the most obvious and personal entrée into experiencing a place, psychological dimensions receive great attention. Particular interest arises from the field of environmental psychology, which strives to better understand people's interactions with biophysical places (Proshansky, Ittleson, & Rivlin, 1976).

One of the most studied psychological concepts is *place identity*, which builds on traditional foundations of identity theory, but also includes the environment as an important factor in developing self concept. Moore and Graefe (1994) assert that place identity develops through relationships not only with people, but also with places that represent the setting for everyday life. As Wendell Berry poetically states, "If you don't know where you are, you don't know who you are" (in Stegner, 1992, p. 199).

Another equally important psychological factor is *place dependence*. This functional attachment "reflects the importance of a place in providing features and conditions that support specific goals or desired activities" (Williams & Vaske, 2003, p. 831). Stokols and Shumaker (1981) posit that locales that facilitate and serve as the setting for important and valued activities create a sense of place dependence and nurture attachment.

Place identity and dependence contribute to *place attachment*, although attachment moves beyond the purely psychological to include sociocultural

components. Place attachment refers to an individual's experience and set of beliefs that build on cultural, often symbolic, experiences shared among families, communities, and societies (Low, 1992). Although place attachment is similar to sense of place, the terms are not interchangeable (Williams & Stewart, 1998, p. 19). Low and Altman (1992) describe this complexity: "Place attachment subsumes or is subsumed by a variety of analogous ideas, including topophilia (Tuan, 1974), place identity (Proshansky et al., 1983), insideness (Rowles, 1980), genres of place (Hufford, 1992), sense of place or rootedness (Chawla, 1992), environmental embededness, community sentiment and identity (Hummon, 1992), to name a few" (p. 3).

#### Sociocultural Dimensions: Society and Culture

Sociocultural dimensions are central to developing and maintaining a sense of place for a range of reasons—from providing a community context in which to interact with places (Hummon, 1992; U.S. EPA 2002) to creating a cultural backdrop for understanding and interpreting places (Basso, 1996a; Hufford, 1992; Low, 1992, 2000). Entrikin (1991) says, "Place presents itself to us as a condition of human experience. As agents in the world we are always 'in place,' much as we are always 'in culture'" (p. 1).

Social scientists emphasize the importance of places in making us who we are, and as part of understanding where we are. Williams (2002) attributes the intimacy of people–place interactions to the social construction of places: While a physical reality clearly exists, the ways in which humans understand place is an outcome of sociocultural processes by which "the meaning of . . . reality is continuously created and recreated through social interactions and practices" (p. 123).

Two intermingling threads comprise the sociocultural dimension. First, the individual functions as a part of society, which develops, portrays, and often promotes an aggregate understanding of place. Second, the cultural and symbolic elements sustain society's views of and beliefs related to place. The former is most often the purview of sociology; the latter of anthropology.

Sociology considers patterns in individual behaviour and how those behaviours manifest in society, particularly through social structures. From this perspective, place attachment "generates identification with place and fosters social and political involvement in the preservation of the physical and social features that characterize a neighborhood" (Mesch & Manor, 1998, p. 505).

Geographers and sociologists often refer to the concept of dwelling, described by Heidegger (1971), as a core of people–place relationships.<sup>2</sup> Some argue against this concept, however, seeing it as elite and exclusionary (Harvey, 1996), particularly in light of the world's increasing mobility. Concerns arise that describing dwelling as the most authentic way to care about a place privileges only lengthy, ancestral place connections. Therefore, critical geographers explore how globalization and transience affect senses

of place. Harvey, for example, describes personal and social identity as being continuously constructed (1996). Gustafson (2002), among others, has studied the interplay between attachment and mobility, finding that the two are not mutually exclusive.

Anthropologists focus on shared cultural symbols that constitute, create, and maintain a sense of place within a society through narrative practices (Hufford, 1992; Ryden, 1993), physical and historical landmarks (Jackson, 1994), rituals and traditions (Morphy, 1995), and even the seemingly mundane activities of everyday life (Low, 2000). Basso alleges that "place-making is . . . a form of cultural activity, and so . . . it can be grasped only in relation to the ideas and practices with which it is accomplished" (1996a, p. 7).

#### Political Economic Dimensions: Place-Based Involvement

Economies and politics reflect localized ways-of-being in the landscape nested in a shared, community-based understanding and image of place. Examining political economies requires recognition that "territorial states are made out of places" (Agnew, 1987, p. 1) and that places are not isolated entities but, rather, have innumerable visible and invisible connections with other places (Gustafson, 2002). The political economic dimension recognizes the continual process of place-making and eschews the concept of a static place, frozen in time (Massey, 1994). Agnew (1987) explains that, "Active socialization' in place produces particular political outcomes" and "it is in specific places that the causes of political behavior . . . are to be found" (p. 44).

The bioregional movement has focused on political economic dimensions of place, promoting decentralized, place-based, often small-scale communities (Meredith, 2005). Bioregionalists emphasize the importance of collective community action within a scale defined by the local bioregion (Sale, 1985). Reacting to increased industrialization and global-scale societies that exist further than ever before from ecological systems, bioregionalists fear that society's ability to adapt to change is diminishing alongside declining biodiversity (McGinnis, 1999). To address the reduced local capacity to deal with ecological and social flux, bioregionalists believe that community-based governance should empower communities to take actions appropriate to, and reflective of, the local bioregion (Sale, 2001).

Bioregionalists are not the only critics of today's political culture, which many see as lacking vivacity. Some political theorists blame the atrophied relationships between the natural world and the places in which our communities are based. Kemmis laments a "general placelessness of . . . political thought [that] weakens both our sense of politics and of place" (1990, p. 7) and posits that "public life can only be reclaimed by understanding and then practicing its connection to real, identifiable places" (p. 6).

While political and economic considerations are clearly critical, few researchers consider how to most appropriately "locate relationships to

places within a social, historical, and political milieu" (Manzo, 2003, p. 54). Manzo argues for a contextual, political understanding of people–place relationships. Understanding the larger milieu in which a place exists helps recognize the power and impact of connections among places. Considering the broader context also forces acknowledgement of the social, cultural, historical, and political flows that constantly reshape places, as well as the people and power structures that operate within them (Manzo, 2003; Stokowski, 2002).

The political economic dimension provides fertile ground for deeper understanding of the larger-scale implications of people-place connections. Questions of power and identity, particularly as manifested in place-based political movements and economic structures, explore some of the most transformative ideas linked to the relationships between people and place.

#### Toward an Integrated View of Place

Three decades ago, Proshansky et al. (1976) called for place studies to "evolve in an interdisciplinary superstructure of theoretical constructs and principles rooted in the basic formulations and empirical findings of many separate disciplines" (p. 5). However, as described above, research has primarily remained within disciplinary boundaries.<sup>3</sup> Many studies employ single-method designs and cursorily provide a token nod to place's interdisciplinary nature. Only recently have environmental, natural resource, and recreation professionals more seriously considered the importance of incorporating the sense-of-place concept into conservation and planning efforts (Farnum et al., 2005).

Fields that focus on practice—in addition to theory—represent the vanguard of interdisciplinary place-related work. Natural resource management and forest science journals, for example, have published studies that incorporate a range of meanings and values of place (e.g., Cheng & Daniels, 2003; Kruger & Shannon, 2000; Williams & Stewart, 1998). Heritage interpretation and tourism journals also publish work that considers sense of place as a multifaceted and complex concept incorporating not only biophysical, but also social and cultural, meanings (e.g., Oaks, 2002; Stokowski, 2002). Applied fields including environmental education—have a significant opportunity to reinvigorate and enhance the relevance of sense of place by engaging multiple dimensions. The following section considers how an integrated understanding of place may affect the design and practice of environmental education.

## Sense of Place: An Educational Framework

Sense of place describes the complex cognitive, affective, and evaluative relationships people develop with social and ecological communities through a variety of mechanisms. While these relationships are often believed to mature over an extended period within a specific environmental context, they can also occur in a shorter time period through an intense experience or through a strong functional dependence on a certain type of place. Alternatively, a sense of place can also refer to an array of emotional relationships that enhance connections with a variety of social and ecological places. An educational framework predicated on creating and nurturing a sense of place—whether rooted or mobile—can relate these concepts and opportunities to real-world issues of environmental learning, involvement, action, and community-based conservation.

Environmental education literature links connection with place to environmentally responsible behaviour through progressive models (Mueller Worster & Abrams, 2005; Vaske & Kobrin, 2001). Mueller Worster and Abrams (2005) describe the steps as "(1) ecological knowledge of the place, which leads to ecological identity; (2) knowledge of the local institution/social context . . .; and (3) place attachment to a region," which "theoretically leads to the environmentally responsible behavior" (p. 526).

The hypothesized connection between caring for a place and demonstrating environmentally responsible behaviours has encouraged a renewed interest in place-based education (Mueller Worster & Abrams, 2005). Interest in place-based education often derives from the belief that encouraging an emotional attachment to a place will lead people to care and learn about that place and, subsequently, produce a desire to protect the place. Sanger (1997), for example, encourages direct, place-based experiences that link with cultural and natural history, with the intention of producing responsible citizens grounded in their place. Thomashow (2002) asserts that, "People are typically interested in understanding who they are in relationship to where they live. By exploring the places that are most important to them, they are most likely to take an interest in the human and ecological communities of those places" (p. 76).

Years of education theory and practice also indicate that involvement in one's community leads to real-life learning, which may translate to real-life action. Dewey (1915), for instance, asserts that, "All studies arise from aspects of the one earth and the one life lived upon it" (p. 91), and emphasizes the importance of developing an educational system in which "the sense of reality [is] acquired through first-hand contact with actualities" (p. 11). Dewey describes community-based educational opportunities that incorporate learning about the natural, built, and managed environments within the context of a civic-minded historical, economic, and political culture.

To date, many place-based explorations suggest the need for curricular revision in the K-12 education system (Hutchison, 2004; Gruenewald, 2003; Sobel, 2003). Many researchers and educators argue for the need to incorporate a sense of place into formal curriculum models, often through experiential explorations, community-service learning, and outdoor education (Smith 2002a, 2002b; Sanger, 1997; Woodhouse & Knapp, 2000). While young people and students are a critical audience, place-based education must be broader than K-12 education. Adults, as well as children, can have deep, transformational relationships with place, while also having an inordinate impact on our world's resources. Reconnecting people with places may enhance psychological, social, and spiritual well-being while also raising awareness of human impacts on the environment. As Orr (1992) laments, "[O]ur immediate places are no longer sources of food, water, livelihood, energy, materials, friends, recreation, or sacred inspiration. . . . [We are] supplied with all these and more from places around the world that are largely unknown to us" (p. 126). So long as modern lifestyles divorce people from biophysical places—the source of natural resources, such as food, water, and clean air—it is nearly impossible to fathom the intricate connections with the natural world in general, or individual places in particular—whether those connections be physical, cultural, social, or political.

Care should be taken, however, in efforts to reconnect people with place. Many current place-based educational efforts represent only one dimension of place (the biophysical) and heavily privilege only one avenue to developing a sense of place (rootedness). The tradition of writing about place—particularly in the environmental field, which has most deeply influenced environmental education—has tended to privilege a rooted perspective, reifying an ancestrally based sense of place above all others (e.g., Berry, 1969, 1981; Leopold, 1949; Snyder, 1990).

Yet, in today's increasingly transient world, a rooted, ancestral connection to place is becoming increasingly rare. Therefore, place-based education programs may be most effective when they recognize the diversity of place attachments that exist and cumulate from a range of relationships with the landscape, including familial, spiritual, and economic, among others (Low, 1992). Place-based education should strive to reach a range of community members through building on individual, unique perspectives, rather than privileging only a rooted sense of place.<sup>4</sup> A multidimensional model embraces people whose sense of place is complex and built on an array of factors, rather than only focusing on ancestral histories. Basso (1996a) epitomizes this robust model when he calls for a celebration of different types of senses of place:

[Y]our sense of place will center on localities different than mine. . . . [T]hat each of us should be drawn to particular pieces of territory, and for reasons we take to be relatively uncomplicated, is radically expectable. A sense of place, everyone presumes, is everyone's possession. But the sense of place is not possessed by everyone in similar manner or like configuration, and that pervasive fact is part of what makes it interesting. (p. 144)

### Conclusion

Sense of place is not something we consciously consider. Orr (1992) attributes this to "the ease with which we miss the immediate and mundane. Those things nearest at hand are often the most difficult to see" (p. 126)—or, as Basso (1996a) says, "sense of place quite simply *is*" (p. xii).

Yet sense of place is deceivingly complex. All at once, a sense of place incorporates psychological being, social community, cultural symbols, biophysical territory, and political and economic systems. By privileging one dimension over the other, the development of holistic, healthy, and fulfilling relationships with places is stifled. By recognizing these interconnected dimensions, an understanding of sense of place as a multifaceted and integrated concept arises. To realistically and honestly assess, address, and explore sense of place, environmental education initiatives must recognize the multiplicity of meanings, sources, and expressions of sense of place.

The field of environmental education stands to benefit from actively acknowledging the holistic nature of sense of place. Working in a field that is inherently interdisciplinary and that celebrates ecological and cultural diversity, we are presented with a great opportunity to embrace a phenomenon that is essentially human. Incorporating a variety of dimensions into environmental education programs honours the many ways in which locales, communities, and cultures texture our life stories. Celebrating a multidimensional sense of place encourages recognition of the uniqueness of each individual's connections with the places that provide rich, meaningful context to our lives.

#### Notes

- Research into virtual places—and the effects of information and communications technologies (ICT) on place perceptions—represents an increasingly important area of study. However, because of the expansive nature of research into place and ICT, it is not possible to adequately address the topic within the constraints of this paper. (For further reading, see Hyun & Strauss, 2001; Green, Harvey, & Knox, 2005; Laegran, 2002, 2004; and Lemley, 2003.)
- <sup>2</sup> Heidegger (1971) asserts that the process of dwelling is ongoing: "The real dwelling plight lies in this, that mortals ever search anew for the nature of dwelling, that they must ever learn to dwell" (p. 161).
- <sup>3</sup> One notable exception is *Place attachment* (Altman & Low, 1992), which incorporates perspectives from a variety of fields.
- <sup>4</sup> Indeed, Wallace Stegner's family was extremely transient (cf., *Where the bluebird sings to the lemonade springs*, 1992). While his circumstances did not nurture a rooted sense of place, his writings evidence a deep con-

nection with and commitment to the natural world. He also served as mentor to Berry, one of the best-known "essayists of place" (Ryden, 1993, pp. 282–285).

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