## The Use of Psychometric Scales to Measure Spirit of Place Relevance to Heritage Conservation Efforts from Ninewa Province, Iraq

Bott, Suzanne E., Ph.D. United States Department of State Provincial Reconstruction Team, Mosul, Iraq <u>suzbott@hotmail.com</u>

Banning, James H. Ph.D. Professor, School of Education Colorado State University <u>banning@cahs.colostate.edu</u>

Abstract. The theme of the 2008 ICOMOS General Assembly, Spirit of Place, has been widely acknowledged as being nebulous, intangible, and hard to define. However, resource managers must be able to demonstrate that Spirit of Place exists as a valid construct in order to justify management strategies, and quite often, to secure financial support for research and conservation. In order to do so, practical measurement tools must therefore be available. This paper presents a multi-faceted methodology for measuring spirit of place in order to offer ways of quantifying and justifying management strategies. This paper is based on empirical research conducted at Colorado State University and observations from two years of reconstruction and heritage conservation practice in Iraq (January 2007 – present). It provides a unique perspective of the importance of promoting spirit of place in the case of post-conflict reconstruction. In such instances, it is especially important to be able to reclaim spirit of place as besieged nations rebuild national identity that has been severely stressed by war.

#### INTRODUCTION

*Spirit of Place*, or "sense of place," as it was termed during the research that forms the basis of this paper, is thought of as an intangible dimension of cultural heritage, a dimension that is largely personal and subjective. As a starting point for the conference, organizers have taken the step of individually defining *Spirit of Place* and the interactive results of the two individual components, sprit and place.

"Spirit, as the intangible genius of the creator, leaves a permanent impression on place and gives it meaning whereas the place itself, that is to say the tangible, nourishes the spirit of its creator and helps define the creation. *Place* as being a combination of both tangible elements (the features of the site, the buildings, the material objects, etc.) and intangible elements (oral traditions, beliefs, rituals, festivals, etc.). When considered as a *relational concept*, the spirit of place takes on a plural and dynamic character, capable of possessing multiple meanings, of changing over time and of belonging to different groups."

By definition, *Spirit of Place* may be considered too subjective a construct to be incorporated into conservation management. While cultural resource managers can point to a particular site and list the reasons why it is historically significant, they may have a more difficult time explaining the way people feel about the site and why they revere its

existence, and supporting management decisions with concrete data about a site's *intrinsic or intangible* value. As humans with a deep appreciation of meaning, beauty, memories, and aesthetics, we innately understand intangible value and recognize that *Spirit of Place* is real. Indeed, if such perceptions are felt by large numbers of people or society as a whole, how can they not be real?

The significant question for managers wishing to protect sites and governments relying upon visitor revenues becomes, "how can *Spirit of Place* be *measured* and *used* as a tool to support management decisions?" The need to be able to support the perception of *Spirit of Place* at a site is especially relevant when making a case for funding, and in instances where adoption of management policies are required that may be unpopular, such as site closures. It is also especially relevant in rebuilding a national psyche stressed by natural devastation or armed conflict.

This research presents a methodology, a "psychometric measurement tool" for evaluating heritage resources based on psychological perceptions and values, and recommends management strategies that take into account individual and shared values. The methodology is based on literature reviews, focus groups, expert panels, and qualitative and quantitative analyses, which identify factors that contribute to a site's perceived significance. The results allow cultural resource managers to validate their short and long-term management strategies based upon the results using "real," quantifiable data.

The significance of validating perceptions of *Spirit of Place* is that it allows managers to move from abstract, subjective concepts to objective, tangible constructs that provide the foundation for implementing strategies to conserve, promote, and communicate shared global heritage.

The inclusion of recent activities from Iraq adds relevance to the discussion and provides insight into a region that is currently inaccessible to the larger global heritage community. The findings highlight the importance of supporting *Spirit of Place* in areas where cultural heritage has been especially stressed by conflict.

# Literature Review

**Perceptions of Sprit of Place.** Early work by scholars in the fields of Environmental Psychology, Environmental Design, Geography, and Resource Management suggests recognition of a fundamental relationship of individuals to place. Geographer Yi-Fu Tuan (1974) noted the presence of "topohilia" or the emotional connections that exist between the physical environment and human beings, and identified a form of reverence called *geopiety* (1993). Sarbin (1983) reflected on the similar Spanish notion of "querencia" or love of place, and Prohansky, Fabian and Kaminoff (1983) suggested the notion of *place attachment* as the psychological bonding that develops between an individual and a place.

Relph explored the essence of place from a phenomenological perspective in his seminal work, *place and placelessness* (1976), touching on different types of place:

- space and place relationships (existential, perceptual, architectural, cognitive, abstract)
- identity of place (insidedness and outsidedness, images)
- authenticity

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- placelessness (kitsch, mass communication, mass culture, big business, central authority) and
- future prospects for place (the inevitability of placelessness, and designing a lived-world of places).

Relph noted that the concept of place only became a significant focus of interest outside geography in the early 1960s as a result of a shift in academic attention toward issues of human-environment interaction, a cultural change in the way people related to environments, the simultaneous changes in the physical nature of environments, and the technological advancements in communication, travel, and ideological globalization (1976:906). He noted that *spiritual* values of a place indicated a need for meaning in the environment (1996:920).

Consistent with the conference definition, Steele (1981) described place as a *transactive relationship* between person and setting. He later noted the importance of *Spirit of Place* as an engaging force in certain locations, "which acts in a powerful, predictable manner on everybody who encounters them. This magic, with which certain locations seem to be endowed, is certainly a force worth considering" (1981:13).

Table 1. Place experiences and major characteristics of place (Steele, 1981)

Hull and Vigo (1990) and Hull (1992) reported that the relationship of an individual to a setting can viewed as overlapping layers of opportunities, meanings, and emotions resembling a flower with overlapping petals. The denser and more interrelated the layers, the more likely the setting develops the qualities of place *significance* (1990:149). Those qualities lead individuals to develop attachments to place.

Related to environmental design, Alexander et al. (1977) noted the basics of place are found in patterns within the built and natural environments, patterns that, again, build upon one another. Norberg-Schulz (1979) noted that genius loci, or *Spirit of Place*, is the very essence of understanding the relationship of humans in the environment. He describes human identity as the ability to find *identification* within the world based upon the character of a place.

**Measurement Models.** Saarinen (1973) bridged the gap between geography and psychology by studying the cognitive-behavioral relationship using projective techniques.

In order to better understand a person's perception of the environment and one's actions, he used analysis of photographs and a mental mapping process called Thematic Apperception Testing (TAT) that allowed individuals to respond to a stimulus (viewing photographs) and create a more elaborate product (their impressions).

Zube, Sell, and Taylor (1982) developed relevant methods of measuring landscape perception based upon four different evaluative approaches:

- *expert evaluation* by skilled trained observers
- *psychophysical evaluation*, based on tests to evaluate perceptions of the general public for planning purposes
- *cognitive psychological evaluation*, an experimental approach to measure human meaning assigned to landscapes and
- *experiential evaluation* approach, which was transactive with observer as participant.

Their framework was based on human interactions with the landscape, and resulted in outcomes in satisfaction, information, and well-being. Zube (1993) recommended design standards to ensure compatible development in U.S. national park settings in order to preserve the special values of those settings.

A measurement tool known as the Recreation Experience Preference (REP) scales was developed to illuminate motivation for recreation experiences (Driver, Nash, and Haas, 1985). The scales clarify the outcomes individuals seek and are used to improve the planning and management of the resources. REP scales are based upon a structure of "domains" (item groupings that represent a broad goal construct) and "scales" (within-domain item groupings that represent dimensions of the broader goal construct).

Nelessen (1994) developed a methodology for evaluating preferred characteristics in communities using slide viewing and rating on a twenty-one point Likert-type scale called the Visual Preference Survey.<sup>TM</sup> Slides focused on a range of features and respondents rated images on appropriateness, likeability, and potential.

**Research Methodology.** The methodology used in this study was developed in two phases. First, steps were taken to determine factors that contribute to the perception of sense of place, which were grouped into domains and scales, and second, the domains and scales were tested using reliability analysis to evaluate strength of the factors.

**Phase 1** involved a review and synthesis of relevant literature in Geography, Environmental Design, Resource Management, and Environmental Psychology, which provided a broad list of factors considered relevant to perception of place. The literature review was developed along two perspectives, theoretical and applied. The theoretical track included environmental psychology and geography, and the applied track was based in environmental design and resource management. The conceptual contributions that each of the four disciplines provided was utilized in focus groups and in the development of the specific questions used in the survey.

**Phase 2** commenced with the implementation of focus groups. Three focus groups were convened of individuals who had interest and expertise in the built and natural environments. They participated in an extensive iterative process of identifying and refining factors through a series of visualizations and discussions of settings perceived to hold a positive and negative sense of place. Transcriptions of the focus

groups were analyzed using an inductive coding strategy and results indicated that 300 variables were available to describe place perception. The domains were separated into physical factors of the setting, cultural factors of the setting, person-related affective factors, and person-related functional factors. These were evaluated by a seven member Expert Panel from each of the four disciplines, and the survey instrument was developed. It consisted of four sense of place domains, 15 scales or domain sub-groups, and 90 factors purported to reflect the scales and domains. The domains and scales are generally described below in the form of questions that were used in the survey (Table 2.).

# Table 2. Domains, Settings, and Referent Questions

# **Physical Setting Domain**

- 1. Natural Setting Does the setting have a presence of nature with sunshine (and shade)? Is there flowing water? Does it have trees and grass or flowers?
- 2. Built Environment Are buildings made of native materials which are appropriate in color and which fit the setting? Does the setting have attractive buildings?
- 3. Character Is the setting clean, alive, peaceful, distinctive, harmonious, balanced, wellmaintained, simple, spacious, and open?

## **Cultural Setting Domain**

- 4. Inherent Social Relations Is the area historic and does it retain authenticity? Does it have a spirit of the people? Does it fit within the larger context of the area and support the activities?
- 5. Transactional Social Does the setting offers a sense of belonging and provide opportunities for interaction? Does it offer civility and generate respect for the individual? Does the site have a distinct energy, and offer a sense of belonging?

#### **Person-related Affective Domain**

- 6. Significance Is the site personally meaningful? Is it viewed as significant and valuable?
- 7. Existential Does the site invoke a sense of connection or a sense of one's own identity? Are there feelings of attachment?
- 8. Memory Is the setting familiar or provides a sense of connection or nostalgia?
- 9. Aesthetics Is the setting beautiful, aesthetically pleasing, and awe inspiring? Does it generate a positive sensory experience and feelings of appreciation?
- 10. Transcendental Is the setting inspirational, magical? Does it offer a sense of the sacred, a *Spirit of Place*? Does it make one feel alive, inspired, connected to a higher power? Is there a sense of romance or strong emotions?

#### **Person-related Functional Domain**

- 11. Purposive Does the setting meet expectations for what is needed? Does it support the role of what is intended?
- 12. Informational Is the site or setting understandable? Is there a sense of direction, distinct landmarks, and is it easy to find one's way around in? Does it make way-finding seem intuitive, and provides information?
- 13. Prospect Does it appear that there are options or opportunities here? Does one feel like exploring, and is there a sense of mystery?
- 14. Refuge Is the setting non-threatening, has obvious boundaries, offers shelter and a sense of refuge? Does the setting feel safe?

15. Well-being - Is the area comfortable, warm, serene, reassuring? Does it allow one to feel in control, peaceful, comfortable, calm, and serene?

**Step 3** involved testing the domains and scales to evaluate the conceptual framework that two major domains exist within sense of place. The Setting domain focused on the physical characteristics of built, natural and socio/cultural factors, including inherent and transactional factors. The Individual or person-related domain focused on affective and functional factors that a site affords a person. Figure 2. represents the interaction of the two domains resulting in a sense or *Spirit of Place*. (Steele, 1981; Bott, 2000).

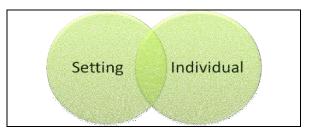


Figure 1. Sense of Place as the Interrelationship between Setting and Individual

## Results

Reliability analysis was used to test the strength of the domains and scales. All proposed domains were found to be reliable with a Cronbach's alpha of .85 or above. Fourteen of fifteen scales were found to be reliable at .74 or above, and the lowest scale (refuge) had a .61 reliability coefficient.

The results supported the hypothesis that individual and shared values contributed to the determination of sense of place, and provided justification for a variety of complementary management strategies such as the involvement of stakeholders in site management and visitors in communicating their *Spirit of Place* values to managers. The most important features of a site and those that contribute to the stakeholders and visitor experiences need to be understood, valued, and incorporated into future management.

# Implications

This study makes two contributions. First, based on the extensive literature review, focus groups, and an expert review process, specific psychometric domains and scales were developed, tested, and found to be reliable indicators of landscape significance or sense of place thereby showing that *sense of place or Spirit of Place is quantifiable*.

Second, this study shows that a common language about *Spirit of Place* provides a starting point for interdisciplinary research and management. Professionals in heritage conservation, tourism planning, visitor facility management, interpretation, and other related fields will find this definition and common language useful in planning and management. The development of a shared definition and measurement tool can enhance the ability of professionals to quantify landscape significance or sense of place.

Planners and designers should invite stakeholder participation at the earliest stages of the design process. They should work toward making understanding, valuing, and preserving *Spirit of Place* among the shared goals of society. In addition, resource

Suzanne E. Bott The Use of Psychometric Scales to Measure Spirit of Place 16<sup>th</sup> General Assembly and Scientific Symposium of ICOMOS managers understand the need for interpretation but must educate the public on the issues associated with the significance and *Spirit of Place*. Planners should share knowledge on the causes of damage and suggest strategies for maintaining and preserving *Spirit of Place*. They should also incorporate site management features that not only protect the site, but that enhance education and conservation and the overall comfort and pleasure of the visitor. Site amenities such as shelter and rest areas, water, restrooms, multimodal paths, and interpretive materials are the bare minimum. Visitor centers, shops, cafés and interactive guides are the next level and clearly important when budgets allow.

# Conclusions

This research addresses the relationship of humans with place by showing that *Spirit of Place* is a phenomenon that can be assessed objectively, and that a valid methodology for evaluating *Spirit of Place* can be developed and operationalized. By simplifying the measurement process, the research takes a meaningful step toward enhancing the dialogue between the disciplines related to heritage conservation, stakeholders and management. The end result is a tool for managers to incorporate user perceptions into planning and management. The process of evaluating and measuring significance is a critical step toward improving management of heritage sites and will help ensure responsive policies that will safeguard the world's irreplaceable heritage resources.

## Relevance to Heritage Conservation Efforts from Ninewa Province, Iraq

The Ninewa Provincial Reconstruction Team (PRT) and US Embassy Baghdad, Public Affairs Office organized the first visit since 2003 to Ninewa cultural heritage sites for a senior official of Iraq's State Board of Antiquities and Heritage (SBAH). The Director General of Excavations was accompanied by US Embassy archaeologist and cultural heritage specialist, Ms. Diane Siebrandt, in May 2008. The purpose of the visit was to assess site conditions, and coordinate long–range planning efforts between Government of Iraq, Ninewa Province, site managers, and the international donor community.

The group visited Hatra, one of three sites in Iraq on the list of UNESCO World Heritage Sites; Nineveh and Nimrud, on UNESCO's Tentative List; Khorsabad, the Chaldean Christian Monastery ruins of Dair Mar Elia, and the al Hadba Minaret. As a result of the visit, the team is developing a strategy for restoration, conservation, site management and long-range economic development. The team will be working to promote Iraqi cultural heritage awareness through educational programs, training, outreach, working with museum staff and site managers, and partnerships with universities and international NGOs. This first step has lead to a desire and commitment to raise cultural heritage awareness in an area where it has been largely forgotten due to other priorities.

The value in raising awareness is found in restoring a sense of cultural identity and pride at all levels of Iraqi society and restoring a sense of hope for the future as cherished sites are again preserved, restored and protected. The promise of a future where it is possible to once again visit historic sites, museums, and cultural centers inspires the population to move forward in daily life. As has been the case in other locales affected by conflict, efforts to restore heritage sites serve to restore order, identity, and cultural fabric of society (Stanley-Price, 2007). As noted by Alain de Botton (2006:212),

"Although we belong to a species that spends an alarming amount of time blowing things up, every now and then we are moved to add gargoyles or garlands, stars or wreaths, to our buildings for no practical reason whatever. In the finest of these flourishes, we can read signs of goodness in a material register, a form of frozen benevolence. We see in them evidence of those sides of human nature which enable us to thrive rather than simply survive. These elegant touches remind us that we are not exclusively pragmatic or sensible: we are also creatures who, with no possibility of profit or power, occasionally carve friars out of stone and mould angels onto walls. In order not to mock such details, we need a culture confident enough about its pragmatism and aggression that it can also acknowledge the contrary demands of vulnerability and play – a culture, that is, sufficiently unthreatened by weakness and decadence as to allow for visible celebrations of tenderness."

This will be the case in Iraq as well, as reconstruction efforts proceed and renewed emphasis is placed on enhancing cultural resources and restoring the *Spirit of Place*.



Figures 2 and 3. Hatra, UNESCO World Heritage Site (photos: Siebrandt)



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Figures 4. and 5. Hatra, UNESCO World Heritage Site (photos: Siebrandt)



Figures 6. and 7. Nineveh (UNESCO World Heritage Site - Tentative List) - Nergal Gate and Lamassu Figures (photos: Siebrandt)



Figures 8 and 9. Reliefs and Lamassu at Nimrud (UNESCO World Heritage Site - Tentative List) (photos: Siebrandt)



Figures 10 and 11. St. Elijah Chaldean Christian Monastery Ruins (Dair Mar Elia) (photos: Strader)

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