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Approaches to Sensory Landscape Archaeology

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Approaches to Sensory Landscape Archaeology

By Jessica Faycurry

As the medium through which humans interact with the physical world, senses are crucial to explore when trying to understand the beings that embody them. Senses are the middlemen through which humans register their surroundings, perform activities crucial for survival, and interact with the world and its inhabitants. The phenomenon of senses, although shared among all humans, can be very personal and informative of individual life histories. The scent of cinnamon, for example, can evoke memories of childhood for some, while for others there is no connection. Senses are physically natured but culturally constructed. Colors, tastes, and sounds can hold completely different meanings to different peoples and cultures. Altogether, senses are an undeniably important component of human existence. As such, sensory discourse has led to an interesting accumulation of data, literature, and discoveries. Emerging from this mass of literature is sensory archaeology bringing with it much potential.

The Center for Archaeological Investigations (CAI) defines sensory archaeology as, an umbrella term for ways of understanding the past by investigating the effects of places and things on people's senses. It considers the potential roles that textures, smells, sounds, tastes, and other less tangible visual qualities, like shimmer, played in informing the choices people made in past societies (2009). Sensory archeology is an interdisciplinary endeavor, which

... sprang from a number of interrelated fields including sociology, psychology, geography, and of course anthropology. Scholars from such fields wanted to gain an understanding of the roles that senses play in human action and interaction. For example, how does hearing, vision, smell, taste, and touch inform how individuals engage their surroundings? Archaeologists have been incited by such inquiries. Their recognition of the need for sensorial investigations in the study of past societies has resulted in some fascinating observations to date (CAI 2009).

The bulk of sensorial case studies in the archaeological field have focused primarily on "western" senses including touch, smell, taste, hearing, and to the largest extent vision. As a result, the ethno and ocular-centric focus in sensory archaeology has concealed other culturally recognized senses. For example, contemporarily among the Anlo-Ewe of West Africa balance is recognized as a sense that is,

along with hearing, at the top of their sense hierarchy, or sensorium (Geurtz 2002:50). Certainly societies of the past would also have recognized other senses. This in turn would have had an impact on how people conducted their daily lives and interacted with their surroundings. The neglect of additional senses limits the full potential of sensory studies instead looking at past societies through a more restricted lens. Such attention to other types of senses will hopefully emerge in the near future.

Luckily, archaeologists have been more fastidious in terms of culturally specific sense hierarchies acknowledging the possibility that certain past cultures may have valued sound, taste, touch, and smell as much as or more than vision. However, senses such as taste and smell are less tangible in a material sense and are therefore more often neglected. For instance, you can see and touch monuments or artifacts but trying to recreate the taste and olfactory environments of ancient peoples is much more problematic due to the lack of material traces. Archaeologists and fellow scholars are yet to address this issue.

There have been diverse themes in the study of sensory archaeology thus far, with landscape being one of the most recent topics of inquiry among archaeologists and anthropologists alike. Landscape archaeology specifically focuses on the ways in which past individuals and societies shaped and were shaped by their surrounding landscapes. Sensory landscape archaeology, then, addresses the roles that senses play in this interaction. Amazingly, archaeologists have been able to observe sensory applications in the landscapes, natural features, and architecture of past societies. It seems that past societies were indeed influenced by their sensory perceptions, especially when it comes to the choices they made regarding their surrounding environments and how they changed these environments. With senses being such a large part of humanly interaction it is logical that people in the past would have manipulated and utilized their surroundings to achieve desired sensory effects. Senses also play the important role of informing individual and social connection to landscapes. To offer some examples and to introduce some of the potentials of sensory landscape studies, in the remainder of this paper I provided a sense-by-sense analysis of several case studies.

Smellscapes, touchscapes and tastescapes

Often the most neglected within sensory studies smell, touch, and taste have important implications regarding the connection between human and landscape. Since sensory archaeology is a

fairly recent field of inquiry, there is a lack of prehistoric archaeological data regarding these three senses particularly the connection between landscape, smell, and taste. Therefore I examine some anthropological case studies instead.

Starting with smell there are numerous publications that investigate the relationship between person and scent. Many psychological and scientific studies have been conducted on smell. Anthropologists have added to this plethora of studies analyses of culturally constructed preferences for certain smells over others, the use of scents to influence people's behavior, and studies investigating the affect scent has on social memory and emplacement. A particularly intriguing case study regarding the latter is "Scents of Place: The Displacement of a First Nations Community in Canada," by anthropologist Deborah Davis Jackson which examines the role that changing "smellscapes" have on cultural emplacement. The First Nation reserve of Aamjiwnaang in Ontario Canada, previously known as Sarnia Band of Chippewa Indians, like many reserves in North America is subject to high levels of pollution (Jackson 2011:1). Located in what is known as Canada's 'Chemical Valley' their once healthy landscape has been drastically altered along with associated sensorial features particularly odor. Smells of peppermint, wild ginger, maple syrup, honey-scented flowers, farm animals, and savory aromas of stewed meat and vegetables, had once overwhelmed the landscape belonging to the natives (Jackson 2011:3). Not only are these scents vividly recounted but also remembered in context to the particular times of the year (maple is remembered as the smell of spring, for example) and with activities associated with their culture, such as hunting (Jackson 2011:3).

These pleasing and culturally significant smells have been overshadowed by the insurgence of chemical plants producing unpleasant arrays of smells. Residents have now begun to associate the unpleasant odors of noxious chemicals with home. For example, remembering when she brought her son home after he had been away from the reserve for awhile, a local woman states, "I rolled down my window and my oldest son . . . he was like, 'Oh my god, what is that *smell?!?*' I was like, 'We're home. This is what home smells like'" (Jackson 2011:6). Not only is the whole reserve associated with an overall background odor, certain locations in town are associated with different smells. Or as one townie stated, "Each corner of the reserve has its own special stench" (Jackson 2011:7). Aware that the odors are due to toxic fumes, the reserve's inhabitants are constantly reminded of their health hazards and suffer from

anxiety because of it. Thus while in the past the more appealing scents helped to reinforce a sense of community and positive emplacement on the reserve, the present repulsive smells serve to alienate the natives from their ancestral landscape. This in turn gives them a feeling of displacement without ever physically removing themselves from the landscape. This is just one example of the connection illustrating how smell can influence memory, emplacement, and cultural connection to landscape.

Both memory and cultural connection are important. They play a significant role in human-landscape relations. Transforming a landscape or space into place (meaningful and culturally significant space), encompasses individual and social memory. Keith Basso illustrates this relationship between social memory and cultural connection to landscapes in 'Wisdom Sits in Places'. As Basso states, Sense of place may assert itself in pressing and powerful ways, and its often-subtle components- as subtle, perhaps, as absent smells in the air or not enough visible sky- come surging into awareness. It is then that we see that attachments to places may be nothing less than profound, and that when these attachments are threatened we may feel as threatened as well. Places, we realize, are as much a part of us as we are of them, and senses of place- yours, mine, and everyone else's- partake complexity of both (Basso1996:xiii-xiv).

This recalls the situation that the natives on the Aamjiwnaang reserve are experiencing. The much less subtle influx of toxic aromas has undeniably affected their sense of place and cultural connection to their land. Senses join with social memory acting together to inform and reinforce the bond people have with landscape. As Keith Basso points out, place-making is, "a way of constructing social traditions and, in the process, personal and social identities. We are, in a sense, the place-worlds we imagine" (1996:7). Therefore both individual and collective relationships to place or landscape are intertwined with tradition, memory, and the act of place-making in complex ways. Senses, meanwhile, profoundly affect these connections serving to reinforce or, in the example of this case study, discourage them.

Taste has also been hard for researchers to grasp in terms of prehistoric connections to landscape. Dietary and related settlement patterns are generally accessible in the archaeological record. However, discerning how the culturally and individually diverse taste palettes of prehistoric people affected their relationship to landscape can be tricky. Did people in the prehistoric past locate their

settlement sites according to their taste preferences, for example locating their homes next to one species of fruit such as apples versus citrus fruit because they had a preference over sweet foods? Was this preference of sweet versus sour fruit reflected in their use of the landscape including monument and residential construction? How does a particular past culture's taste palette inform their relationship to their surrounding? Are there any cases in which differential access to specific types of preferred food because of taste preference is reflected in residential proximity? For example, are elites located closer to specific luxury crops and does architecture assist in restricting access to these crops by other than elites individuals? These are only a few questions regarding the relationship between landscape and taste. Hopefully case studies in the near future will succeed in answering many more.

The archaeology of touch is another understudied areas in archaeological research. Archaeologist Vicki Cummings confronted this fact in the article "Experiencing Texture and Transformation in the British Neolithic," while noting that touch and the texture of artifacts and features has been ignored (2002:249). Cummings (2002) makes some excellent observations regarding how stone circles and megaliths were physically enhanced to produce various textures. At the site of Bargrennan in south-west Scotland a stone chamber includes textural manipulation with the left and right of the chamber comprising of diverse surfaces. The stones to the right of the chamber contain a stepped effect on their outer surfaces, the most pronounced of which is the first stone you come upon in the passage. Also on the right is a series of natural depressions, the largest of which is located in the back of the chamber. Stones on the left hold none of these characteristics. According to Cummings, "The stepped effect produces a dramatic visual texture which is most distinctive in the passage where it may have been illuminated by natural light. In the chamber, however, textural differences would have been difficult to see in low or restricted light" (2002:251). Hence the cupmarks at the back of the chamber would have been more pronounced through touch. The use of texture here would have created distinctions between the left and right side of the monument essentially utilizing the sense of touch and not just vision to differentiate. In what other ways did prehistoric societies factor touch into their building constructions? Was the texture of building materials itself as important as the appearance of texture? You could imagine several possibilities and reasons that people would have valued the sense of touch in terms of landscape. For example, are there any examples of utilizing texture in construction to help accommodate blind or visually

challenged individuals? Landscapes of touch, or touchscapes, hold many prospective investigations for both sensory and landscape archaeologists.

Acoustic archaeology and soundscapes

Archaeoacoustics is basically the acoustical study of past remains such as artifacts and ancient monuments. Archaeologists in this field have been trying to project the sounds of the past into the present in order to gain an idea of the particular roles sound played in past societies. This has certain implications for sensory landscape archaeology as researchers are recognizing that, for example, the construction of monumental architecture and the use of the natural landscape may have included the manipulation of auditory effects for a number of possible reasons. Stanford researcher Miriam Kolar has been studying such a case of monument-auditory relation at the ceremonial center of Chavin de Huantar in Peru. The “Chavin de Huantar Archaeological Acoustics Project” is, “investigating the architectural and instrumental acoustics of Chavín de Huántar, a 3,000-year old ceremonial center in the north-central sierra of Perú that pre-dates Inca society by over 2,000 years” (Kolar 2012). Their mission is to “provide new forms of sound-related evidence in order to characterize the possible and likely components and implications of the sound environments in ancient Chavin” (Kolar 2012).

Researchers of the project are measuring the enclosed architecture for its acoustic properties in order to see how sound is filtered and transmitted. They have also been utilizing musical instruments known as *pututus* (conch-shell shaped trumpets), by measuring their acoustic properties in the auditory environment of Chavin’s architecture. The testing of the sensory effects of instrument and architecture has led Kolar’s research team to discover a strong transmission of sound between Chavin’s Circular Plaza and a Lanzon monolith favoring sound frequencies of the Chavin *pututus* as well as human voice (Magic Sounds of Peru, 2011). The Lanzon, itself, is a 15 foot tall stela (stone monument) adorned with depictions of Chavin’s principal deity, the “Smiling God” depicted as a human-feline hybrid with claws, fangs curved sideways in a smile, and snakes for hair and is believed to symbolize trade, fertility, dualism, and nature (Magic Sounds of Peru 2011). The Lanzon is located in the central chamber within the Old Temple in the ceremonial and religious center of Chavin. It is apparent that a central duct was built to connect the area of the Lanzon to that of the ceremonially and ritually significant Circular Plaza (Magic Sounds of Peru 2011). Sound would subsequently have permeated through a hole in the roof of the

chamber where the Lanzon sits (Magic Sounds of Peru 2011). Therefore, this would have given the effect that music and human voice was coming from the Lanzon 'Smiling God'. Iconographic imagery within these structures depict themes of ritual including psychoactive plant consumption and human to animal transformation leading researchers to believe that the acoustic affects were designed to accompany ritual helping to produce an altered state of mind (Kolar 2012).

Vision and visual archaeology

Visual archaeology has been a forerunner in sensory studies utilizing a number of methods to access the visual qualities of prehistoric archaeological features. Popular topics for visual-landscape studies include landscapes of authority, power, and surveillance. Such themes recognize the ways in which natural and built landscapes serve to limit and control people's access to information, resources, or even to other people. The use of GIS in view shed analysis adds to this type of visual access analysis. Phenomenology, and namely Christopher Tilley, has been the ultimate influence on visual archaeological studies, however. Christopher Tilley, has sought to, "describe, as precisely as possible, the manner in which human beings experience prehistoric places and landscapes (today and in the past) from the structured point of view of the physical, living, moving, and sensing human body (Skeates 2010:2). In other words, to experience the world through our use of bodily senses as past individuals would have through theirs. Phenomenology's use of sensory perception to interpret archaeological sites and landscapes helped pioneer sensory and landscape archaeology but has been criticized by a number of scholars. Sensory researcher Yannis Hamilakis claims that "[s]ensory and sensuous experience is socially and historically specific, and our bodies and sensory modalities too are the products of our own historical moment, thus rendering attempts at sensory empathy with past people problematic" (Hamilakis 2011:1). This way of sensing has also been criticized as favoring the individual versus groups of intercommunicating people (Skeates 2010:2). However, this approach to visual landscape studies has helped to catalyze many interesting finds in terms of the visual connections between archaeological sites and the landscape they reside in.

Christopher Tilley's examination of British monumental construction in "The power of rocks: topography and monumental construction on Bodmin Moor" discusses such concepts of visual relations to features. Using the phenomenological approach, walking through the landscape and 'sensing' the

landscape, Tilley was able to notice a significant difference in Neolithic and Bronze Age construction. The Neolithic Tor cairns are visually very open and accessible whereas the visibility of Bronze Age cairns are much more limited. According to Tilley, “[w]hile in the Neolithic the Tors constituted a series of symbolic resources whose use and veneration was available to all, during the Bronze Age access to, and use of them, became far more restricted” (1996:173). The use of the cairns had changed from public to private and, as a result, the visual access to these monuments had changed. Tilley explains the switch to a more secret and visually restricted monument as “a concern for secrecy, to hide the activities taking place inside the ritual arena from observation from the outside (1996:173). This example of visual control brings many questions into account. Who were the individuals with the power and authority to access such private information? What other ways were monuments altered visually to accommodate changing practices? What are the relationships between social control of visual access and social control of access to information, lifestyles, and practices? The researchers are currently exploring these and other pressing questions related to visual archaeology.

Approaches to sensory landscape archaeology and conclusion

There has been a certain share of criticism for some of the approaches that archaeologists have used in sensorial studies. Already discussed was the privileging of vision before all else along with analyzing the sensorial dynamics of past cultures using only “western” senses as a gauge. In addition to these is the issue of completely isolating one sense for analysis, ignoring the fact that humans are synaesthetic. This may become problematic for instance in the case of taste since the ability to taste is linked to olfaction. Overall, sensory archaeology promises to offer some important contributions to the field and has brought up many questions thus far. Combined with landscape archaeology, sensory archaeology proposes new ways to experience human-landscape relationships; through the embodied senses, which serve to mediate humans and their surroundings.

The views expressed in this article are the author's own and do not necessarily reflect the views of the Department of Anthropology and University of New Hampshire.

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