

THE GEOGRAPHY OF HERITAGE: COMPARING ARCHAEOLOGICAL CULTURE  
AREAS AND CONTEMPORARY CULTURAL LANDSCAPES

By

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A Thesis Submitted to the Faculty of the

SCHOOL OF ANTHROPOLOGY

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF ANTHROPOLOGY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2015

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## ACKNOWLEDGEMENTS

My gratitude goes out to the Hopi Cultural Preservation Office and the Zuni Cultural Resources Advisory Team (ZCRAT) for supporting this research. I owe special appreciation to Stewart B. Koyiyumptewa and Octavius Seowtewa, for their advice and for facilitating work sessions with cultural advisers.

This thesis is an extension of the Fire and Humans in Resilient Ecosystems (FHiRE) project, funded by the National Science Foundation Dynamics of Coupled Natural and Human Systems (CNH) program, Award 1114898. Thank you to the FHiRE project team for allowing me to take part in their inspired research program. I owe sincere gratitude to co-Principle Investigator Dr. T. J. Ferguson for providing me with many incredible learning opportunities as part of the FHiRE project.

The tribal advisers who participated in the FHiRE project provided valuable perspectives on cultural practices and tribal values associated with land and resource use, as well as connections to ancestral places. Participants from the Hopi Tribe include Riley T. Balenquah, Stewart B. Koyiyumptewa, Leigh Kuwanwisiwma, Marvin Lalo, Daniel Lomayestewa, Dwayne Lomayestewa, Lee Wayne Lomayestewa, Joel Monongya, Joel Nicholas, Ben Nuvamsa, Leonard Talaswaima, Paul Talawepi, Max Taylor, Tyler Tewawina, and Ronald Wadsworth. Zuni participants include Ronnie Cachini, Harry Chimoni, Gerald Hooee Sr., Ben Kallestewa, Eldred Quam, Octavius Seowtewa, Perry Tsadiasi, Cornell Tsalate, and George Yawakie.

Thank you to Dr. T. J. Ferguson for serving as my committee chair and adviser, offering patient guidance and productive advice on this thesis and throughout my time with the School of Anthropology. As members of my committee, Dr. Barbara J. Mills and Dr. Maria Nieves Zedeño offered valuable feedback and insights that improved this work.

My interest in this project developed while working with members of the Pueblo of Jemez. I want to thank Christopher Toya and Paul Tosa of the Pueblo of Jemez for their support and encouragement. I owe special gratitude to Mr. Tosa for sharing knowledge and stories on Hemish history and landscape. While his words are not explicitly cited in the following pages, he has contributed a great deal to my work.

Finally, I thank my husband, Corey, and my mother, Nancy, for their unwavering support and my grandmother, Janith, for her enthusiastic interest in my education and work.

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## **ABSTRACT**

This thesis compares archaeological culture areas and contemporary cultural landscapes of the Hopi and Zuni tribes as an evaluation of the scale in which stakeholders consider heritage resources. Archaeological culture areas provide a heuristic for interpretations of past regional patterns. However, contemporary Hopi and Zuni people describe historical and spiritual ties to vast cultural landscapes, stretching well beyond archaeological culture areas in the American Southwest. Cultural landscapes are emic delineations of space that are formed through multiple dimensions of interaction with the land and environment. Concepts of time and space and the role of memory, connectivity, and place are explored to help to delineate the scale of Hopi and Zuni cultural landscapes. For both Hopis and Zunis, the contemporary cultural landscape is founded upon the relationships between places and between past and present cultural practices. Cultural landscapes provide a framework, for anthropological research and historic preservation alike, to contextualize the smaller, nested scales of social identity and practice that they incorporate.



## **CHAPTER ONE: RESEARCH BACKGROUND AND OBJECTIVES**

Millennia of human history, land and resource use, and spirituality among Pueblo people of the southwestern United States all interact within cultural landscapes. The movement of individuals and groups over vast territories has shaped Pueblo cultural geography, traditions, and worldview associated with these landscapes. The archaeological record is a component of Pueblo ancestral landscapes, but reflects only the material elements associated with a palimpsest of tangible and intangible properties. The overarching cultural practices and social structures that influenced the production of artifacts and shaped the land have also influenced the way people interact with the landscape in non-material ways.

Empirical evidence associated with the archaeological record, which exists in physical space and absolute time, has been privileged in scientific research associated with the past human environment. As such, archaeological methods have contributed significantly to defining spatial distributions of people and societies, creating culture areas, or distinct units of analysis that reflect commonalities in material culture. Using culture areas in this way, archaeologists have ascribed an identity to a constellation of material culture and environmental adaptations such as architectural traditions, settlement and subsistence patterns, and craft technology and traditions. While archaeological culture areas are useful in delineating operational units of analysis and providing a heuristic for understanding regional patterns (Peoples 2011:94–95), discrete boundaries associated with such areas are often uncritically applied and reproduced. For instance, Adler and Bruning (2008:41) describe how culture areas are used extensively in cultural affiliation studies within the purview of the Native American Graves Protection and

Repatriation Act (NAGPRA) to define an identifiable group in the past. I argue in this thesis that the use of archaeologically defined culture areas in work associated with historic preservation should be balanced with traditions and heritage values of contemporary descendant communities.

In historic preservation research, increased participation of Native Americans as consultants and collaborators working alongside land managers and archaeologists has helped influence how interactions within the human environment are modeled and interpreted. The gradual integration of stakeholder values and methodologies into archaeological interpretations of the past (Ferguson and Colwell-Chanthaphonh 2006; Kuwanwisiwma and Ferguson 2009; Zedeño 2014) has helped establish a place for archaeology within the realm of heritage conservation.

While the role of contemporary traditions and oral narratives in the interpretation of the archaeological record is debated in the anthropological literature (Echo-Hawk 2000; Mason 2000; Mason 2006), recent scholarship has contributed toward decolonizing archaeological practice (Atalay 2006, 2012) and integrating non-Western worldviews into archaeological practice (Alberti and Marshall 2009; Zedeño 2014). Severin Fowles (2010:464) recently asserted,

Native knowledge has come to be accepted as viable historical data, and is fast approaching a new era in which native epistemologies...are understood as precisely that—epistemologies or bodies of theory about the world that may be profitably drawn upon in a rigorous manner alongside the classic writings of the Western intellectual tradition.

The archaeological record and intangible values associated with the landscape are bundled in the construction of cultural identity and heritage, and have the capacity to inform, complement, and contradict interpretations that are garnered from their individual analysis. Despite the significant advances in anthropological and archaeological scholarship, the integration of Western concepts of land ownership with Puebloan landscape values has proven to be difficult to translate into the context of historic preservation law. The frameworks outlined in historic preservation legislation that was enacted to help protect places of significance are geared toward discrete properties that are associated with absolute time in the past.

Stoffle and his colleagues (1997) describe how cultural landscapes are often a more representative scale used to consider cultural resources of significance to Native American communities. Localized places of significance within cultural landscapes are commonly understood in relation to other, often distant, places or events. Furthermore, ancestral landscapes associated with contemporary Pueblo people cover vast tracts of land and encompass considerable time depth. Contemporary cultural landscapes are affected by the overlying mosaic of legal boundaries that delineate federal, state, and private lands, and structure land management, access, and preservation. In light of contrasting cultural and legal frameworks that inform land management practices and historic preservation, Stoffle and colleagues (1997:231) pose a critical question: what is an appropriate geographic scale in which to consider heritage resources?

Discrepancies between archaeologically defined culture areas and contemporary cultural landscapes of Pueblo people were discussed during ethnographic fieldwork completed for the Fire and Humans in Resilient Ecosystems (FHiRE) project, a

multidisciplinary fire ecology study funded by the National Science Foundation (Grant 1114898). The FHiRE project investigates the long-term human impact on fire regimes and forest resilience in Southwestern ponderosa pine forests. Ethnographic research for this project, directed by Dr. T. J. Ferguson of the University of Arizona and Dr. John R. Welch of Simon Fraser University, was conducted with Jemez, Hopi, Zuni, and Apache cultural advisers. I draw from the perspectives shared by Hopi and Zuni cultural advisers in order to explore issues of scale in cultural heritage.

In the following chapters, I outline conventional archaeological culture areas associated with the Hopi Tribe and the Pueblo of Zuni within the American Southwest. To this end, I review published archaeological literature to define how archaeologists have defined Hopi and Zuni culture areas spatially. My review of archaeologically defined culture areas of the Hopi and Zuni represents a survey of the literature available and attempts to capture how major transitions in scholarship and research interests have affected the way culture areas are perceived through time. I then compare these archaeologically defined culture areas with Hopi and Zuni perspectives on the geographic extent and components of ancestral landscapes. Hopi and Zuni perspectives were recorded during ethnographic interviews, focus group meetings, and visits to ancestral sites. My analysis addresses issues of scale, the role of movement, and connectivity between places that is reflected in the cultural landscapes perceived and maintained by contemporary Pueblo people.

Through a comparison of the scale and character-defining features of archaeological culture areas and ancestral landscapes, my objective is to contribute insights that will help archaeologists and historic preservation professionals identify and

characterize significant places within distinct geographic areas of interest (or under the management of a particular entity) without conflating such units with discrete boundaries that discount the perspectives of descendant communities. Finally, this research evaluates the utility of a multiscalar analysis of ancestral landscapes that reflects the dynamic relationship between local places of significance, the immediate landscapes in which such places are situated, and the broad, macro-regional trends that shape group identity. This contextualizes archaeologically defined culture areas as components of contemporary Native American heritage.

These ideas are developed over the next four chapters. Chapter 2 outlines the theoretical underpinnings that guide my analysis of Hopi and Zuni cultural landscapes. I draw from anthropological theory to examine the interplay of time, memory, society, and place-making within landscapes. Chapter 3 discusses the methodological parameters of the analysis introduced here. In Chapter 4, I present a comparison of archaeological culture areas and contemporary ancestral landscapes of the Hopi and Zuni. I find that these units of analysis are distinct, both in terms of geographic scale and in the cultural logic that informs how they are defined. In Chapter 5, I draw insights from the comparison of archaeological culture areas and contemporary cultural landscapes to briefly explore how a landscape approach may be gainfully applied in archaeology and historic preservation. I argue that a landscape approach is vital to improving archaeological land-use models that extend beyond the conventional focus of archaeological sites, as well as to help define the significance of historic places.

## CHAPTER TWO: THEORETICAL ORIENTATION

Litigation of land claims by Native American tribes between 1946 and 1987, followed by the passage of the Native American Graves Protection and Repatriation Act (NAGPRA) in 1990 and the amendment of the National Historic Preservation Act (NHPA) in 1992, contributed to theoretical shifts in the study of indigenous land use and cultural affiliation. However, archaeological practice is still contending with the objective of reconstructing intangible, dynamic social contexts, which retain significance among descendant communities, from static material residues (Anschuetz 2001:162; Thomas 1993:26). Advances in anthropological scholarship have been made regarding the development of territory (Zedeño 1997; Zedeño and Anderson 2010), the embodiment of time and history (Bender 2003; Ferguson and Colwell-Chanthaphonh 2006; Ingold 1993), and experiential properties (Tilley 1994) within the landscape.

As a unit of analysis, cultural landscapes allow those engaged in research or land management to confront long-standing challenges associated with differing opinions on such issues as defining site boundaries and notions of site abandonment (Anschuetz 2001:167). A landscape perspective takes into consideration the relationships that exist between natural and cultural dimensions, between the past and the present, and between physical places within the environment.

### ***Landscape as a Unit of Analysis***

Scholars use the term 'landscape' to denote numerous aspects of the physical and intangible facets of the human environment (Anschuetz 2001:158). The term has been applied to demonstrate the interface between the natural and cultural realms of the

environment, and illustrate the thematic properties of nature or society. Conceived of as a framework that structures broad natural and cultural processes, a landscape approach in anthropological scholarship can be traced back nearly a century. In the early twentieth century, the influential cultural geographer Carl Sauer demonstrated the impact of human interventions in creating landscapes through physical means and by imbuing the terrain with cultural values (Sauer 1925). Sauer succinctly demonstrates the binary nature of landscapes, stating, “The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium, the cultural landscape is the result” (1925:46).

Subsequent scholarship in ecological anthropology (for example, Steward 1937) examined the relationships between socioeconomic development and the natural environment (Anschuetz 2001:169). This was followed by archaeologists in the mid-twentieth century, who acknowledged that social and ideological facets influence how people interact with and modify their environments Anschuetz (2001:172). Later, Binford (1982) illustrated that a range of economic and social activities among social groups forms broad cultural landscapes based on systems of patterned sites, thus demonstrating the importance of moving beyond singular site boundaries to understand the breadth of socioeconomic activities. The development of regional settlement studies, such as the interrelationships between central sites and smaller outlying sites within a cultural area, has been greatly aided in recent years by the availability of computerized geographical information systems (GIS) applications.

Rather than simply being a backdrop to the social realm, landscapes are now understood to be complexly intertwined with society, culture, and spirituality (Anschuetz

et al. 2001:158). In order to approach landscapes as an analytical unit, it is necessary to consider the extent of natural and social processes that contribute to their formation. The products of past scholarship and collaborative research concerning land use from a cross-cultural perspective demonstrate how people engage with the landscape on multiple dimensions (for example, Darling 2009; Kuwanwisiwma and Ferguson 2009).

Landscapes as analytical units include a temporal dimension, an association with memory and identity, an embodiment of social relations, and the occurrence of multiscale place-networks.

### ***Landscape as a Dynamic, “Living” Entity and as “Time Materialized”***

Landscapes reflect a palimpsest of spatial and temporal constituents (Bender 1993:9). The spatial component consists of the geographic extent of physical, social, or spiritual connections to the land, which are affected by the passage of time. While the topography of the land may change little over the course of centuries, transitions and development are inherent properties of the landscape (Bender 1993:3; Ingold 1993:166). Natural forces and human action constantly shape and reshape landscapes. Furthermore, cultural landscapes exist in plurality as individual and group perspectives shift over time, and spatial and historical components are appropriated and contested (Bender 2003:S103).

While seasonal cycles and climatic shifts affect the ecological elements of landscapes, these transitions and repetitions are integrated into patterns of use and, in turn, historical associations with the landscape (Ingold 1993:163). A sort of ecological feedback loop is formed as economic, social, and spiritual traditions guide the



interactions between people and the physical elements of the landscape, including geographic features, plants, animals, and water (Anschuetz 2005:56). As with the lifecycle of an ecosystem, the spiritual and historical associations embodied within landscapes experience growth, decay, and renewal.

A tension between fixity and transience exists within landscapes. Bender (2003:S103) proposes that “landscape is time materialized: landscape like time never stands still.” Rather than achieving a completed state, the landscape is constantly being shaped by the actions and events that take place within it (Ingold 1993:162). However, the imprints on the land made by ancestors and events often become fixed reference points for subsequent generations (Morphy 1995:188).

Notions of linear time that are common in archaeological interpretations of the past reflect an incremental, unidirectional progression from past to present. However, Morphy (1995:188–189) argues that in the formation of landscapes, the sequence of events in absolute time is secondary to their spatial associations. Time in landscapes is not uniform and is often compressed as the events that shaped places merge into a symbolic “past” (Bender 2003:S103). Ferguson and Colwell-Chanthaphonh (2006) describe three distinct time scales associated with the formation and reproduction of cultural landscapes, including absolute, relative, and representational time. In this model, absolute time is linear, measured by regular units, and constrained by the notions of “reality” within the physical world. Relative time is socially constructed, with flexible units and defined by relationships of events and space. Relative time as defined by Ferguson and Colwell-Chanthaphonh (2006) has parallels with social time, as defined by Ingold (1993:158–161). Ingold’s social time entails qualitative and flexible units of time that are based on

the rhythms and conventions of people and places that compose a society. Representative time is an abstraction meant to convey social conventions or symbolic qualities. A combination of time scales often factors into the formation of the landscape (Ferguson and Colwell-Chanthaphonh 2006:33–35).

### ***Landscape as Memory and the Connection of Past and Present***

The landscape, as a product of the past that exists in the present, serves as a reference upon which traditions and individual memories can be recalled (Anyon et al. 1997; Kuchler 1993). Basso (1996:34) notes that most American Indians inscribe landscapes with place names that transmit historical (as well as moral and spiritual) information. Contemporary land-based societies, including many indigenous groups worldwide, consider the preservation of landscapes to be a fundamental part of sustaining social memory and traditions. Such memories and traditions often involve “cognitive maps” that reflect a body of knowledge based on a combination of physical experience, social constructs, and individual perceptions (Anschuetz et al. 2001:167). Kuchler (1995:85) argues that landscapes serve as a physical platform upon which to recall memories and, in many indigenous societies, as the framework upon which the ideas and practices that shape memory are transmitted. According to Kuchler, many indigenous people perceive the landscape *as* memory, rather than an abstraction from memory.

As with memory, landscapes simultaneously incorporate events of the past, the conventions of the present, and the inter-generational traditions that unite them (Anschuetz et al. 2001:186). The interaction of past and present takes place within the physical environment and individual consciousness (Morphy 1995:205). Traditional

histories are inscribed in locales of significant events, geomorphic features and index objects (Zedeño 2014), allowing contemporary people to connect on a spiritual level to natural and ancestor realms (Ferguson and Colwell-Chanthaphonh 2006:32) and sustain long-standing cultural practices and identities (Anschuetz et al. 2001:190). Artifacts, monuments, and other inter-generational materials serve as active mechanisms of memory and social reproduction (Bender 1993:10). Archaeological remains have a spatial component that connects descendants with a geographical area, as well as an intellectual component that illustrates shared ideologies between past and present people (Anschuetz 2005:58–59).

### ***The Role of Landscape in Identity***

Alder and Bruning (2008) illustrate the complexity of group identity. They note, “Shared group identity is not a precisely constituted concept but is rather a bundle of traditional knowledge, landscapes, specific places, histories, and material culture that a group utilizes to situate itself in the social nexus relative to other identified social groupings. This bundle of knowledge includes references to time, space, history, and place” (2008:50). Individuals and societies alike use cultural landscapes to assert and dispute identity (Bender 1993:3). Contemporary American Indian tribes in the Southwest engage cultural landscapes as historical and geographical variables in the process of identity formation and heritage conservation (Ferguson and Colwell-Chanthaphonh 2006:27). Distinctions in landscapes based on identity or ethnicity are created through material or symbolic signals that express either membership or exclusion. Shared ideologies and modes of expression are transcribed and reproduced within the landscape.

Sociocultural identities in the form of social action embedded in the environment become intertwined with the spatial dimension of the landscape (Anschuetz et al. 2001:180).

### ***Landscape and Social Structure***

Members of a society balance the influence of entrenched structure and agency in daily life. Morphy (1995:187) describes a multilateral relationship between individuals, the contemporary world in which they live, and the ancestral past. Morphy argues that it is against the perception of an ordered, fixed world of the ancestral past that living people structure how they perceive and move through the landscape. Structural components of the landscape reflect long-term patterning in practice over time that become conscious and subconscious traditions (Anschuetz et al. 2001:173) and provide mechanisms to maintain knowledge and stability of a cosmological order (Morphy 1995:186–189).

Landscapes provide material correlates to such organizing principles (Anschuetz et al. 2001:161). Basso notes that the Cibicue Apache consider the past a “well-worn path” which has been travelled by all of their ancestors (1996:31). Such paths are important in order to maintain traditions and lifeways, as well as connections to place in a changing world (Basso 1996:4). Puebloan people also consider the structural principles founded by the ancestors, which guide their interaction with the landscape, to be vital to the cultural persistence of their communities (Anschuetz 2005:57).

### ***Knowledge and Stewardship of Ancestral Landscapes***

Morphy (1995:196–197) argues that since an active relationship exists between the ancestral past and the land, people are able to learn about the past by travelling through

the landscape (see also Nabakov 1998:242). Such individual journeys begin at birth, whereby the process of instilling a sense of place commences. The process of instilling a sense of place and a cognitive geography is dependent on specific time and place, as well as factors such as gender, age, class, and social standing (Bender 1993:2).

Cultural landscapes are created and maintained through mechanisms such as speech and ceremony (Basso 1996; Morphy 1995). These mechanisms instill values, beliefs, and historical memory within the participating community and provide the means to sustain and renew connections to distant places within landscapes for long periods without physical use (Ferguson and Anyon 2001:104). Historical information is thus taught and reproduced within a community by perceiving of and talking about landscapes. Morphy (1995:193) describes how elements of the landscape, including details associated with plant and animal species, topography, and climate were encountered by ancestral beings who both adapted to and shaped them during their travels across the land. Contemporary traditions tied to the landscape are instilled within Native American ritual calendars, which allow community members to engage and interact with places of significance (Anschuetz et al. 2001:178).

Oral traditions describing contemporary associations with broad cultural landscapes have been integrated into recent archaeological scholarship in the American Southwest (Bernadini 2005; Ferguson and Colwell-Chanthaphonh 2006; Lyons 2003; Snead 2008). While there are significant debates within the anthropological community about the role that oral tradition should take in interpreting the archaeological record (Echo-Hawk 2000; Mason 2000), ethnohistorical perspectives on the connection of language, ceremony, and

sacred geography are vital to contextualizing the archaeological record within the heritage values held by descendant communities and traditionally associated people.

Oral traditions tied to physical places illustrate the enduring knowledge, power, and significance of landscapes within contemporary communities (Basso 1996; Ferguson and Colwell-Chanthaphonh 2006). Ingold (1993) notes that oral traditions held by Native American communities associated with a landscape often allow listeners to experience a place. Rather than imposing interpretations that oversimplify or convolute the landscape, narratives “help to open up the world, not to cloak it” (Ingold 1993:171). Ingold suggests this opening up of the world should also be the objective of archaeological research.

Ferguson and Colwell-Chanthaphonh (2006:29) describe how Leroy Lewis, a Hopi cultural adviser, noted that his observations of the landscape evoke stories and songs that reflect historical information. The places and features within the landscape bring to mind historical information that is transmitted through language. In this manner, meaning, values, and stories embedded in landscapes can be read like text. Ortman (2012) argues that oral traditions encode specific geographical information. Connecting places referenced in oral traditions to their physical locations validates the social import of narratives, strengthens spiritual connections between the present and the ancestral past, and reinforces the cultural viability of landscape-based traditions (Ferguson and Colwell-Chanthaphonh 2006; Young 1988; Zedeño and Laluk 2008). Ortman (2012:198) adds that some traditions may contain metaphors or “preexisting cosmographical ideas” that are mapped onto contemporary homelands different from those of their origins.

### ***Specialized Knowledge of Ancestral Landscapes***

Native American perspectives of landscape are often shaped by membership in social groups such as kivas, medicine societies, moieties, and clans. Just as historical geographies associated with societies as a whole are inscribed as landscapes, information exclusive to kin groups, clans, and religious organizations is mapped onto the landscape (Anschuetz et al. 2001:168; Morphy 1995:199). For example, individual clans within Hopi society maintain distinct geographic genealogies, and associated esoteric knowledge is protected (Bernadini 2008; Ferguson and Colwell-Chanthaphonh 2006). In Zuni society, members of medicine societies retain exclusive information associated with the sacred geography of ancestral migrations (Ferguson and Hart 1985; Ferguson and Colwell-Chanthaphonh 2006).

Thus, a plurality of landscapes coexists in a society, and while these are historically particularistic, they are shaped and reshaped through subjective experience (Bender 2003:S104). Commonalities serve to unite individuals and groups, while distinctions produce diversity or conflict (Anschuetz et al. 2001:165). In this manner, social relationships are materialized on a spatial scale (Bender 2003:S103).

### ***Place, Networks, and Scale***

The dynamic, socially constructed, and often political nature of landscapes makes them complex entities. Analyses of place, and the relationships between the places that form networks, illustrate the nested components within the landscape as a whole. A multiscale approach that considers both the distinct and relational properties of places,

and the patterns they form, helps elucidate principal components within the landscape and the processes involved in their formation.

### Place and Place-Making

Places within landscapes reflect the formation of spatial references that become associated with daily activities, significant events, beliefs, and values (Basso 1996:76). Spatial references reflect metaphorical inscription or tangible interventions in the landscape, or both forms of demarcation (Zedeño and Bowser 2009). Physical means of demarcating place include transformations such as erecting monuments, creating rock art, or ecological interventions such as burning. Intangible means of demarcating place include naming places and instilling cultural or spiritual values. Place names serve as powerful instruments used to integrate and convey geographical, historical, cultural, and social information, evoke emotion, and express knowledge and advice that may be otherwise lost over time (Basso 1996:76–77, 100; Zedeño and Bowser 2009:8).

Places provide a locus for commemoration, connection, and contemplation of the past, as well as for understanding how the present is ordered (Basso 1996; Bender 2003:S105). Attachments to places structure interactions with the material world (Zedeño and Bowser 2009:5). Durable places that emerge from various facets of land use and “shared bodies of local knowledge” (Basso 1996:xiv) form identity and territorial boundaries. Through the process of place-making, societies forge a shared sense of place that is integral to cultural heritage. This research is guided by the principle proposed by Zedeño and Bowser (2009:2) that “archeology is as much about place as it is about the past and about material culture and environment.”



## Place Relations and Networks

Bender (2003:S103) asserts, “Every beginning and ending, every boundary drawn is arbitrary.” This concept can be applied to places, in that they are not delineated by fixed boundaries in physical space but embedded in the larger landscape. Places serve as centers or nodes within the landscape that are connected by paths (Ingold 1993:156; Zedeño and Anderson 2010). For example, Anschuetz (2005:58) explains that the Tewa villages are considered core places that are connected by paths to surrounding mountain peaks.

Patterns and relationships that develop between places construct networks that reflect both spatial and temporal dimensions of the landscape (Bender 2003:S108; Ingold 1993:155–156; Morphy 1995:186). Drawing on processual theory, Binford (1982) argues that it is important to consider contexts that are located beyond the conventional concepts of archaeological sites, which are places or nodes within a greater ancestral landscape. Patterns emerge from culturally structured interactions with features and resources within the landscape (Anschuetz et al. 2001:161; Zedeño and Anderson 2010). Furthermore, the significance of a place is based on its relationships with other places within the landscape. For instance, some ancestral Pueblo sites need to be placed within a context of migration from the place of emergence to the final destination.

## Scale in Landscapes

Anschuetz and his colleagues (2001:182) note, “Each community’s particular sense of place and time, in turn, helps organize the structure and pattern of their occupation of sustaining areas and their use of larger physical environments.” Changes in land use

through time, or changes in association with distinct cultural or social practices, produce multiple scalar components within landscapes. Landscapes may include “close-grained, worked upon, lived-in places” (Bender 1993:1), as well as distant places that are known primarily through historical narratives or ceremonial contexts within a unified whole.

The archaeological landscape, like the cultural landscape, is the palimpsest of cultural residues that results from natural and cultural processes operating at different spatial and temporal scales (Anschuetz et al. 2001:188). Kuwanwisiwma and Ferguson (2004:25) assert the importance of interpreting individual archaeological sites within a broad regional context that considers the sociocultural relationships that apply to use of the landscape. A landscape approach to archaeology and the management of historic properties is pertinent in this regard, as it enables the examination of various scales at which a community operates. Scalar components of the landscape, where archaeological methods may be most successfully applied, include those formed by settlement patterns, community rituals, and ethnic variations (Anschuetz et al. 2001:176). A landscape approach that considers the multidimensional nature of human-environmental interactions, including physical, social, and cultural factors, helps break down the dichotomy between scientific and humanistic perspectives in archaeology. This is needed to engage the many stakeholders involved in historic preservation and heritage conservation (Anschuetz et al. 2001:159, 163).

### CHAPTER 3: METHODS

Anthropologists in the American Southwest have been concerned with cultural landscapes of past and present indigenous peoples for over a century (Fowles 2010:455). Culture areas are a basic unit of analysis associated with the spatial distribution of cultural traits such as environmental adaptations, land use patterns, and social organization. The concept of culture areas originates in the work of anthropologists Alfred L. Kroeber (1908, 1963) and Clark Wissler (1917). Today archaeologists continue to delineate and employ discrete geographic areas associated with societies as units of analysis. The formation of cultural units based in geographic space is founded on the “premise that patterned distributions of material culture represent distinct social groups with territorial membership” (Zedeño 1997:68). Zedeño (1997) illustrates that these cultural units are often circumscribed or defined in relation to specific research interests, and that they should consider a broad range of land use behaviors from a diachronic perspective. The intensity of archaeological investigation in the Southwest throughout the last century has allowed researchers to refine sweeping regional identities into increasingly circumscribed units based on stylistic trends in architectural traditions and artifacts through time (Bernadini 2005:19).

In Chapter 4, I use a survey of published archaeological work in the Western Pueblo region in order to examine the scale of conventionally defined Hopi and Zuni culture areas in geographic space. I highlight how developments in archaeological scholarship and methodology have influenced how researchers in the Southwest have conceived of culture areas over time, with particular attention to issues of scale.

These examples of archaeologically defined culture areas provide useful points of comparison for an analysis of contemporary cultural landscapes described by Hopi and Zuni cultural advisers during the FHiRE project. Hopi and Zuni perspectives reported in Chapter 4 were documented during ethnographic fieldwork conducted to investigate fire ecology, land and resource use, and the culture and symbolic meanings associated with fire and landscape in the Jemez Mountains of northern New Mexico. Ethnographic research with Hopi and Zuni advisers included semi-structured interviews with individuals identified as cultural leaders within their respective communities. Fieldwork in forested environments (Figure 1) and ancestral sites, in the San Francisco Peaks, the Zuni Mountains, and Jemez Mountains provided a venue for discussions about culturally important resources, traditional land management models, historical events, and ties to place. Additional ethnographic information pertaining to the composition, scale, and significance of cultural landscapes was collected during focus group meetings on the Hopi and Zuni Reservations (Figure 2). The insights provided by Hopi and Zuni cultural advisers are supplemented with published information about aboriginal land use, as well as ethnographic reports summarizing migration histories, pilgrimages, and cultural identity.

As cultural landscapes are formed through the interplay of the physical environment and intangible cultural values associated with the land, I assembled data from Hopi and Zuni oral traditions to evaluate this relationship. Oral traditions are significant sources for understanding the past events that have shaped cultural perspectives and practices associated with the landscape. As Vansina observes, oral traditions are “verbal messages which are reported statements from the past beyond the

present generation” (1985:27). Oral traditions take part in the transmission of historical events, each account akin to a temporarily tangible historical document. Landscapes aid in the recreation of historical events and processes, acting as a mnemonic device to recall sequence and spatiality (Vansina 1985:47). Through the use of “situated talk” about places (Basso 1996:75), and the embodiment of values and social memory, landscapes can be recalled through oral traditions, even after long periods of not being visited by tribal members (Ferguson and Anyon 2001:104). Formal narratives, prayers, and ritual performances are methods for commemorating and renewing knowledge associated with ancestral migrations over vast geographic areas (Hopkins 2012:25). Hedquist and his colleagues (2014:3) describe a range of information that can be conveyed through the names of places, including the physical appearance, resources present, place in traditional practices, and associations with events, beings, or social groups. I examine the use of traditional narratives, non-sensitive ceremonial or spiritual practices, and place names by Hopi and Zuni advisers in my analysis of contemporary cultural landscapes.

Ferguson and Hart (1985:21) note that Zuni migration narratives can be thought of as a form of symbolic discourse or prayer that has been imbued with a sense of directionality, regional associations, and names of specific places. Pilgrimages by contemporary Hopi and Zuni people to places described in migration narratives underscore the geographic foundation of each tribe’s migration narratives. For example, Hopi tribal member Leigh J. Kuwanwisiwma describes how *Palatkwapi*, the Red Land to the South, where many clans lived prior to migrating north toward the Hopi Mesas, can be conceived of as both a place and an era in Hopi history (Ferguson and Colwell-Chanthaphonh 2006:33). In addition to the discussion of migration with cultural advisers,

I referred to published data on Hopi and Zuni migration narratives to evaluate the role of this process within the contemporary cultural landscape.

Information amassed from ethnographic fieldwork and published literature was organized using the NVivo qualitative analysis software to provide a coding index that facilitated qualitative observations, including frequency of use, context, and relationships between specific landscape concepts. Careful attention was paid to place names, place logic, and the scalar components of landscape. Place logic (Zedeño 2014) includes the symbolic and contextual associations that cultural advisers use to define the significance of a place or object, and scalar components of landscape.

The comparison of archaeological culture areas with cultural landscapes that follows in Chapter 4 considers the components that make up these units of analysis, as well as their geographic scale. The geographic scale of Hopi and Zuni archaeological culture areas are illustrated in maps produced using ESRI ArcGIS® software. Maps are simplified representations of the space, time and scale involved in cultural landscapes. Further simplification of the distribution of places associated with migrations and pilgrimages were required due to the scale of the map and the generalized nature of this analysis. Thus, places and landmarks in Hopi and Zuni cultural landscapes mapped in this analysis are limited to those discussed during fieldwork and interviews associated with the FHiRE project.

The cultural advisers who participated in the FHiRE project ethnographic research are predominantly males, and most of them are members of their tribe's cultural resource advisory team. The advisers belong to numerous social groups within Hopi and Zuni

society, including clans, kivas, medicine societies and priesthoods. Each clan in Hopi society followed a distinct migration history, accumulating individualized and complimentary sets of knowledge. Similarly, the villages on each of the Hopi Mesas have their own social histories (Whiteley 1998). At Zuni, tribal history is largely transmitted through the ceremonial traditions of religious societies (Ferguson 2007; Ferguson and Hart 1985; Pandey 1995). Zuni religious societies followed distinct migration routes while in search of the Middle Place, accumulating knowledge of places, practices and resources along the way. In the following chapter, I refer to the synthesis of perspectives on landscape shared by FHiRE project participants and those included in the published materials reviewed for this as the “contemporary Hopi cultural landscape” and the “contemporary Zuni cultural landscape.” I do so for the sake of simplicity, with the recognition that my analysis includes only a sample of perspectives on landscape held within Hopi and Zuni societies.



Figure 1. Fieldwork with Hopi cultural advisers and Paul Tosa from the Pueblo of Jemez, in the Jemez Mountains, New Mexico. Photograph by T. J. Ferguson, May 22, 2014.



Figure 2. Focus group meeting with Zuni cultural advisers at Zuni Pueblo. Photograph by Barry Price Steinbrecher, January 2, 2015.



## **CHAPTER 4: ARCHAEOLOGICAL CULTURE AREAS AND CONTEMPORARY CULTURAL LANDSCAPES OF THE HOPI AND ZUNI**

In this chapter, I discuss the spatial differences between conventionally defined archaeological culture areas and the contemporary cultural landscapes of Hopi and Zuni people. Archaeological reconstructions of the past routinely delineate culture areas that are bounded based on constellations of material correlates. Observations of discrete environmental conditions, land use, and the distribution of material traditions are combined to demarcate discrete cultural areas in geographic space, and these are translated into social boundaries (Anschuetz et al. 2001; Cordell and Gumerman 1989). The theoretical underpinnings of culture areas, as a fundamental unit of analysis in reconstructing distinct societies and their histories, is found in the work of anthropologists Clark Wissler (1917, 1927) and Alfred Kroeber (1931, 1939). As developed by Wissler and Kroeber, the culture area concept is based on the geographical extent of common ecological adaptations that influence social and material customs (Anschuetz et al. 2001:180). Archaeologists have used such regional and sub-regional distinctions to develop ideas about shared identity and ethnicity among prehispanic Southwestern populations (Duff 2002:32–33; Peeples 2011:2–3). Peeples (2011:10) notes that anthropological concepts of culture areas are sometimes associated with notions of shared heritage, even in areas with evidence of multi-ethnic populations.

Archaeological reconstructions of settlement patterns and material traditions over time and space, stemming from work in the early twentieth century (for example, Kroeber 1916; Spier 1917), allowed for increased seriation of traits. Distinctions based on material traits have been used to distinguish cultural districts or “areas of specialization”

(Duff 2002:29). Local sequences in artifact classes have been associated with “relatively autonomous social and economic entities that changed periodically at what are considered phase boundaries,” downplaying the fluidity of interaction and information exchange between populations associated with discrete localities (Gumerman and Dean 1989:100).

Culture areas, districts, and areas of specialization continue to influence the way that archaeologists interpret material patterns of the past. Increasingly circumscribed units of analysis are created as archaeologists fine-tune localized sequences of particular artifact classes. However, the localized units of analysis that mark stylistic trends can be uncritically equated with a social boundary in the past, and this has potential consequences for our understanding of the long-term and large-scale patterns entailing historical context and interaction in the Southwest. Recent investigations involving large, macro-regional databases (for example, Mills et al. 2013) are evaluating the fluidity of social interaction in the Southwest.

The central criteria that archaeologists have used to delineate Hopi and Zuni culture areas include units of analysis that are based primarily on etic interpretations of the archaeological record. I think it is critical to also consider emic perspectives held by contemporary descendants regarding the tribal histories, land use, and identity related to places and features that factor into their cultural heritage. These places and features include former habitations, rock art, artifacts, and contribute to cultural landscapes. Recognizing that Hopi and Zuni history, society and culture are inextricably connected with the land (Ferguson and Anyon 2001; Ferguson and Colwell-Chanthaphonh 2006, Hart 1995; Kuwanwisiwma and Ferguson 2009), I investigate the fundamental

components and spatial distributions of Hopi and Zuni cultural landscapes to establish comparative units of analysis. As discussed in Chapter 2, cultural landscapes are composed of a combination of physical entities, including ancestral sites, landforms, plants, and animals, as well as intangible historical and cultural associations. In my thesis research, Hopi and Zuni cultural advisers assessed land use, significant landmarks, natural resources, and cultural and spiritual values associated with landscapes, and I use these assessments to define physical and intangible elements of cultural landscapes. Finally, I examine how Hopi and Zuni cultural advisers conceive of a particular place, the Jemez Mountains in north-central New Mexico (see Figure 3), within their own cultural landscapes.

### ***The Hopi Culture Area in Archaeology***

Early anthropological investigations in the Hopi region (Fewkes 1898, 1900; Mindeleff 1891) employed a combination of ethnographic observations of social and ceremonial organization, subsistence, language, and material culture. One objective of this early research was to connect contemporary Pueblo people with the occupants of archaeological sites that dot the Southwestern landscape (Duff 2002:3; Longacre 1980:2). Hopi society and lifeways were considered to be direct analogs to the broad cultural patterns that extended throughout the Southwest and into neighboring regions.

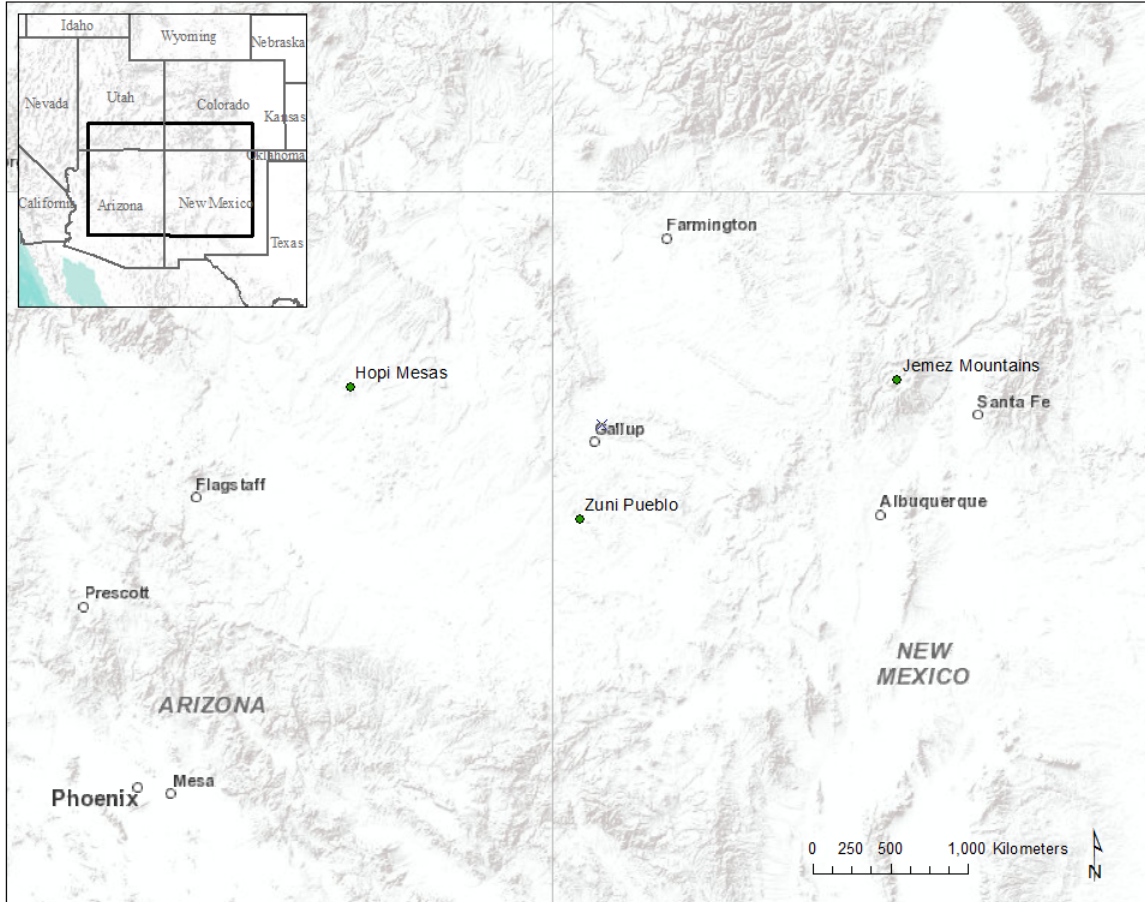


Figure 3. Map showing the location of the Jemez Mountains relative to Zuni Pueblo and the Hopi Mesas.

Oral traditions, namely migration histories, were heavily cited by researchers such as Fewkes (1898, 1900) and Mindeleff (1891) in interpretations of archaeological remains (Longacre 1980:3). Fewkes (1900) described the Hopi as descendants of a once unified Puebloan people that were distributed over a vast area of the Southwest. He advocated for the investigation of archaeological settlements by what he called “ethno-archaeologists,” working under the guidance of Hopi people to relate features and artifacts from the past with contemporary practices and material traditions (Fewkes 1900:579).

Fewkes published migration stories associated with individual clans, as told by members of the community of Wàlpi on First Mesa, “as an aid to the archaeologist who may need traditions to guide him in the identification of the ruins of northern Arizona” (1900:577). Using this method, Fewkes estimated that the Pueblo population aggregated into localized communities during the sixteenth and seventeenth centuries A.D., due to hostile, invading groups. He concluded that Hopi people are descended from clans that migrated to the Hopi Mesas, arriving from Utah in the north, the Gila Valley in the south, and the Rio Grande to the east (1900:577). Fewkes illustrated how clan migration histories were important in Hopi land use by documenting how clan leaders return to ancestral places in distant locations, such as shrines or springs, in order to collect important resources or perform rituals (1900:591–592). The prominence of Hopi clan migration histories in Fewkes’ archaeological interpretations, while sometimes uncritically applied, emphasize the dynamic social relations and movement among groups in the past.

Mindeleff (1891) also incorporated oral traditions of living Pueblo people into his interpretation of archaeological remains over a vast region that spanned from central Utah in the north to Mexico in the south, and from the Pecos River on the east to the Colorado River on the west (1891:13). However, he called for a cautious approach, recognizing that symbolic elements and inconsistent chronological scales were incorporated into Hopi oral traditions.

Mindeleff (1891) prefaced his analysis of architecture in the Tusayan Province, which is how he referred to the Hopi area, with a short summary of Hopi oral traditions regarding their emergence and the instructions they were given about various ways of

inhabiting the earth's surface, including how to build stone houses during their varied paths of migration. Mindeleff combined survey data collected between 1882 and 1885 with a lengthy discussion of clan migration traditions to describe ancestral villages within the Tusayan Province. He mapped the Tusayan Province as ranging from north of Black Mesa south to encompass Antelope, First, Second, and Third Mesas, as well as the Hopi Buttes. The southern and eastern boundaries of the Province extend toward the Little Colorado River and terminate at the Puerco River on the west (1891:12). Mindeleff related the aboriginal use of the lands and the historical connection of Hopi people to the abandoned villages within this area.

In the early twentieth century, a "Time-Space Revolution" occurred in Southwestern archaeology (Longacre 1980:5), and subsequent descriptions of the region encompassing the Hopi area are marked by increasingly localized culture histories (Brew 1979). Ethnoarchaeological approaches to historical syntheses associated with geographic areas fell out of favor among researchers as archaeology became increasingly distinct from cultural anthropology (Longacre 1980:5–6). A concern for chronological reconstructions and trait lists defining archaeological cultures supplanted former scholarly interests of associating living people with archaeological sites in the Southwest (Longacre 1980:5).

The transition to chronological seriation using relative dating methods and spatial segregation of cultural units based on fine-grained material traits is epitomized in Colton's 1939 publication of *Prehistoric Culture Units and Their Relationship in Northern Arizona*. In this work, Colton (1939:6) described the classification of distinct cultural areas, called branches, based on material determinants that were assumed to

represent social groupings akin to tribes. Branches were further subdivided into discrete chronological phases marked by transitions in material traditions among contemporaneous settlements. Colton (1939:12) described sites in Hopi Country as the foundation of the Tusayan branch of the Anasazi.

The geographic distribution of the Tusayan branch is located on the southeastern ridges of Black Mesa, encompassing First, Second, and Third Mesas, and the adjacent drainages immediately to the south (Colton 1939:59–60). Sites within the Tusayan branch were included in seven chronological phases between A.D. 900 and 1800, distinguished by temporally diagnostic ceramic traditions, architectural styles (especially kivas), and later incorporation of Old World cultigens, livestock, and artifact types (Colton 1939:61–66).

In 1937, J. O. Brew led the Peabody Expedition to document archaeological remains in the Hopi area, including excavations at Awatovi. Brew thought that the Hopi area lay at the southern end of Black Mesa, between 35 and 36 degrees longitude (Brew 1941). He observed that thousands of Precolumbian sites extend from the mesa ridges into the valleys draining into the Little Colorado River (Brew 1941:103). Nearly 40 years later, Brew's (1979) summary of the culture history of the Hopi area centers largely on the Hopi Mesas and the area immediately to the south. He stated that significant transitions in the settlement patterns and material traditions of the Hopi area occurred between approximately A.D. 1250 and A.D. 1350, when there was an influx of population and village growth as the north end of Black Mesa, the Flagstaff area, and the Little Colorado River valley were depopulated.

As local settlement histories and the development of fine-grained artifact sequences contributed to increased chronological control, archaeologists began to define the Hopi area in more synchronic terms. Adams (1996:48), for instance, defines the Hopi area during the Pueblo III period (A.D. 1150–1350) as extending from the Little Colorado River Valley on the south and west, to southern Black Mesa and the Moenkopi Wash on the north, and the Hopi Buttes on the east. He delineates four separate districts within this area during the Pueblo III period on the basis of discrete land use patterns: the Middle Little Colorado River, the Hopi Mesas and immediate environs, Moenkopi, and the Hopi Buttes.

Adams (1996:57) notes that the end of the Pueblo III period marks a time of significant transformation in Hopi region (and the Southwest as a whole), when dispersed, kinship-based settlements aggregated into the large communities that are recorded at Spanish contact. Duff (2002:183) describes how the population within the Hopi area aggregated into a few large pueblos by A.D. 1400, effectively narrowing the archaeological view of the Hopi area to the vicinity of Antelope, First, Second, and Third Mesas. He notes that the spatial constriction of the Hopi landscape at this time provided the demographic and social conditions that led to the development of a uniquely Hopi identity, as known historically.

A renewed interest in the migration traditions held by living Hopi people is evident by the turn of the twenty-first century. Duff (2002) associates migrations from the Upper Little Colorado, White Mountains, and Silver Creek areas with the influx of people into villages at the Hopi Mesas, while Adams and his colleagues (2004) and Bernadini (2005)



trace migrations of clans through the Middle Little Colorado, Winslow, and Anderson Mesa areas.

Lyons (2003) describes the relevance of continued divisions between the archaeological culture areas delineated around Hopi Mesas, the Kayenta region to the north and west of Black Mesa that extends into southern Utah, and the Winslow Branch located in the vicinity of the Middle Little Colorado River. He views these as individual archaeological culture areas marked by distinctive settlement histories. Lyons (2003) underscores the value of taxonomic distinctions that have been developed for these culture areas when they are placed in the context of migration patterns. He notes that the distinctions illustrate the heterogeneous nature of the *Hisatsinom*, or ancient people, that were subsumed within Hopi society.

Bernadini and Fowles (2011) use a refined spatial definition of the Hopi area that is focused on the immediate vicinity around First, Second, and Third Mesas in their analysis of the clan-based social organization that emerged after migrations into the Hopi villages. However, their analysis highlights the much larger region in which ancestral Hopi clans traveled through prior to settling in the Hopi area. This region extends from the Four Corners area to southern Arizona (Bernadini and Fowles 2011:254).

The work of Lyons (2003), Bernadini (2005) and Bernadini and Fowles (2011) reflect renewed interest in relating the archaeological record to Hopi clan migrations. Their analyses are distinguished from earlier anthropological approaches, such as work of Fewkes and Mindeleff, as they apply observations of material evidence from spatially restricted scales to correlate examples of ancestral Hopi migrations in time and space.

Recent work using large, macro-regional data sets (for example, Mills et al. 2013; Kohler et al. 2012) reveals the dynamic nature of settlement, land use, and social interaction in the Southwest. Mills and her colleagues (2013) define networks using ceramic assemblages and obsidian sources to illustrate changing patterns of connectivity between people in the Southwest over time. Their study suggests that the people in the Hopi area in northeastern Arizona maintained social and economic ties to groups throughout northern Arizona between A.D. 1200 and 1300. While the Hopi region itself became increasingly isolated on a macroregional scale after A.D. 1350, social ties within the region persisted as a significant dispersion of populations occurred in the Southwest in the late prehispanic period (Mills et al. 2013:5787).

The archaeological trends associated with studies of Hopi “prehistory” and cultural development emerged through investigations related to social history, identity, and migration. The restriction of the Hopi cultural area associated with the space-time systematics that developed in the twentieth century allowed for localized sequences to be fine-tuned. While recent work has advanced our understanding of ancestral migrations and the dynamics of social boundaries over time, archaeologically defined culture areas of the Hopi are by and large spatially restricted to the area immediately surrounding the contemporary Hopi villages. Figure 4 illustrates the general area encompassed in various archaeological depictions of the Hopi area.

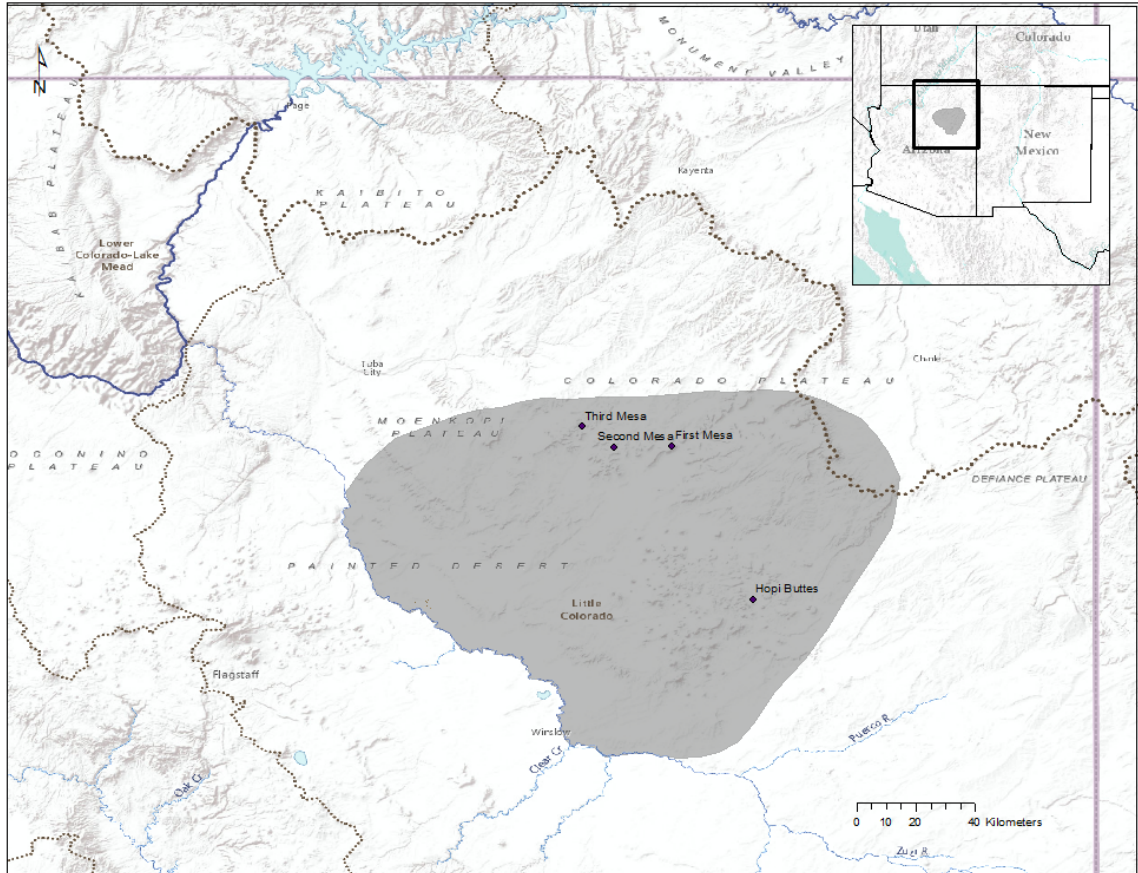


Figure 4. Map showing the general extent of the Hopi culture area, as defined archaeologically.

### ***The Contemporary Hopi Cultural Landscape***

Kurt Anschuetz and his colleagues (2001:180) describe how cultural communities are formed through the social actions and traditions that emerged as people interacted with their environments, creating cultural landscapes. The importance of interactions with the land in Hopi cultural practices and beliefs cannot be overstated. For Hopi people, land represents more than a backdrop to society and a source of subsistence; it “embodies knowledge, spiritual power, and meaning” (Hopkins 2012:9). The concept of *Hopitutskwa*, or Hopi Land, is a critical component of a Hopi cultural landscape

(Kuwanwisiwma and Ferguson 2004; Zedeño 1997). *Hopitutskwa* has been defined as the core and homeland of the Hopi people, which Lee Wayne Lomayestewa, a member of the Bear Clan from Songòopavi, describes as a figurative plaza at the center of a greater village (Koyiyumptewa et al. 2015). The term *Hopitutskwa* encompasses the vast geographic area through which the Hopi people traveled through during their migrations to *Tuuwanasavi* (the Center of the Universe) at the Hopi Mesas. During their migrations through *Hopitutskwa*, the Hopi people established communities and traditions, and buried their dead (Kuwanwisiwma and Ferguson 2004:25).

#### The Role of Movement in a Hopi Landscape

Movement is an important theme in Hopi traditions. Upon emergence into the Fourth World, Hopi people were instructed to migrate through the land until they reached their destined place of settlement at the Earth's Center, located at the Hopi Mesas (Kuwanwisiwma and Ferguson 2004:26). The term that Hopi elders use to describe their emergence from *atkyaqw*, from below, can also be interpreted as referring to direction (Ferguson and Colwell-Chanthaphonh 2006:97). Leigh Kuwanwisiwma describes (in Ferguson and Colwell-Chanthaphonh 2006:97) how emergence "from below" can also be interpreted as "from the south," while "from above" also means "from the north."

Hopi history is a collection of clan histories (Eggan 1950; Ferguson and Anyon 2001:105), some of which are centered within the northern Southwest, while others encompass places as distant as Central or South America (Ferguson and Colwell-Chanthaphonh 2006:97; Hopkins 2012:30). While much of the information associated with clan migration traditions is considered to be privileged knowledge reserved for clan members, abbreviated versions that reference the places of clan origin, directions of

travel, and the traditions that each group contributed to the Hopi ceremonial cycle are known throughout Hopi society (Ferguson et al. 2013).

For example, the ancient people known as *Hoopoq 'yaqam*, which translates to “those who went to the northeast,” are associated with clans that came from the place known as *Palatkwapi* (red-walled city to the south) via the Hohokam region of southern and central Arizona (Ferguson and Colwell-Chanthaphonh 2006:97; Ferguson et al. 2013:111–112). The *Pakingnyam* (Water Clan) are among the clans of southern origin and are said to have brought ceremonies involving the *Paalölöqangw* (plumed serpent) with them from *Palatkwapi*. The plumed serpent imagery, which is commonly used on Hohokam ceramics, is thought by some to be associated with the Mesoamerican figure *Tlaloc*, described as “an ancient rain-storm-earth god” (Ferguson et al. 2013:112).

Hopi ancestors interacted with varied geographic areas during their migrations. During their travels, Hopi ancestors developed cultural practices aligned with diverse environments, incorporated important resources into subsistence practices and ritual, and established significant places that continue to be commemorated in stories, songs, prayers, and practice. While migrations of clans to *Tuuwanasavi* have been completed, movement and connectivity continue to play significant roles in the cultural landscape.

Pilgrimages to shrines, springs, and resource collection locales provide a way for the Hopi people to define and interact with their landscape. Cultural adviser, Marvin Lalo, a member of the Tobacco Clan from Wälpi, explained that Hopi people continue to collect resources from places beyond the Hopi Reservation, including important locations within Arizona, New Mexico, and Colorado. Leonard Talaswaima, a member of the

Pumpkin Clan from Supawlavi described how evergreen boughs have been collected from a location near Kisiwu, a spring on Black Mesa, for hundreds of years. He notes that the resources there are now being left to rejuvenate, and that evergreens are currently collected at important locations within the San Francisco Peaks. These sacred locales are connected to the Hopi villages through a network of trails (Koyiyumptewa et al. 2014).

*Homvìikya*, or pilgrimage trails, footpaths and travel routes that link significant places, are important features of the landscape. These features act as historical markers that delineate the processes involved in landscape formation. Trails and their associated shrines and markers are considered to form a constituent whole, connected both physically as well as spiritually (Koyiyumptewa and Colwell-Chanthaphonh 2011:445, 447).

#### Features of the Hopi Landscape

As part of the covenant with the guardian of the Fourth World, Måasaw, Hopi ancestors were instructed to leave *iaakaku*, or footprints (Ferguson and Colwell-Chanthaphonh 2006:95). Footprints include tangible features, such as ancestral villages, artifacts, and rock art. Leonard Talaswaima notes that people left footprints as reminders of the places they lived (Koyiyumptewa et al. 2015). Lee Wayne Lomayestewa explained that the Hopi people were instructed to “go through the land, mark your territory, make your houses out of rock, put your markings on the walls, and when you leave a place, break your pottery. And hopefully sometime in the future, with that information in the future, you will get our land back. Those are our footprints” (Koyiyumptewa et al. 2015). Kivas at ancestral sites are another feature that Hopi people cite as evidence of their historical connections to the land. These structures are associated with clans whose

migrations encompassed in the northern Southwest (Ferguson and Colwell-Chanthaphonh 2006:125).

Rock art is a significant component of the Hopi cultural landscape. Rock art functions as a signaling device, documenting important events and significant places. Clan totems, such as those documented by Fewkes (1897) and Colton and Colton (1931), help to reconstruct migration and pilgrimage routes, and the histories associated with ancestral groups. Migration symbols include spirals (Figure 5), which can indicate the direction in which ancestors were travelling (Ferguson and Colwell-Chanthaphonh 2006:128). Max Taylor, a member of the Sun Clan from Songòopavi, was taught that the spiral symbol indicates Hopi connections to a place. He noted, “when we see it, that (indicates) that Hopi has been through there” (Koyiyumtewa et al. 2015).

According to Marvin Lalo, shrines are significant features within the landscape that denote important locations and help Hopi people identify ancestral settlement. He added that shrines are not considered boundary markers, but rather occur within a network of places. Lee Wayne Lomayestewa described how Hopi people connect with distant places using a single shrine located at or nearby their village (Koyiyumtewa et al. 2015). Leonard Talaswaima and described how the offerings that are left at shrines within Hopi villages today are received at other important places within the landscape, including Toko’navi (Navajo Mountain) and the San Francisco Peaks (Koyiyumtewa et al. 2015).

Mountains, rivers, and springs are important features within the landscape, all of which are considered *itaakuku* (Kuwanwisiwma and Ferguson 2004:25). Geographic landmarks such as these may be associated with important events, figures, or ceremonies,

as well as contain important resources. Beyond the Hopi Mesas, there are sacred mountain peaks in all directions. Notable landmarks include Toko'navi, the San Francisco Peaks, Chevelon Peak, and Mount Taylor (Figure 6). Leonard Talaswaima explained, "Different clans came or passed through these places and they know that there's important resources that are there in those places. It could be water; it could be springs; it could be a forest, the trees, medicine" (Koyiyumptewa et al. 2015). Marvin Lalo explained that these landmarks are significant because katsina live there. Leonard Talaswaima noted, "They say if you can climb these mountains and go to the top, you'll see the rest of Hopi land. Beyond the horizon, as far as you can see" (Koyiyumptewa et al. 2015).

Place names are also a form of *iaakaku*, as they both evoke the physical location and features of the location and provide information about the experiences that Hopi ancestors had there (Koyiyumptewa and Colwell-Chanthaphonh 2011:446). Place names provide a medium through which Hopi people conceptualize their environment and index their relationship to the land (Hedquist et al. 2014).

### The Issue of Boundaries

Hopi people do not consider their connection to ancestral land, the earth, or the cosmos to be truncated by boundaries. Connection to places through memory, spirituality, and engagement with the land transcends Western notions of linear time and static space. Thus, a Hopi cultural landscape cannot be adequately delineated in absolutes, such as by drawing a line on a map. This concept is at odds with the nature of modern land management, archaeological observations and constructs, and historic preservation laws.



However, when places are considered on contextual basis, the nature of Hopi historical and cultural connections to place can be gleaned without assigning boundaries.

### The Jemez Mountains in the Hopi Cultural Landscape

Our fieldwork with Hopi cultural advisers in the Jemez Mountains was useful in documenting how the Hopi people view this area in relation to their cultural landscape. I use examples from our fieldwork to illustrate the cultural logic used by Hopi people to relate to places within their landscapes. During our fieldwork, Hopi cultural advisers visited a Hemish ancestral site described by Paul Tosa, a research partner from the Pueblo of Jemez, as the Place of the Pumpkin Moiety. He noted that the Hemish (the name used by the Jemez Pueblo community to refer to themselves) Pumpkin Moiety originated in that place. Leonard Talaswaima, a member of the Pumpkin Clan, said that it felt significant to be at the site and he explained how he often wonders about the specific places his clan migrated through before reaching *Tuuwanasavi*. Marvin Lalo stated that it is a blessing to spend time at a site where Pueblo ceremonies originated and were used before (Koyiyumptewa et al. 2014).

The culmination of clan migrations with the arrival of Hopi ancestors at *Tuuwanasavi* did not restrict movement across vast distances. Hopi people maintained social connections and knowledge of resources in the locations that their ancestors migrated through. Leonard Talaswaima explains that continued connection to places visited by Hopi people provided the foundation for trade routes. He notes Hopi people likely obtained obsidian mined from the sources located in the Valles Caldera of the Jemez Mountains and explained, “Those types of shared resources, they’re very important” (Koyiyumptewa et al. 2015).

Additional historical connections exist between Hopi people and the people and land of the Jemez area. Clan migrations described by Fewkes (1900:586) associate the Bear and Firewood clans with *Muiobi*, the Rio Grande, and the Jemez region. These connections reflect continued social interaction and illustrate the mobility of people within the landscape. Lee Wayne Lomayestewa explains that many people from the New Mexico Pueblos, including the Jemez Pueblos, came to the Hopi Mesas seeking refuge after the Pueblo Revolt in A.D. 1680. Hopi traditions about this history were documented by Mindeleff (1891:40–41) as they relate to the village of Payupki on Second Mesa. Lomayestewa thinks that some Hopi people may have accompanied people from the New Mexico Pueblos as they later returned home. He illustrates the continued connection between the Hopi and Jemez areas, describing how a clown society from Jemez Pueblo recently came to do a ceremony at the ancestral village of Sikyatki, near First Mesa, which was a refuge for people from the Jemez area during the Spanish period (Koyiyumtewa et al. 2015).

The historical ties that bring people from Jemez to Hopi also work to tie the Hopi people to the Jemez Mountains. As Leonard Talaswaima explained, there are connections between the New Mexico pueblos and Hopi, as they use similar architecture and have similarities in ceremonial traditions (Koyiyumtewa et al. 2015). Pueblo-style architecture, use of kivas, and rock art all signal cultural and historical connections between Hopi people and their Pueblo relatives.



Figure 5. Spiral petroglyph with human figure at Chaco Canyon. Hopi cultural advisers consider spirals to be migration symbols. Photograph by T. J. Ferguson, June 24, 2007.

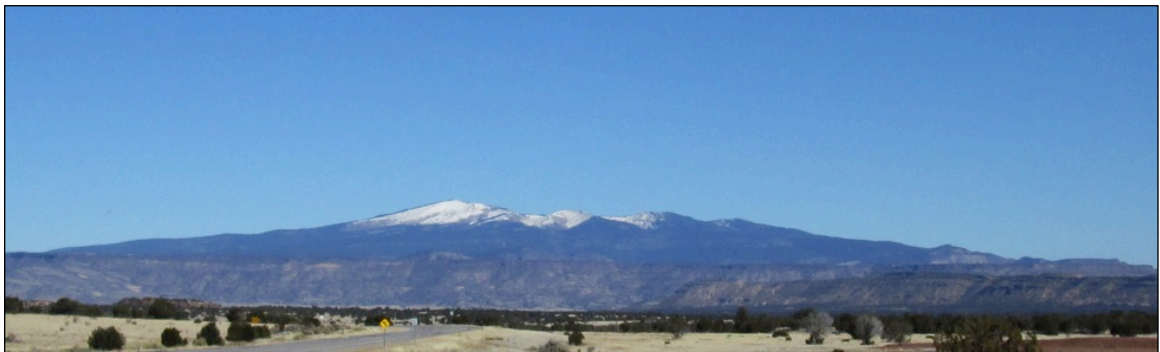


Figure 6. View of Mount Taylor from the southwest. Mount Taylor is among several mountain peaks described by Hopi cultural advisers as important landmarks within the cultural landscape. Photograph by Barry Price Steinbrecher, January 4, 2015.

## The Scale of the Hopi Cultural Landscape

In contrast to the narrowly circumscribed views of the Hopi area that are popular in contemporary archaeology, the Hopi people envision their cultural landscape as an unbounded area that encompasses all the places where their ancestors dwelled, the places that have Hopi names, and the places associated with shrines and pilgrimages. Examples of places that are embedded in the contemporary Hopi cultural landscape are illustrated in Figure 7 and listed in Table 1.

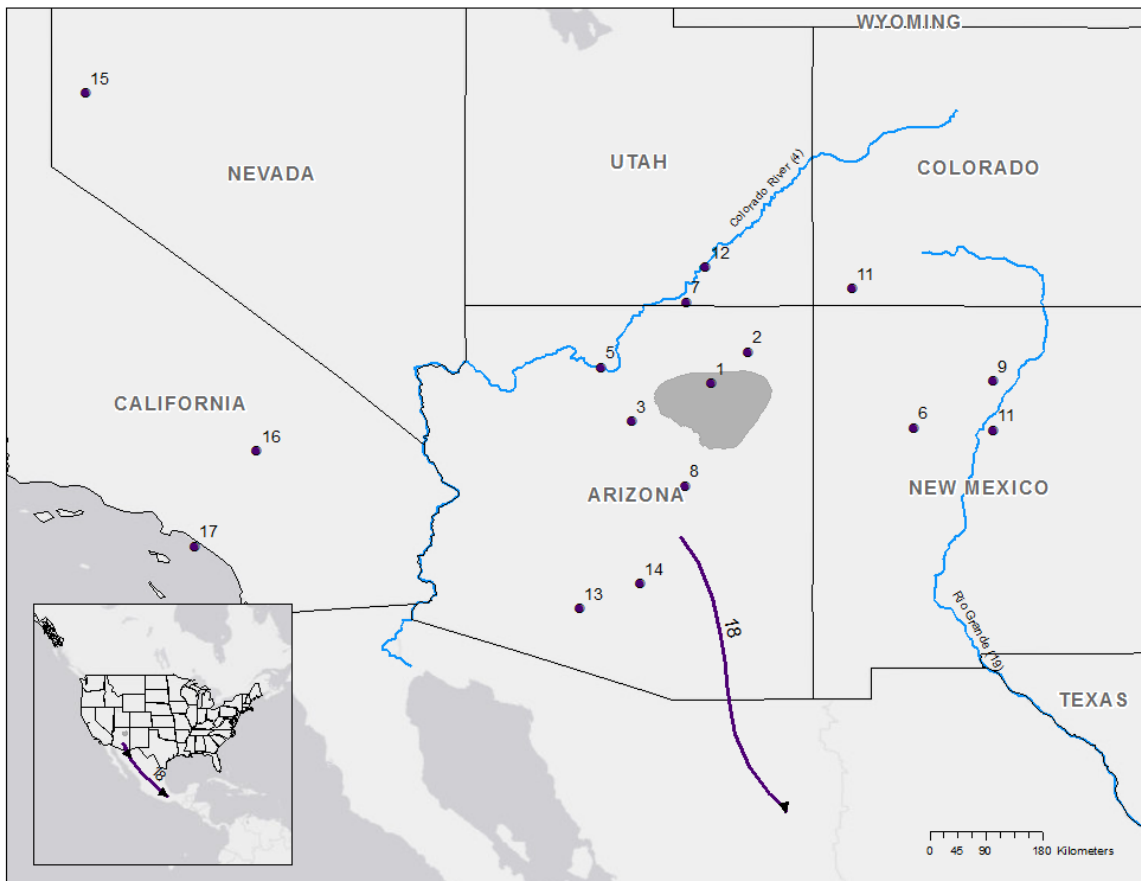


Figure 7. Map showing the locations of places within the Hopi cultural landscape discussed during interviews and fieldwork with Hopi cultural advisers. Numbered locations are listed in Table 1. The shaded area around the Hopi Mesas depicts the general Hopi culture area as defined conventionally by archaeologists.

Table 1. Place names for landscape features mentioned in interviews and fieldwork with Hopi cultural advisers.

Number	Place Name or Feature
1	<i>Tuuwanasavi</i> , Hopi Mesas, Center of the Universe
2	Kisiwu Spring
3	<i>Nuvatukya 'ovi</i> , San Francisco Peaks
4	<i>Pisisvayu</i> , Colorado River
5	<i>Öngtupqa</i> , Grand Canyon
6	Mount Taylor
7	<i>Toko 'navi</i> , Navajo Mountain
8	Chevelon Ridge
9	Valles Caldera
10	<i>Payuvki</i> , Sandia Pueblo
11	Mesa Verde
12	Defiance House
13	Barry Goldwater Missile Range, Southern Arizona
14	<i>Naasavi</i> , Casa Grande
15	Pyramid Lake, Nevada
16	Barstow, California
17	Pacific Ocean
18	<i>Palatkwapi</i>
19	<i>Muiobi</i> , Rio Grande

Archaeologists conventionally use observations of difference in material remains to delineate the Hopi culture area. Conversely, contemporary Hopi people identify and maintain relationships within the landscape through observations of similarity and continuity. The difference in scale is significant, and archaeologists need to recognize this if we are to adequately write about Hopi history and land in a manner that makes sense to descendant communities.

### ***The Zuni Culture Area in Archaeology***

Early researchers working in the Zuni area thought the Zuni people had historical connections to a broad geographical area. Frank Hamilton Cushing (1890:170, 190–193) describes how the Zunis and their ancestors once occupied a vast area that extended as far south as Central or South America. This was the “Original Pueblo,” or “Shiwian.”

During an 1886 trip through the Phoenix Basin, Cushing observed platform mounds along the Salt and Gila Rivers that he thought were referenced in Zuni traditional history. Under his direction, a crew began excavations at the site known as Los Muertos because of the numerous mortuary features at the site (Cushing 1890:161–162). Cushing (1890:164) interprets the platform mound sites to be the “Great House of the Priests” that was described in Zuni oral traditions. Longacre (1980:2–3) notes that there was little concern for the temporal placement of sites in this early work, and the complex settlement patterns these sites were part of were not fully comprehended. Instead, archaeological sites were interpreted almost exclusively using Zuni origin and migration accounts, and through comparison with the practices of living Zuni people.

Mindeleff's (1891) study of architecture in the Cibola (Zuni) region is likewise guided by an overarching interest in relating living communities with surrounding ancestral sites. The Cibola Province is delineated by the Zuni Mountains on the northeast, the Zuni Plateau on the southeast, and the Rio Puerco on the west. Mindeleff notes that the site of Kin Tiel on the Pueblo Colorado Wash in Arizona lies at far northwestern portion of the Cibola Province, bordering the Tusayan Province (1891:91–92). Mindeleff (1891:92) explains that Kin Tiel is included within the Cibola Province as a result of traditional associations among contemporary Zuni people documented by Cushing.

In his discussion of ancestral pueblo sites in the Zuni area, Fewkes (1891:95) explains, “one comes upon ruins almost everywhere he turns on this reservation and in some of the most deserted cañons there are mounds which indicate the sites of former pueblos.” Fewkes (1891) reports on a sample of these sites, which are located between Nutria on the north, the Malpais lava flow on the east, to the Upper Little Colorado River on the south and west. While he observes that sites within this region date to different periods, he concludes that the similarities in construction, position and form indicate that they were built and inhabited by ancestors of modern Zuni people (Fewkes 1891:101).

Subsequent work in the Zuni region focused on investigating local chronology and artifact sequences using seriation, cross-dating methods, and taxonomic classifications based on trait lists (Longacre 1980:5). Notably, Spier (1917) recorded over two hundred archaeological sites within the Zuni region. Spier (1917:266) developed a ceramic sequence that could help cross-date sites within the Zuni area, beginning with observations of historic ceramics at Zuni Pueblo. Spier (1917:213–15) describes the Zuni region as a relatively circumscribed area that encompasses the drainages on the Zuni

River and lesser tributaries of the Little Colorado River, from approximately the Arizona-New Mexico border on the west to the lava flow at the Continental Divide on the east.

The dissected plateau country rises into the Zuni Mountains at the northeastern end of the province, while the Zuni Plateau sweeps across the southern half. The area encompassed within this territory is roughly 2,400 square miles (6,216 square kilometers). Spier's research laid the groundwork for developing local chronologies and settlement patterns.

Roberts' (1931, 1932) work at Kiatuthlanna, a site north of St. Johns, Arizona and the Village of the Great Kivas, located on the Zuni Reservation near Nutria allowed him to develop local artifact sequences, as well as associate the Zuni region with broader regional patterns in archaeological culture history. According to Roberts (1932:25–27), the Zuni region extends from the Zuni Buttes and rolling mesas around Nutria in the north to the Zuni Plateau in the south and from the Zuni Mountains on the east into far western Arizona. Roberts (1931) includes the site of Kiatuthlanna, occupied during the Pueblo I and Pueblo III periods, in the Zuni region. Roberts listened to the Zuni workmen he employed, who explained to him that Zuni ancestors had occupied Kiatuthlanna during their migration from the Sacred Lake (at Koluwala:wa) to what is now Zuni Pueblo. The Zunis told Roberts that two lakes near Kiatuthlanna were still visited for ceremonial purposes (Roberts 1931:5). In subsequent work at Whitewater Draw along the Puerco River, Roberts focused on the role of the sites there in archaeological culture history rather than tribal traditions and does not explicitly relate them to the Zuni region (Roberts 1939).

Based on his work at Atsinna on top of El Morro in the Zuni Mountains, Woodbury (1956) concluded that the Zuni Mountains and the Malpais lava flow form a natural



boundary between the Zuni and Acoma culture areas. For Woodbury, Atsinna thus defined the eastern edge of the Zuni culture area.

John Rinaldo's (1964) discussion of the origin of historic Zuni culture highlights the dynamic nature of cultural boundaries in the Zuni region. His discussion encompasses the geographic region between Chaco Canyon in the southern San Juan Basin of northwestern New Mexico and the Mogollon Rim in east-central Arizona. Rinaldo (1964:129) states that the area was broadly associated with the Chacoan complex between the Pueblo I and Pueblo III periods. He contrasts this pattern with the late prehispanic period and historic Zuni culture, which show considerable connections to pueblos in the White Mountains and Upper Little Colorado River drainage (Rinaldo 1964:129–130). He notes that the Zuni area can be conceived of as a transitional area where northern Puebloan traditions intermingled with traditions to the south, including ceramic traditions, village layout, burial practices, and a constellation of artifact forms (Rinaldo 1964:130–135). Like Roberts (1931), Rinaldo notes that modern Zuni people maintain ties to the northern Mogollon area, visiting shrines that have been established there. He upholds Robert's placement of Kiatuthlanna within the Zuni region and effectively extends the eastern boundary of the region into the northern Mogollon Rim country.

In a review published in the 1970s, Woodbury (1979) conceives of the area in terms of archaeological evidence and traditional use by Zuni people, including the uplands of the Zuni Mountains on the east to the St. Johns' area in western Arizona. The area is bounded by Whitewater Draw and the Nutria River on the north and extends approximately 50 miles to the south of Zuni Pueblo. Woodbury (1979:468) argues that

further work in the Zuni area upheld Rinaldo's observations that the Zuni area lays in the periphery of Chacoan and Upper Gila regions. Despite the dynamic location in a transition zone, the Zuni area demonstrates a relatively unbroken sequence of development beginning around A.D 700 to the establishment of historically documented villages. By the thirteenth century A.D., the relatively dispersed population within the area had aggregated into large villages located within a 25-mile stretch of the Zuni River (Woodbury 1979:468–469). Duff (2002:183) argues it was as that aggregation of the region's population into these discrete settlement clusters in the late prehispanic period that led to the formation of the historic Zuni identity.

Kintigh (1996:131) describes the Cibola, or Zuni, region as extending from the northern Mogollon Rim and Winslow areas on the west to the Continental Divide on the east. The region is bounded on the north by the Rio Puerco and on the south by the Upper Little Colorado River, excluding the Fence Lake and Quemado areas south of the Zuni Plateau. Recognizing the dynamic transitions that occurred in the Cibola area between A.D. 1150 and 1350, Kintigh (1996) divides the area into districts based on post-Chacoan settlement patterns. Within the Cibola area, the Zuni district encompasses 1,758 square miles (4553 square kilometers) of the Zuni River drainage, extending from the El Morro Valley to the confluence with Jalarosa draw. Kintigh describes how the Zuni District became increasingly distinguished from populations in the Silver Creek, Petrified Forest, Manuelito Canyon and Upper Little Colorado areas as people aggregated into larger communities. The districts defined by Kintigh center on settlement clusters where localized ceramic sequences, particularly after A.D. 1300, reflect variations in external interaction, trade, and social ties.

Huntley and Kintigh (2004:62) describe the Zuni region as being centered on the Zuni River drainage and the El Morro Valley. The Jalarosa Draw, located to the south of the present-day reservation, displays a degree of social integration and inward focus during the Pueblo IV period and is thus excluded from the Zuni area. Kintigh (1998) and Kintigh and Huntley's (2004) work homes in on synchronic patterns in discrete localities.

Duff (2002:189) describes the Zuni region in the Pueblo IV period (A.D. 1275–1400) as a circumscribed area centered on the Zuni River from its confluence with the Jalarosa Draw to the Zuni Mountains. He argues that the Zuni region was notably insulated within the Western Pueblo area as a whole, marked by significant inward focus and strong social identity. He describes the Zuni region as a distinct district distinguished from the patterns evident in the Little Colorado, Silver Creek, and Mogollon Rim areas. However, Duff (2002) observes that practices associated with katsina in the Zuni region stem from an influx of populations from the Arizona Mountains, Silver Creek and Upper Little Colorado areas.

In the volume *Zuni Origins*, Barbara Mills (2007) evaluates the relationship of ceramics and identify formation in the Zuni region, located on the Southern Colorado Plateau to the north of Quemado and east of the Lower Rio Puerco. Mills (207:210) notes that the spatial boundaries of the Zuni region are not necessarily coeval with social boundaries and that ceramic traditions between A.D. 200 and 1630 reflect dynamic patterns of social interaction between the Zuni region and surrounding areas.

In a similar fashion, Peebles (2011:48) notes that social boundaries were mutable and were marked by change over time. Acknowledging the contingencies of such

boundaries, Peeples advocates for a broad definition of the Cibola region using geographic features to delineate it. Accordingly, he defines the region as the area between the Rio Puerco on the north and Cebolleta Mesa to the east, and a line between Holbrook, Arizona, and the Forestdale Valley below the Mogollon Rim on the west. Between A.D. 700 and 1000, the southern boundary lies roughly between the towns of Quemado and Show Low. After A.D. 1000, Peeples extends this boundary south to the Tularosa River, as material traditions aligned with Ancestral Pueblo patterns extend south within the Cibola region (2011:48–49, 337–338). He notes that this region should be understood as an archaeological construct, based on similarities in ceramic types, architecture and settlement patterns, and economic strategies, rather than a distinct cultural designation (2011:48–49). As such, the Cibola region is not equated on a one-to-one basis with the Zuni culture area in his analysis.

Early archaeological research in the Zuni area related practices and oral traditions among the contemporary Zuni community to archaeological remains over a large portion of the American Southwest. Subsequent research focused on stratigraphic seriation of localized sequences within the Zuni region, in order to place ancestral sites in time as well as space. With increased spatial and temporal control, archaeologists refined the geographic region they associated with the Zuni culture area. Recent research on social interaction within the Zuni region and surrounding areas has shown that social boundaries were dynamic.

The term “Cibola” is often used in the archaeological literature to denote an area that is tantamount with the Zuni region. While early researchers appear to have used the terms Cibola and Zuni synonymously, observations of shifting settlement patterns and

social interactions have resulted in some incongruities between the two terms. In the last few decades, the Cibola region has come to represent a geographically and culturally diverse area of east-central Arizona and west-central New Mexico with shifting boundaries over time. The conventionally defined Zuni culture area (Figure 8) remains centered on the Zuni River drainage.

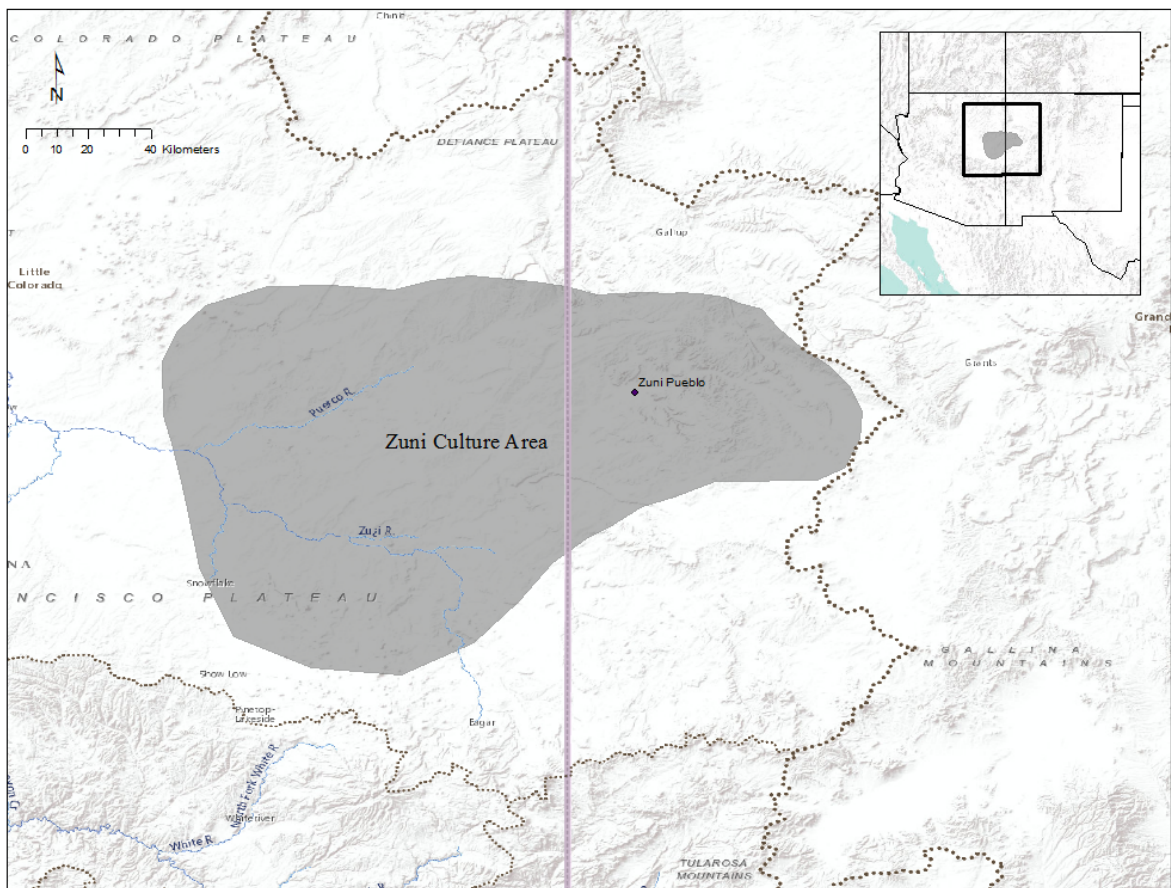


Figure 8. Map showing the general extent of the Zuni culture area, as defined archaeologically.

### ***The Contemporary Zuni Cultural Landscape***

The continuing significance of the landscape among Zuni people today is intimately related to oral traditions recounting their history. Migration narratives, songs

and prayers act as maps, grounding experiences and events in both literal and figurative space (Enote and McLerran 2011). While some traditional knowledge is retained exclusively for members of distinct religious societies, secular accounts of tribal history relate important information regarding the use and values embodied in the landscape (Ferguson and Colwell-Chanthaphonh 2006:151). While spiritual, even symbolic in nature, Zuni origin and migration narratives (the *chimik'yanakona penan*, “from the beginning talk”) are considered sacred truth (Ferguson and Hart 1985:21). With an estimated 97 percent of Zuni aboriginal lands as judicially determined located outside of their current reservation (Ferguson and Anyon 2001:109), traditional knowledge plays an important role in maintaining a Zuni cultural landscape.

Documentation of aboriginal land use indicates that Zuni land extended well beyond a settled core along the Zuni River, including lands used for subsistence, collection of medicinal resources, and ceremonial purposes. In *A Zuni Atlas*, Ferguson and Hart (1985:3) describe an area of intensive use historically that lies between 106 degrees and 112 degrees west longitude and 32 degrees and 37 degrees north latitude. Additional places well beyond this area are visited and used on occasion, including hunting locales in eastern New Mexico and Sierra Abajo in southern Utah, and pilgrimages to places including Mesa Verde and the Pacific Ocean (Ferguson and Hart 1985:3).

The Zuni comprehend the archaeological record in terms of their ancestors, whom they call *Ino:de:kwe* or *A:lashina:we* (Ferguson 2007:377). The places that Zuni ancestors visited, inhabited, and inscribed in memory extend beyond the cultural boundaries defined by archaeologists. Referring to the varied material traditions of Zuni

ancestors, Octavius Seowtewa states, “These people went to different places, they just changed clothes” (Cachini et al. 2015). The landscape formed by ancestral places, landmarks, and resources continues to have historical and religious significance. Ferguson (2007:377) notes, “It is through the cognition and use of this landscape that the ancient past is projected into the contemporary world and kept alive.”

### Role of Movement in a Zuni Cultural Landscape

Zuni elder and Zuni Cultural Resources Advisory Team (ZCRAT) member Harry Chimoni described how *Halona:wa* has been the center of the Zuni world since time immemorial (Cachini et al 2015), and part of a much larger landscape that Zuni people have inhabited over time. Ronnie Cachini, a religious leader and ZCRAT member explained that Zuni ancestors “left their mark everywhere,” as they traveled throughout the entire Southwest in search of *Halona:wa*, the Middle Place (Cachini and Quam 2014). He describes how his ancestors migrated through Colorado, through southern Arizona, and through northern Mexico.

Zuni migration narratives play a critical role in landscape formation. The route discussed in this chapter is an abbreviation and simplification of the narratives. Furthermore, the route has symbolic importance rather than simply being a literal map of sequential movements across the land (Ferguson and Hart 1985:21; Ferguson 2007). After emerging into this world at *Chimik’yana’kya deya*, the Place of the Beginning, is located along the Colorado River within the Grand Canyon (Figure 9), the Zuni migrated up the Little Colorado River, building villages at various locations along the way (Ferguson and Hart 1985:21; Ferguson 2007:383). *Sunha:k’yabachu Yalanne*, the San Francisco Peaks, *Kumanch an A’l Akkwe’a*, Canyon Diablo, and *Denatsali Im’a*,

Woodruff Butte, were important landmarks encountered on their eastward movement (Ferguson 2007:383).

Zuni ancestors split into two groups while travelling along the Little Colorado River. One group migrated south to the “Land of Everlasting Sun,” and never returned. The other group continued toward the Middle Place, but along the way fractioned into three subgroups. One group continued east, arriving near the confluence of the Little Colorado and Zuni rivers. Several shrines were established in this area commemorating events and associations with spiritual beings (Ferguson 2007:385). The Zuni ancestors continued to a *Hanlibinkya*, located in a canyon north of the Zuni River, where clans were named and their symbols were inscribed as petroglyphs (Ferguson 2007:385). The main body of Zuni ancestors moved east to *Halona:Itiwana*, the Middle Place, where modern Zuni people continue to live today (Ferguson 2007:385).

Members of the Sword Swallower and Big Fire Society left the main group in the Little Colorado River valley and traveled north and east to the Rio Grande (Ferguson 2007:394–395). They followed the Rio Puerco north through the San Juan Basin. Along the way, they stopped at Chaco Canyon, called *Heshoda Bitsulliya* in reference to the round shape of the kivas (Ferguson 2007:395). Zuni advisor Octavius Seowtewa explained that the medicine societies traveled to Mesa Verde and areas farther north. He noted that Rainbow Bridge, the rock formations in Arches National Park, Cathedral Rock in Colorado Springs, and Chimney Rock are landmarks that were encountered in the northern route (Cachini et al. 2015). *Shiba:bulima*, located on the eastern slopes of the Jemez Mountains is an important landmark of the northern migration route, and the religious practices of Zuni medicine societies were perfected there (Ferguson 2007:385).



The group eventually moved south to *Chi:biya Yalanne*, Sandia Peak, then westward toward *Dewankwin K'yaba:chu*, Mount Taylor. They continued to the southwest, establishing villages at *Heshoda Yalta* (Atsinna) at El Morro and *Heshodan Im'oskwi'a* in the Nutria area before reaching the Middle Place (Ferguson 2007:385, 395).

Some members of the group traveled south along the upper Little Colorado River to *Shohk'onan Im'a*, Flute Mountain (Escudilla Peak). Turning northeast, the group arrived at in the Zuni Mountains and turned west toward the Middle Place. Along the southern route, Zuni ancestors established *Heshoda Ts'in'a*, Town of Speech Markings, and other villages in the Pescado area before arriving at the Middle Place (Ferguson 2007:385, 397). Numerous ancestral villages near Zuni Pueblo are named in the migration narratives.

Zuni migration traditions are anchored in geographic space, with the physical location of many places mentioned known. Shrines were established at important landmarks, including each village established along the route (Ferguson and Colwell-Chanthaphonh 2006:153; Ferguson and Hart 1985:22). Resources that were used during the migration became an important part of being Zuni and pilgrimages to places like *Chimik'yana'kya dey'a* and *Kohuwala:wa* to collect water, plants, minerals, and other items continue today (Ferguson 2007:390).

Zuni people actively shape the landscape through pilgrimages. Ronnie Cachini and Octavius Seowtewa described how the Little Fire Keeper accompanies many groups on their pilgrimages, including numerous locations south of the modern Pueblo and east in the El Morro Valley. The Little Fire keeper carries a torch that drops hot embers along

the route. Fires that are ignited by these embers are allowed to burn, and the small fires are thought to have a positive ecological impact on the vegetation (Cachini et al. 2014).

#### Features of the Zuni Cultural Landscape

Springs are significant features in the landscape because they play a prominent role as stopping points described in migration traditions. In the Kyaklo prayer alone, 54 springs that were stopping points during migrations are described (Ferguson 2007:381). Furthermore, the mountains that were encountered along the migration became shrines. These features are commemorated in prayer and visited during pilgrimages (Ferguson and Colwell-Chanthaphonh 2006:153; Ferguson 2007:383). Ferguson notes that many of the shrines visited by the Zuni people today are located at 2000 meters elevation or higher. Ladd (1983) states that mountaintops are significant landmarks that delineate modern A:shiwi (Zuni) lands. The Sandia Mountains, Jemez Mountains, Mount Taylor, Blue Mountain in southern Utah, the San Francisco Peaks, Mogollon Mountains, White Mountains, and Tularosa Mountains are all revered, as are streams, springs, ponds, caves, mesas, and buttes.

Ronnie Cachini and Octavius Seowtewa described how the presence of medicinal resources, including plants and minerals, marks places as significant, and these resources explains why there was past habitation and ongoing pilgrimages in these areas. Ronnie Cachini explained that Zuni people use medicines that are not found near Zuni Pueblo, and they have to travel far to collect them. He described how that presence of the osha root that he observed during a recent visit to Chimney Rock and Pagosa Springs signaled the significance of these places to Zuni advisors (Cachini et al. 2015).

Trails are important feature of the Zuni cultural landscape. Octavius Seowtewa explained, “Trails are like our veins, our own blood veins, vessels in our body that connect us to our whole being is how we identify those trails connecting to the important places that identify Zuni aboriginal places” (Cachini et al. 2015). He added the trails allow the distant places to remain alive and noted that each ancestral village would have had their own routes toward sacred places in the landscape. Trails are important conduits that allow relationships Zuni people and archaeologists alike to reconstruct relationships among places in the landscape. Waterways are significant features that are often conceived of in a similar way as trails. Ronnie Cachini described how his ancestors used the Colorado River like a road to travel to the Sea of Cortez and the Pacific Ocean. He noted that items such as shell collected from the ocean are still used ceremonially (Cachini and Quam 2014). When significant places are located along a waterway, the entire feature is considered significant.

Shrines and offering places are important features that tie people to significant places. Shrines and offering places may be distant, requiring travel over considerable distances or placed nearby a community. For instance, figurines that embody the *Ahayu:da*, or Twin War Figures, are placed at shrines around Zuni Pueblo to protect the Zuni people (Merrill et al. 1993). Ronnie Cachini explained that prayer stick bundles are left with the *Ahayu:da*, and that one such prayer stick bundle was found alongside *Ahayu:da* near the Gila Cliff Dwellings in southwestern New Mexico. According to Ronnie Cachini, this reflects the antiquity of Zuni ancestors in that area (Cachini and Quam 2014). Continuity in practices associated with shrines has allowed Zuni people to reconnect with significant places in distant locations. Octavius Seowtewa explained how

the ZCRAT has reconnected with shrines in places such as Cathedral Rock in Colorado, and near Yuma, Arizona. These places provide continuity in the practices of ancestral people and the modern Zuni people (Cachini et al. 2015).

Material remains of ancestral lifeways comprise another important facet of a Zuni landscape. Similarities among community layout, architecture, rock art symbols, and the use of plazas and kivas all provide evidence of a relationship with Zuni ancestors. According to Ronnie Cachini, these materials are footprints left on the landscape, which act as stepping-stones for modern Pueblo people's existence and way of life. He stated, "We were all one people at one time, all Pueblo peoples" (Cachini and Quam 2014). Ronnie Cachini further explained that his ancestors left footprints for a reason, to show where they were and how they lived. He stated, "The rock art that you see is like a map, showing where to get food, where to get water, which way to travel. It showed the identity and place names" (Cachini and Quam 2014).

These tangible features evoke intangible knowledge, memories, and historical associations. Conversely, elements of the landscape are embodied and their significance expressed in artistic forms and ceremonial articles. Octavius Seowtewa explained that rock formations in what is now known as Arches National Park inspired elements of the altars of medicine societies today. He noted that visiting the places where Zuni ancestors visited on their migrations allows them to make these types of connections (Cachini et al. 2015).

## The Issue of Boundaries

The geographic extent of places described in migration narratives or exhibiting Pueblo-style architecture, or kiva use should not be conflated with boundaries. Ronnie Cachini explained, “It was vast, our area, our homeland. We didn’t have boundaries, we never had boundaries ... We have areas that we consider sacred, but the whole landscape is considered sacred ... we can’t create boundaries around our sacred places, our sacred home, our Mother Earth, because the entire world is sacred” (Cachini and Quam 2014). The Zuni landscape embodies a logic that includes identifying relationships between features and places. A germane example was described by Octavius Seowtewa, who noted that the entire Colorado River, from its headwaters to where it drains into the Sea of Cortez, is a traditional cultural property for the Zuni because the sacred place of emergence, offering places, and ancestral villages are located along its reach (Cachini et al. 2015).

## Jemez Mountains in a Zuni Cultural Landscape

Several places within the Jemez Mountains are mentioned in the migration narratives. *Shiba:bulima*, the place of the Stone Lions located in what is now Bandelier National Park, is prominent as a place associated the Zuni medicine societies and prey animals. Ronnie Cachini explained the cultural significance of this place, stating, “the songs, the prayers, and the medicine were shown to our ancestors and that’s what they took back to Zuni, to our Pueblo, to our people and this is what we still used today” (Cachini and Seowtewa 2014). He explained that before the winter solstice, Zuni people make a pilgrimage to the Stone Lions to leave offerings of prayer sticks. The people on the pilgrimage would make camps for and stay for a few weeks, up to a month, collecting

medicinal plants, minerals, and other materials to be used when they returned home. While the pilgrimage is no longer made on foot, it remains an important collection area and shrine (Cachini and Seowtewa 2014).

Several additional shrines and collection locales are located in the Jemez Mountains and nearby on the western side of the Rio Grande, which continue to be used by kiva groups and priests. Octavius Seowtewa noted that pilgrimages were made to collect obsidian from the Jemez Mountains. The obsidian from this area has a unique name in the Zuni language. Also, Soda Dam, located north of Jemez Springs, is a collection place for white medicine used by Zuni people (Figure 10) (Cachini and Seowtewa 2014). The Ant Society and Shell Society that are part of Zuni religious culture reflect knowledge that Zuni people gained while living along the Rio Grande located just east of the Jemez Mountains (Ferguson 2007:395). Octavius Seowtewa described how a collaborative project with Cochiti and Santo Domingo Pueblos identified Zuni corrals in the eastern portion of the Jemez Mountains. He describes how the corrals were constructed for horses belonging to Zuni people making the pilgrimage. During their stay, Zuni people collected many types of resources that would be shared with all of the medicine societies (Cachini and Seowtewa 2014).

Octavius Seowtewa noted that multiple pilgrimage routes would have connected the Jemez Mountains with settlements established prior to the ancestors' arrival at the Middle Place, such as those in the Nutria and Fort Wingate areas. He added that landforms like Mount Taylor were used as directional markers that aid in navigation (Cachini and Seowtewa 2014).



Figure 9. Grand Canyon and Colorado River viewed from Desert View Tower. Zuni cultural advisers discussed the Grand Canyon and Colorado River as significant landmarks in the cultural landscape. Photograph by T. J. Ferguson, August 26, 2005.



Figure 10. Soda Dam on the Jemez River. Zuni cultural advisers described Soda Dam as a source of medicinal resources. Photograph by Barry Price Steinbrecher, June 21, 2014.

## The Scale of the Zuni Cultural Landscape

Archaeological remains are an important component of the Zuni cultural landscape. However, the geographic boundaries that have been delineated by archaeologists to describe the Zuni culture area reflect a much smaller scale than the cultural landscape described by contemporary Zuni people (Figure 11). Zuni people include all the places where their ancestors migrated through, resided, and inscribed in memory, including geographic landmarks and places that may not have associated archaeological materials (Table 2).

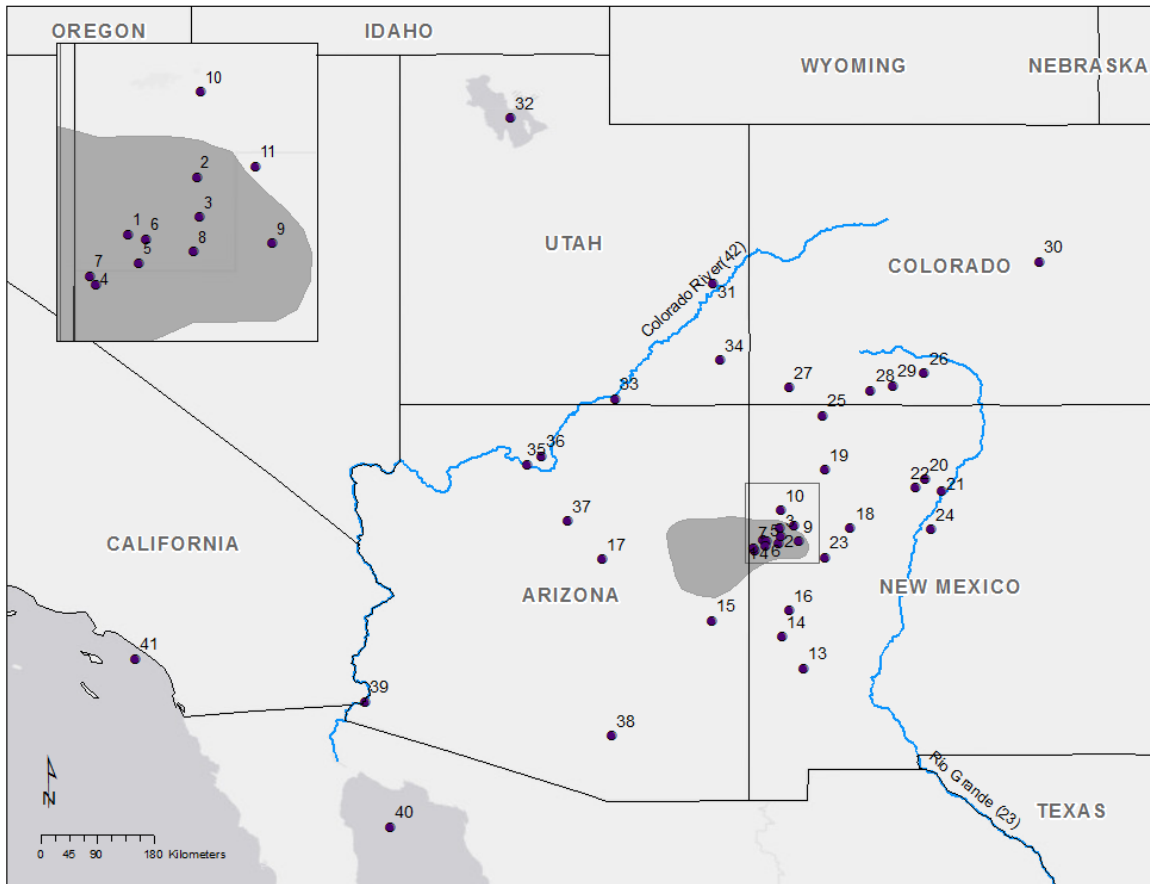


Figure 11. Map showing the locations of places within the Zuni cultural landscape discussed during interviews and fieldwork with cultural advisers. Numbered locations are listed in Table 2. The shaded area depicts the Zuni culture area as defined by archaeologists.



Table 2. Place names and landscape features mentioned in interviews and fieldwork with Zuni cultural advisers.

<b>Number</b>	<b>Place Name or Feature</b>
1	<i>Halona:wa</i> , Zuni Pueblo, the Middle Place, Center of the Zuni World
2	Nutria
3	Pescado
4	Ojo Caliente
5	Pie Mesa
6	Dowa Yalanne
7	Hawikku
8	<i>Archeotekopa</i> , Knife Canyon Site
9	<i>Atsinna</i> , El Morro
10	Fort Wingate
11	Oso Ridge, Zuni Mountains
12	El Malpais Lava Flow
13	Gila Cliff Dwellings, Gila Mountains, New Mexico
14	K'yak'yali an Yalanne, Eagle Peak,
15	White Mountains
16	Slaughter Mesa
17	<i>Kumanchi an:ah:luk'a</i> , Chavez Pass
18	<i>Dewankwink'yaba:chu</i> Yalanne, Mount Taylor
19	<i>Heshoda Bitsulliya</i> , Chaco Canyon
20	<i>He:mushina Yalla:we</i> , Jemez Mountains
21	<i>Shiba:bulima</i> , Bandelier National Monument
22	Soda Dam, Jemez Mountains

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**Table 2 (continued)**

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23	Rio Grande
24	<i>Chibiya Yalanne</i> , Sandia Mountains
25	Aztec Ruins
26	San Juan Mountains
27	Mesa Verde
28	Chimney Rock
29	Pagosa Springs
30	Cathedral Rock
31	Arches National Park
32	Great Salt Lake
33	Rainbow Bridge
34	Blanding, Utah
35	Grand Canyon
36	Ribbon Falls
37	<i>Sunhakwin K'yaba:chu Yalanne</i> , San Francisco Peaks
38	Tucson Basin
39	Yuma area
40	Sea of Cortez
41	Pacific Ocean
42	<i>K'yawan' A'honanne</i> , Colorado River, Green River

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In contrast to the concept of a “culture area,” defined through differences in the archaeological record, the Zuni cultural landscape is not defined by boundaries but

through connectivity. The distinction in scale is significant and should be considered in archaeological interpretations of the past.

### ***Archaeological Culture Areas in Relation to Contemporary Cultural Landscapes***

Early archaeological interests in the Pueblo area involved questions related to social history, identity, and migration. Oral traditions of living communities were applied as direct interpretations of the archaeological record, understating the complexity of movement and interaction through time. The parceling of space and time that has accompanied the development of refined artifact taxonomies in the twentieth century increased archaeologists' capacity for spatial and chronological control. While the delineation of archaeological culture areas and districts is useful for establishing operable units of analysis and providing a heuristic for understanding localized patterns (Peoples 2011:94–95), discrete boundaries associated with such areas are often uncritically applied and reproduced. Duff states,

Many archaeologists ascribe 'tribal' or 'ethnic' status to regional distributions of ceramics and settlements, and, consciously or not, interpret these distributions assuming varying degrees of internal homogeneity.

Using artifacts as we do, archaeologists tend to envision boundaries as materially marked when they may have been socially fluid (2002:32–33).

These synchronic, spatially restricted boundaries can have significant social and political implications regarding rights to land and resources, as well as historic preservation.

For Pueblo people, archaeological remains play a critical role in understanding the past. However, historical associations are guided by a cultural logic that considers continuity in practice and present spiritual knowledge (Koyiyumptewa and Colwell-Chanthaphonh 2011:444). Pueblo landscapes are palimpsests where physical, social, and spiritual realms of existence all interplay. As Anschuetz (2005:58–59) succinctly states, “This system of relationships transcends the dimension of time: the past becomes a referent for the present and the landscape the recollection and celebration of tradition itself.” Cultural values, such as historical or spiritual associations, are embodied through long-term interaction with the landscape, which provide continuity even over gaps in physical use (Ferguson and Anyon 2001:104). While archaeological investigations often explicitly define periods of use and ‘abandonment’ for sites or regions, landscapes can be sustained through intangible means such as oral traditions (for example, Darling 2009) and renewed through social memory.

The issue of scale is important, as we try to reconcile the concept of unbounded landscapes with localized or regional patterns of land use. Just as the concept of *Hopitutskwa* can be understood as a “literal homeland and figurative heartland of the Hopi people,” (Koyiyumptewa and Colwell-Chanthaphonh 2011:445), archaeological culture areas should be recognized as nested within Pueblo cultural landscapes. Archaeological culture areas can be considered an intensively used core at a given time, where physical interaction with the land is constant, but should not be considered bounded entities. Unlike traditional archaeological delineations of time and space, cultural landscapes are diachronic and cumulative.

The ongoing connection that Hopi and Zuni people have to the Jemez Mountains is one example that highlights the role of movement and connectivity in landscape formation and continuity. The emphasis on the life history of sites, monuments, and other bounded spaces in archaeology (Snead et al. 2009) contrasts with the emphasis on movement within Pueblo cultural landscapes. The role of migration is critical in the southwest and has been of archaeological interest since the nineteenth century. Beyond migration, the practices that drive mobility in seemingly sedentary populations include, but are not limited to, pilgrimage and other religious or ceremonial purposes, collection of non-local resources, and trade. Trails and travel corridors are more meaningful than just ways to move from point A to point B. Movement between places drives interaction with the landscape and has social and ecological implications. Zedeño (1997) illustrates how mobility within the landscape among historic Hopi people within their aboriginal territory can be used to better model land use and territory formation in the prehispanic era. Further consideration of mobility within the larger cultural landscapes, as a dialogue between archaeology and traditional knowledge, seems warranted as such models continue to develop.

With the realities of circumscribed project areas or specific research directives, archaeological sites are often treated as “cultural islands” rather than nodes within a complex network (Ferguson and Anyon 2001:113). By contrast, cultural landscapes consider the “deep affinities that depend on spiritual and emotional relationships across space and time” (Koyiyumptewa and Colwell-Chanthaphonh 2011:444). The relationships between places that exist, as part of tradition or cultural logic, can provide

valuable information regarding how people have interacted with the land and each other over time.

## CHAPTER 5: CONCLUSIONS AND APPLICATIONS

A comparison of archaeological culture areas and contemporary cultural landscapes associated with the Hopi and Zuni reveals significant differences in the spatial and temporal constructs that archaeologists and native peoples use in defining cultural territories. Archaeologists define and categorize small spatial units that are often associated with a discrete interval of time in the past. In contrast, contemporary Hopi and Zuni cultural landscapes are unrestricted spatially and are temporally cumulative.

In order to distinguish regional cultural patterns and provide chronological control for associated artifact assemblages, archaeologists have developed increasingly refined taxonomic classifications for artifacts, settlement patterns, and cultural groups. The delineation of culture areas for a given period helps to define social and demographic developments over time and space; however, these definitions may downplay the continued relevance of earlier habitations, rock art, and resource locales in distant areas. Fowles (2009:457) remarks, “As archaeologists we tend to ignore sites that ‘date’ to earlier phases when seeking to understand a settlement of a later phase. Unoccupied sites disappear from maps as if ruins were invisible to past peoples.” By contrast, contemporary Pueblo people continue to engage with ancestral sites as part of ongoing cultural practices, tribal heritage, and social identity. Although the activities associated with ancestral sites may change, these places continued to serve as landmarks and monuments in contemporary cultural landscapes (Ferguson and Colwell-Chanthaphonh 2006).

While archaeological culture areas are derived exclusively through material evidence, Hopi and Zuni cultural landscapes are based on complex interactions between environment, history, and culture. These cultural landscapes incorporate features associated with past and present land use, intangible values, and social memory. Cultural landscapes are emic delineations of space that are formed through multiple dimensions of interaction with the land and environment. In contemporary Pueblo societies, cultural landscapes consider both long-standing ties to areas that represent ancestral homelands and the role of movement in social histories and traditional practices. The process of movement across the land over time contributes to the development of social contexts in which material traditions develop. The expansive, cumulative nature of Hopi and Zuni cultural landscapes seemingly contradicts archaeological constructs that delineate circumscribed spatial and temporal units. However, cultural landscapes provide an avenue for conceptualizing the role that archaeological record plays in the heritage of contemporary descendant communities.

Contemporary Hopi and Zuni connections to ancestral places, significant locations, and resource collection locales have archaeological implications (Figure 12). Hopi and Zuni cultural advisers are quick to point out that trails and trail markers, shrines and offering places, and resources collected from distant sources all have archaeological correlates. They think that oral traditions and social histories are associated with roads, trails and routes that inscribe patterns of movement on the land (for example, Ferguson et al. 2009; Snead 2006). Offerings left at shrines, ancestral villages, and other locales represent the continued use and significance of cultural landscapes. The use of resources collected from locations beyond historical territories provides material evidence that



connects distant places with modern Pueblo communities. Using cultural landscapes as an analytical framework, archaeologists can identify evidence of relationships, associations, and values tied to material phenomena that help contextualize residential, economic, and social patterns.

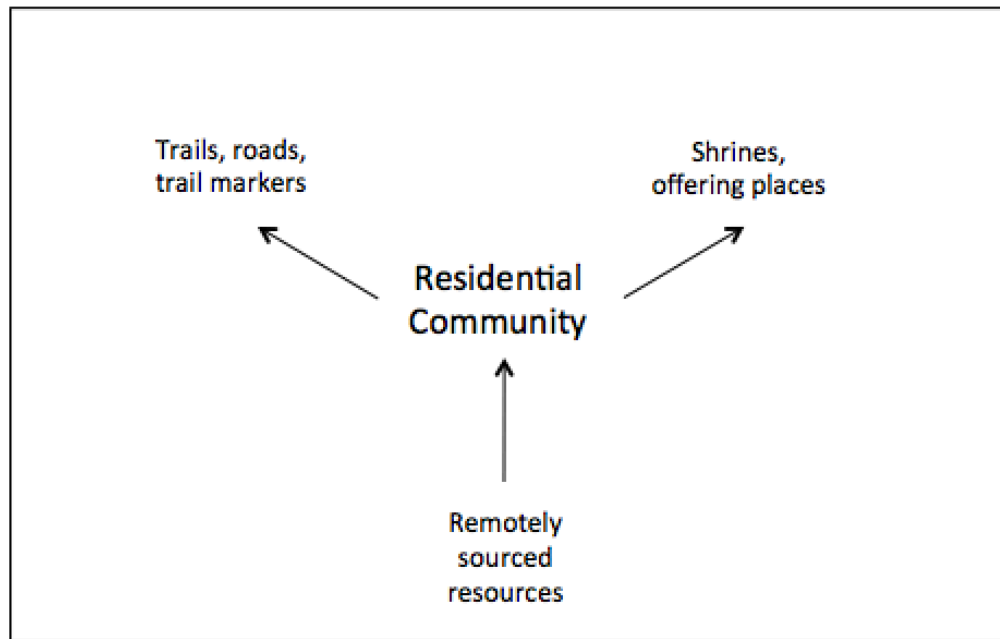


Figure 12. Examples of relationships between places within landscapes discussed with Hopi and Zuni cultural advisers that can be traced archaeologically.

### ***Landscapes as Spatial and Analytical Units in Archaeology***

As Anschuetz and his colleagues (2001:161) observed, “Landscapes are the arena for all of a community’s activities.” Landscapes represent comprehensive analytical units that provide a framework to contextualize the smaller, nested scales of social identity and practice that they incorporate. Landscapes are constructed through a combination of social, economic, and spiritual practices and beliefs, so they offer a venue for evaluating relationships between the varied aspects of past lifeways.

Because landscapes are formed through the interplay of intangible cultural beliefs and practices and the physical environment, a landscape approach to archaeological investigation uses modern cognitive principles and values that are derived through ethnographic analogy and collaborative research. These analogies are of considerable importance in rounding out land-use models and informing interpretations of the archaeological record. Using ethnographic data on cultural landscapes, researchers can begin to relate spatial configurations of archaeologically visible features and patterns of land use with “culturally specific cognitive maps” (Anschuetz et al. 2001:179) and are better poised to identify subtle evidence of activities beyond traditionally documented archaeological sites (Fowles 2009:448).

Duff (2002:4) warns against the using ethnographic analogy and cross-cultural comparisons too rigidly, so we do not develop preconceived notions of social boundaries at the outset of our research. Instead, ethnographic analogies can be used critically to develop a set of “index” objects and features (Zedeño 2014) that signal culturally significant landscape elements. Index objects or features inherently possess certain attributes that are defined on a culturally specific basis, and these signal important qualities or powers. For instance, contemporary Hopi and Zuni people consider certain rock art symbols, kivas, springs, medicinal resources and shrines to be important objects and features that are associated with ongoing spiritual beliefs and cultural practices, and these help define the significance of the places they are associated with.

### ***Implications for Historic Preservation and Heritage Conservation***

Today many archaeological investigations are driven by regulations that require documentation of historic properties or mitigation of adverse effects on historic properties related to federal undertakings that occur within relatively small areas where modern development is planned. A landscape approach is relevant to investigations encompassing small areas because contextualization of how sites and features are situated within a larger area is critical to understanding past human behavior (Snead et al. 2009:18–19). This is especially important in areas with a rapid rate of urban development and land modification, such as the Southwest. As Kuwanwisiwma and Ferguson (2004:25) argue, archaeological sites need to be interpreted within a regional scale as elements of a cultural landscape. Archaeologists and land managers alike can begin to establish regional relationships by supplementing data on site histories and local environmental contexts with a broader evaluation of view sheds, connections to significant geographic features, and relationships to travel corridors.

An assessment of archaeological sites and other historic properties that considers how they fit into a contemporary cultural landscape will help identify intangible qualities and traditional associations that add to historical and cultural significance. In a cultural resource management setting, these intangible values can determine the criteria under which archaeological sites are eligible for the National Register of Historic Places. This is relevant to resolving adverse effects when those properties will be affected by federal undertakings. According to the regulations in the National Historic Preservation Act (36 CFR 800), adverse effects on historic properties can be often be mitigated through measures such as archaeological data recovery (Cook 2015). However, Native Americans

have ongoing relationships with archaeological sites, considering them to be monuments of tribal history and shrines that are renewed through religious offerings and prayers. These values reflect how these places also serve as traditional cultural properties. The destruction of traditional cultural properties disrupts cultural practices and thus cannot always be mitigated (Ferguson et al. 1995).

Archaeological remains are an important part of the contemporary cultural landscapes that define, relate, and preserve the cultural heritage of the Hopi and Zuni people. Archaeological research can help connect contemporary people with aspects of their history that have not been preserved in oral or written records. Combining scientific observations and traditional knowledge has a synergistic effect on the archaeological understanding of human behavior. This interplay stems from the ongoing relationships between the archaeological record and the cultural traditions of contemporary people. These relationships provide a platform for understanding the cultural practices and beliefs of living communities, and for advancing the theoretical and methodological underpinnings of archaeology as a discipline.

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