A Silent Journey South: Migration from Mesa Verde

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Introduction

A Holistic View of Migration from Mesa Verde

Integrating archaeological findings with oral history records is crucial for a thorough understanding of the migration from Mesa Verde. The ancient Puebloans did not vanish from Mesa Verde; instead, I pose that they migrated and transformed into the modern Puebloans. Archaeological evidence and oral accounts from twenty-six current tribes indicate that this migration started and concluded along the Rio Grande River. Archaeological records indicate that ancient Puebloans raised turkeys genetically related to those of today's Puebloans. At the same time, oral histories suggest that celestial guides led the migration southwest—a guidance still acknowledged in current traditions.

Background

Archaeologists have long grappled with the intricate history of migration and societal change within the Mesa Verde communities. This research aims to merge archaeological records with oral histories to clarify these historical ambiguities, focusing particularly on the interconnections between migration, violence, healing, and food scarcity.

The Four Corners region, with Sleeping Ute Mountain dominating the landscape and Mesa Verde hidden to the east, is arid and inhospitable. Unlike the Great Sage Plain, Mesa Verde relies on irrigation from seep springs for agriculture. Excavations in the 1990s uncovered site 5MT10010, revealing evidence of probable cannibalism around AD 1150. Similar signs at nearby sites indicate widespread violence and extreme conditions during this period.

One puzzling question is why people settled in such a harsh area. Mesa Verde’s few springs provided limited domestic water, and agriculture relied on capturing occasional floodwater from ephemeral streams like Cowboy Wash. Techniques may have included overbank and "ak-chin" farming, similar to practices by the O’odham of southern Arizona.

A study by Gary Huckleberry and Brian Billman explores farming at Cowboy Wash, 15 miles from Mesa Verde, and whether arroyo entrenchment due to drought influences abandonment and migration in the Southwest. They found that arroyo-cutting at Cowboy Wash didn’t consistently correlate with drought periods or abandonment. The area was occupied intermittently during favorable conditions, with Mesa Verde serving as the year-round settlement. Ultimately, both areas were abandoned due to drought, suggesting that while arroyo-cutting posed challenges, drought was the primary driver of the abandonment of Mesa Verde.

The harsh environment of Mesa Verde meant farming was precarious, and droughts led to extreme measures for survival, including possible cannibalism. The inhabitants faced constant threats from hunger and violence, making Cowboy Wash and, eventually, Mesa Verde a place of extremes.

Research Objective

The research aims to bridge the divide between physical evidence supporting historical narratives, untold stories marked by challenging times, and the reticence of oral tradition bearers. By validating oral histories with archaeological findings, the research aims to illustrate the continuity and adaptation of Puebloan communities over time.

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Methodology

Ethical Considerations in Gathering Oral Histories

Collecting oral histories involved navigating a dual silence: the reluctance to recount painful historical events and skepticism toward outsiders. These narratives, often dismissed as mere legends, are critical to understanding past lived experiences. The intention to publish oral histories from multiple tribes was expressed, and approval was obtained from four preservation offices out of the twenty-six tribes descending from Mesa Verde. These oral accounts and cultural references were gathered in person and corroborated by previously published work approved by the preservation offices of the Diné (Navajo), Hopi, Ohkay Owingeh, Kewa (Santa Domingo), and Pueblo Pojoaque Tewa people of Northern Arizona and New Mexico.

Archaeological Corroboration

Archaeological evidence indicates that drought and intertribal violence led to the domestication of turkeys among the ancient Puebloans. A study analyzing the genetic lineage of turkeys traces the ancestry of modern Puebloans back to Mesa Verde. This evidence corroborates historical accounts of turkey domestication for various purposes and links these stories to historical migrations driven by ecological stressors such as drought.

Most tribes and tribal members do not permit general DNA testing due to a complex and cautious stance shaped by a history of exploitation and mistrust toward the medical community. Many tribes are wary of genetic research due to past abuses where their genetic material was used without consent for studies that sometimes contradicted their cultural beliefs and threatened their land claims.

Cultural and Historical Significance

The Role of Domestic Turkeys

Turkeys, revered for their insulation, adornment, and sustenance since ancient times, hold profound significance in Mesa Verde's history. Their presence in the archaeological record and comparable finds in the Rio Grande region underscore their enduring importance across generations. Initially, the ancient Puebloans did not intend to domesticate turkeys; however, drought and the migration of hunting animals forced them to rely on turkeys for sustenance. This dependency led to a dire food situation, as turkeys consumed a significant portion of the annual corn harvest, resulting in severe malnutrition, intertribal violence, and eventually cannibalism.

The consequences of climate change vary over space and time. Therefore, it is necessary to sample the environmental diversity that various societies experience in order to conduct effective studies of human responses to climatically induced environmental change. In an article available through Cambridge Press, Timothy A. Kohler and colleagues reconstruct population histories from A.D. 600 to 1280 in six ecologically distinct areas of the central Mesa Verde region in southwestern Colorado and relate these to climate-driven changes in agricultural potential. In all but one subregion, increases in maize-niche size led to increased population size. However, as turkeys consumed increasing amounts of the corn harvest, they exacerbated the strain on the maize niche, reducing the overall agricultural yield per capita and intensifying food shortages.

High birth rates continued to accompany high population levels even as productive conditions declined in the A.D. 1200s. In two subregions, from A.D. 1140 to 1180 and from A.D. 1225 to 1260, they find big differences between the size of the maize niche and the population density. They suggest that by the mid-1200s, people's actions in those subregions led to violence and social collapse across the whole society.

They also looked at ancient mitochondrial DNA (mtDNA) and stable isotopes from turkey and dog remains in the Central Mesa Verde region (CMV) and the Northern Rio Grande region (NRG) in the PLoS. One article called "Prehistoric mitochondrial DNA of domesticated animals supports a 13th-century exodus from the

northern US Southwest." Brian Kemp and his colleagues did this research. They aimed to test whether domesticated turkeys and dogs were brought from CMV to NRG during a large migration, potentially introducing the Tewa language and culture to the area.

The writers thought that if the Tewa people in NRG came from CMV populations, then the mtDNA haplotype frequencies in turkeys from after 1280 CE NRG would be very different from samples from before 1280 CE NRG but would be the same as samples from before 1280 CE CMV. They found a big difference in the number of turkeys with certain mtDNA haplogroups between samples from before and after 1280 CE in NRG. This suggests that turkeys moved from CMV to NRG during the migration. However, they acknowledged that these results indicate shared maternal ancestry rather than directly proving transportation from CMV.

The study's limitations include insufficient geographic sampling, possible under-sampling, and the need for more direct genetic evidence to confirm population movement. The authors recommend broader geographic sampling and advanced genetic analyses to understand turkey domestication and human migration patterns better. Despite these challenges, Kemp and colleagues' research introduces a novel approach to studying prehistoric population movements through domesticated animal DNA, contributing valuable insights into the depopulation of CMV and the origins of Tewa culture.

Through linguistic analysis, cultural insights, and native oral traditions, we gain glimpses of the lineage linking Tewa-speaking Pueblo people to Mesa Verde's cliff dwellers. A groundbreaking study recently published in PLoS One uses DNA analysis to establish this genetic connection, illuminating the journey of turkeys from cliff dwellings to present-day communities.

Narratives of Drought and Migration

Oral histories, such as "The Fish Story," tell of severe droughts leading to tragic transformations and eventual migration, supported by archaeological signs of environmental stress and social upheaval. One such account describes the following:

> "During a severe drought, the men gathered in a kiva to pray for rain. They fasted and waited for days, but one man broke the fast by sneaking to a lake to drink. Upon returning, he burst and turned everyone in the kiva into water animals. The woman responsible for feeding them also transformed into a snake when she returned from the kiva back to the village. The village must relocate; the elders ruled after realizing the tragedy that the man's betrayal had caused. They took the snake woman to her kind, where she was accepted, and the village moved, eventually settling in San Juan."

This story, among others, illustrates the decision-making processes influenced by natural events as remembered and passed down through generations among communities on both sides of the Rio Grande.

Patterns of Migration

Migration Routes and Kinship

Oral histories describe the migration route: after their emergence, the Tewa people were initially divided into the Summer and Winter People and sent in opposite directions across the landscape. These stories detail the deliberate pacing and planning of migration, reflecting a deep connection to the land and celestial navigation guided by stars like the Coyote star and Thunderbird constellation. Archaeological findings of settlement patterns corroborate the migration of the summer and winter people along the Rio Grande. Their mission was to locate the "middle place," the future sites of their historic villages. The Summer People journeyed along the western side of the Rio Grande, subsisting on fruits, while the Winter People traveled along the eastern side, relying on deer and elk for sustenance. During their southward trek, they paused twelve times, each stop becoming an ancient village, aligning with the oral story that the migration took eleven steps, commonly understood to mean eleven days. Eventually, the two groups converged in the Rio Grande Valley, where they established their homes. Here, a unique social structure emerged, with villages united yet divided, as both summer and winter people retained their distinct identities while collaborating for the village's collective benefit.

This arrangement has persisted through the ages, shaping the historic and modern homes of the Tewa people.

Settlement and Continuity

The concept of "The Middle Place" emerged from these migrations—a series of settlements along the Rio Grande where communities reunited and established new homes. This enduring connection is evident in the continuous presence of Puebloan descendants in these areas today. According to Cruz's Tewa Origins and the Middle Place, the history of the Tewa people, particularly Ohkay Owingeh, underscores the importance of Posi'owingeh in the Rio Chama valley (Ortiz 1969). Each Tewa village, including San Ildefonso, with its connections to ancestral sites on the Pajarito Plateau, has a distinct history of coalescence. This variation suggests that the processes and locations where the Summer and Winter People united differed across the Tewa world. This multiplicity of "middle places" indicates that the Tewa are recounting not just a single event of coalescence but an entire history of seeking harmony among diverse populations in the changing social landscape of northern New Mexico.

The origins of Tewa society appear to have stemmed from various places, converging uniquely across the Rio Grande valley. Despite this, an examination of Tewa history through the southern and eastern portions reveals both the antiquity of Pueblo occupation and the continuity of

Tewa-like material culture from AD 900 to the present day. Archaeological evidence from the middle northern Rio Grande region, defined as the area north of Santa Fe and south of Santa Cruz, supports cultural continuity from the Late Developmental period onward, suggesting an in situ development of Tewa society (Schillaci and Lakatos 2017). However, Tewa oral history presents a more complex narrative. All Tewa villages, including those in the middle of the northern Rio Grande (Pojoaque, Nambe, and Tesuque), share the origin traditions of the Summer and Winter People traveling separate routes along the Rio Grande (Parsons 1994 [1926]).

Tekhe'owingeh, adjacent to Pojoaque Pueblo, is specifically cited as the village where these groups first came together, making it both a literal and figurative middle place.

Archaeologically identifying the Summer and Winter People, including their convergence, is challenging, but recent research supports Tewa oral tradition. Although the cultural history of the region dates back to Clovis times (Warren 1974), occupation was generally sporadic and small-scale until AD 900. During the Late Developmental period, the middle northern Rio Grande experienced a population increase, with Ortman (2014) estimating a population of approximately nine hundred between AD 900 and 1050, doubling by the end of the eleventh century. This increase may be linked to early migrations from the north or west, possibly including Tiwa speakers from the San Juan Valley. Most residences were small pueblo hamlets, except for the Pojoaque Grant Site, which had twenty house units, one hundred rooms, and a great kiva (McNutt 1969).

Cruz proposes that the immigrants into the middle of the northern Rio Grande during the late developmental period are abstractly remembered as the Winter People by the Tewa. This is supported by Florence Hawley Ellis's (1988) recording of the Nambe tradition, which describes two major groups arriving in the Rio Grande: one from the northwest via the Chama Valley and another from southern Colorado, settling in high-elevation pueblos (Ortiz 1969; Parsons 1994 [1926]). The archaeological record aligns with this narrative, showing small sites in high-elevation locales on the eastern side of the Rio Grande with San Juan origins.

The Winter People were likely early migrants, sharing cultural affinities with other Tiwa-speaking groups in the Rio Grande Valley, such as those ancestral to Taos and Picuris. They may have produced Kwahe'e black-on-white pottery (Schillaci and Lakatos 2016). In the thirteenth century, the middle and northern Rio Grande were affected by broader demographic and social trends as migrants from the north and west arrived. The population tripled to roughly six thousand by 1315 (Ortman 2014), with new, larger villages exhibiting considerable architectural variability, indicating the presence of diverse groups in the southeastern Tewa world.

Cultural and Historical Significance

Celestial Guidance and Prophecy

Oral histories from the Hopi and Navajo reservations speak of celestial phenomena guiding migrations and influencing cultural practices. These accounts provide a deeper understanding of the spiritual and practical aspects of Puebloan migrations, emphasizing the role of the natural world in cultural continuity and adaptation. One significant celestial phenomenon is the Thunderbird constellation, which is linked to the Bear constellation (Sagittarius). Considered a spring and summer constellation, the Thunderbird first appears with the heliacal rise in the pre-dawn hours of early spring. This appearance coincides with Earth's First Thunder of Spring, signaling the season's arrival.

The sounds of the First Thunder and the first sighting of the Thunderbird constellation awaken the life processes of spring, symbolizing the rejuvenation of seasonal life cycles on Earth. The thunderbird is also known as the messenger of the ancestors. The Thunderbird constellation embodies the intricate interconnection of all life in the universe, including animals, plants, humans, thunder, and lightning. The cosmic essence of the Thunderbird constellation is depicted as a feather containing six stars. Each star represents a month and can be identified with the morning heliacal rise of the first bright star in the east, following the new crescent moon, for each of the six months.

During this period, the Coyote Star (Canopus) also appears in the south, clearly visible for about three weeks before disappearing until the same time next year. Historically, the Coyote Star and the Ghaaji crescent moon were used together to determine the end of the cold winter season. Unlike most Navajo constellations, the Thunderbird constellation spans a significant portion of the sky, pointing southwest at its head, and is visible over many months (Maryboy, Begay, and Teren [2021]).

Prophecy Rocks

In the state of Arizona, near Oraibi, a few stones known as Prophecy Rocks contain petroglyphic symbols that describe the destiny of the human race. The Hopi say that the large figure on the rock is the creator, holding a bow in his left hand to signify that the Hopi should abandon the ways of war and terror. A straight line extending from the right of the Great Spirit represents the timeline of human existence, translating into thousands of years. A point where the Great Spirit touches the line marks the time when people will return to the Great Spirit. This straight path symbolizes righteousness, peace, and harmony, promising a pure life on Earth.

The Thunderbird constellation's representation of interconnectedness serves as a reminder that living in harmony with nature ensures that the Earth remains fertile and conducive to life.

Conversely, a broader, upper path carved on Prophecy Rocks signifies a path of greed and war, attracting those who stray from harmony. Some are believed to outline the time of Mesa Verde’s abandonment.

According to prophecy, the Blue Kachina star, next to the Coyote Star (Sirius, next to Canopus), will herald catastrophic events, differentiating the righteous from the evil.

IV. Viewing Migration in Contemporary Contexts

How This Applies to Modern Migrations

This study encourages a reevaluation of current migrations, advocating for a perspective that avoids romanticizing or misrepresenting people's movements today. It highlights the importance of acknowledging migrating communities' lived experiences and historical continuities after displacement.

Integrating Oral Histories in Archaeological Research

By incorporating oral traditions into archaeological research, we can achieve a more holistic understanding of historical events and cultural practices. The oral traditions collected are not static legends but living parts of the community identity, reinforced through song, dance, and storytelling. These practices ensure that historical memories and the essence of ancient wisdom persist in modern Puebloan societies. This approach challenges the misconception that the Ancient Puebloans vanished into thin air or died off, offering a richer, more accurate portrayal of their endurance, adaptation, and legacy.

Conclusion

In conclusion, the inhabitants of Mesa Verde did not simply vanish; they migrated deliberately, transforming their societal structures and adapting to new environments. Their descendants, who continue to live and tell these stories, embody the resilience and continuity of their ancestors.

This research underscores the value of integrating oral histories with archaeological evidence, providing a comprehensive understanding of historical migrations and their implications for today's shifting populations.

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