

A MULTIVOCAL FRAMEWORK FOR THE PEOPLING OF THE AMERICAS

by

SHELBY WYNNE MCWHIRTER

(Under the Direction of Scott Nesbit)

ABSTRACT

A problem within PaleoIndigenous archaeology has been identified by both Indigenous and non-indigenous scholars. Within PaleoIndigenous, Clovis-based archaeology there is a need for more collaborative efforts with Indigenous stakeholders. Calls to enhance and facilitate Indigenous collaboration in archaeological research and interpretation have been reverberating throughout the discipline for more than 30 years. As it is evident that this call is not a new one, the lack of collaborative efforts in PaleoIndigenous archaeology requires a solution. This thesis seeks to reveal the *Authorized Heritage Discourse*, which dictates research in the field, emphasize the importance of Indigenous collaboration for Clovis age archaeology through a case study of the Anzick Clovis Child, and propose a multivocal framework to help better facilitate the creation of holistic, public facing narratives.

INDEX WORDS: Paleoindian Archaeology, Clovis, Pre-Clovis, Critical Heritage Studies,
Public Archaeology, Indigenous Collaboration

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DEDICATION

This Thesis is dedicated to my little brother, Willy McWhirter. Although he is no longer a part of this world, his memory lives on.

ACKNOWLEDGEMENTS

I would like to thank my family and loved ones for their unwavering support---I could have never made it to this point in my life without that support. I would also like to thank my major professor, Scott Nesbit, who took a leap of faith with me on this project, and whose support I am grateful for. Additionally, I would like to thank the wonderful members of my committee, James Brooks, Jennifer Birch, Stefan Brannan, and Katie Marages. This project has required me to think about heritage in a new way and, ultimately, to seek multidisciplinary advice. I could not have asked for a better committee to guide me through such complex issues. A special thank you to those who sparked my interest in PaleoIndigenous archaeology, at the University of Wyoming: Todd Surovell, Spencer Pelton, and Chase Mahan. Finally, I would like to thank those who took the time to discuss these topics with me, suggest books or articles, and/or offer insight and support: Bonnie Pitblado, Paulette Steeves, Maddie Mackie, Charles Koenig, and James Reap.

Before I get into the content of this thesis, I would like to establish that I am writing about these topics from a unique position. Importantly, I want to establish that I am not of Native American Descent, and that I am also not of a fully Western background. My paternal line hails from many places in Europe, but Louisiana is the place that became home. My maternal line hails from the Visayâs of the Philippines, where my ancestors trace their history to antiquity. My heritage exists in a multiplicity unique to me, full of gumbo and lumpia.

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CHAPTER 1

INTRODUCTION

Late-Pleistocene archaeology (also known as PaleoIndian or PaleoIndigenous) is a field which takes particular interest in the question of *the peopling of the Americas*. This question of peopling seeks to find an answer to: *who* were the first peoples to arrive in the Western Hemisphere, *where* did they come from and *when* did they arrive? This peopling question has resulted in a schism, within the subfield of archaeology, that has manifested into the warring models of the Clovis-First and the pre-Clovis.¹ This debate has largely become the focus of professionals working in this subfield, but this focus is on a topic which many descendants claim does not represent their beliefs of *time immemorial* (a phrase which is used to demonstrate ancestral depth and ties to land, can refer to millennia or a few decades).² Further, this debate has deepened the division between Clovis archaeologists and Indigenous Knowledge holders. However, there is one Clovis-based case where both the scientific data and the Indigenous origin stories worked to enrich one another; this story occurred with the uncovering of the Anzick Clovis Child.

¹ Todd Surovell et al., “Late date of human arrival to North America: Continental scale differences in stratigraphic integrity of pre-13,000 BP archaeological sites.” *PLoS ONE* 17(4), 2022.

Michael R. Stafford and D.L. Carlson., “The age of Clovis– 13,050 to 12,750 cal yr BP.” *Science Advances* 6(43), 2020.

J.M. Broughton and E.M. Weitzel., “Population reconstructions for humans and megafauna suggest mixed causes for North American Pleistocene extinctions.” *Nat. Commun.* 9(5441), 2018.

Ben A. Potter et al., “Current evidence allows multiple models for the peopling of the Americas.” *Science Advances* 4(8), 2018.

Ben A. Potter., “Arrival routes of the first Americans uncertain – Response.” *Science* 359(6381), pp. 1225, 2018.

David S. Whitley and Ronald I. Dorn., “New Perspectives on the Clovis vs. Pre-Clovis Controversy.” *American Antiquity* 58(4), 2017.

² Paulette F.C. Steeves, “Singing to Ancestors: Respecting and re-telling stories woven through ancient ancestral lands,” in *The Routledge Companion to Global Indigenous History*, Routledge, pp. 186, 2021.

Paulette F.C. Steeves, *The Indigenous Paleolithic of the Western Hemisphere*, University of Nebraska Press, 2021.

A problem within the subfield's research has been identified by both Indigenous scholars and non-indigenous archaeologists that, within PaleoIndigenous, Clovis-based archaeology there is a need for more collaborative efforts with Indigenous stakeholders.³ Indigenous collaboration in archaeological projects and research has increased across various other subfields of American archaeology over the last 30 years and since the passing of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA).⁴ This legislation did not require collaborative research or the creation of relationships between heritage professionals and tribes. However, after its passing, voluntary collaborative efforts began to rise in number for other archaeology subfields.⁵

Relevance to Historic Preservation:

While late-Pleistocene archaeology is not a subfield of the American discipline of Historic Preservation, this thesis treats the issues presented as a discourse of critical heritage studies.⁶ Critical heritage studies are an approach used to address critical issues presented within the broader heritage field. A major point of this approach argues that much like the assertion that knowledge production is not a neutral matter but is, instead, inherently political,⁷ critical heritage

³ Bonnie L. Pitblado, "On Rehumanizing Pleistocene People of the Western Hemisphere." *American Antiquity* 87(2), 2022, pp. 217-235.

Gesa Mackenthun and Christen Mucher., *Decolonizing "Prehistory:" Deep Time and Indigenous Knowledge in North America*, 2021

Matthew C. Sanger. "The Indigenous Paleolithic of the Western Hemisphere. PAULETTE F.C. STEEVES. 2021. University of Nebraska Press, Lincoln. xxvii + 294 pp. \$65.00 (hardcover), ISBN 978-1-4962-0217-8., *American Antiquity*. 2022;87(3):627-682.

Paulette F.C. Steeves, *The Indigenous Paleolithic of the Western Hemisphere*, 2021.

⁴ Colwell-Chanthaphonh, Chip. "Archaeology and Indigenous Collaboration," in *Archaeological Theory Today*," ed. by Ian Hodder. (p. 270.), *Polity Press*, 2012.

⁵ Ibid.

⁶ Tim Winter, "Clarifying the critical in critical heritage studies." *International Journal of Heritage Studies*, pp. 532-545, 2012.

⁷ This comes from Michael Foucault's term in critical theory known as 'power-knowledge.'

studies assert the same claim regarding the production of knowledge related to heritage.⁸ Therefore, the production of research and narratives within the broader field of heritage have the ability to produce issues which can have impacts extending beyond the field itself.⁹ A central goal of the critical analysis of the field is to promote dialogue which is more engaged and productive within the sector of heritage conservation.¹⁰ A critical heritage studies professional, Laurajane Smith has identified that, oftentimes, it is the case that historiographical experts (archaeologists, historians, ethnographers, etc.) are just one stakeholder in deciding what gets to be preserved, interpreted, and then valued.¹¹ Further, this field of study recognizes the disposition of these professionals as the drivers or actors of the Authorized Heritage Discourse (AHD).¹² Smith *would* classify these warring Clovis models as an AHD,¹³ which is something that adds to, "...the alienation of non-experts from their heritage to the growing authority of heritage professionals."¹⁴ Critical approaches to heritage studies is a growing discourse and practice within the field of Historic Preservation, while these practices may be applied to different forms of moveable, immovable, tangible and intangible forms of heritage, the sentiment of holistic knowledge production is apparent.

The Research Problem:

⁸ Ibid.

⁹ Tim Winter, "Clarifying the critical in critical heritage studies." *International Journal Of Heritage Studies*, pp. 532-545, 2012.

¹⁰ Elizabeth Chilton., "Engaging "the Public" in Heritage: Which Public and Whose Heritage, in *Relevance and Application of Heritage in Contemporary Society*, pp.96-104, Routledge, 2018.

¹¹ Ibid.

¹² Elizabeth Chilton., "Engaging "the Public" in Heritage: Which Public and Whose Heritage, in *Relevance and Application of Heritage in Contemporary Society*, pp.96-104, Routledge, 2018.

¹³ Laurajane Smith and Emma Waterton., "Constrained by Commonsense: The Authorized Heritage Discourse in Contemporary Debates, in the *Oxford Handbook of Public Archaeology*, Oxford University Press, 2012.

¹⁴ Elizabeth Chilton., "Engaging "the Public" in Heritage: Which Public and Whose Heritage, in *Relevance and Application of Heritage in Contemporary Society*, pp.96-104, Routledge, 2018.

Broadly, there are two ways of knowing regarding the origins of the First Peoples. The first is informed by Indigenous Knowledge (IK) of the past and the second is informed by the formal discipline of archaeology. In many ways, the two have been presented as incompatible. This thesis will take particular interest in the case of the Anzick Clovis Child. Again, this case is an example of a Clovis-age site where research has worked to combine the two ways of knowing and produced narratives contrary to the Authorized Heritage Discourse of the Clovis-First model.

Multivocality as a Solution:

Multivocality is an approach which upholds the equal value of multiple interpretations for a single topic of research.¹⁵ While these varied ways of knowing have often been presented as incompatible, it is evident that other subfields have utilized multivocal approaches where each vocality has worked to better enrich one another.

There are two examples of multivocal approaches related to Indigenous origin stories in research which this study will address, although there are likely more examples to draw from. The first example lies with the Pawnee scholar Roger Echo-Hawk's proposal for "ancient American history" which is an effort to bring together oral stories and archaeology by studying Arikara origin stories.¹⁶ This study emphasizes the fact that, while it is evident that oral history has become a well-established scholarly area of research, "The investigation of oral traditions that pertain to ancient settings lacks a similarly strong disciplinary infrastructure...."¹⁷ Echo-

¹⁵ Sonya Atalay., "Multivocality and Indigenous Archaeologies," in *Evaluating Multiple Narratives: Beyond Nationalist, Colonialist, Imperialist Archaeologies*, Springer, 2008.

¹⁶ Roger C. Echo-Hawk., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time." *American Antiquity*. 2000;65(2):267-290.

¹⁷ Roger C. Echo-Hawk., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time." *American Antiquity*. 2000;65(2):279.

Hawk further stresses that this collaboration between archaeologists and Indigenous stakeholders is important as often the narratives created outside of the oral tradition can be leveraged for political reasons whereas collaboration can, “...rework archaeology to incorporate new propositions that explain the phenomena of history.”¹⁸ Echo-Hawk also lays out a series of methods that can be utilized to assess oral stories. This thesis chooses to highlight the methods presented here, as they could be useful for future, collaborative research. However, this thesis seeks to present two lines of evidence (the archaeology and the oral tradition), for this reason, I will not seek to assess the origin story or IK which I will present.

The second example lies with archaeologist, Wesley Bernardini’s longitudinal research project with the Hopi Cultural Preservation Office. This study, informed by Hopi oral traditions and IK, worked to holistically reconstruct historical narratives about the Hopi Mesas.¹⁹ Hypotheses and conclusions made throughout this study were nuanced because of their grounding in IK and the multi-proxy effort to understand this history which included the study of oral tradition, archaeology, art, architecture, and ethnography.²⁰ Further, this project could not have been completed without the implementation of multiple vocalities through various Hopi Knowledge holders. Importantly, a central goal of this project was to ensure that the information was written in a manner that would make the study accessible to everyone, and especially to the Hopi people.

This thesis aims to demonstrate that, even if the two ways of knowing cannot work to corroborate one another, they can both *still* be presented together with an application of

¹⁸ Chip Colwell-Chanthaphonh., “Archaeology and Indigenous Collaboration,” in *Archaeological Theory Today.*” ed. by Ian Hodder. (p. 275.), *Polity Press*, 2012.

¹⁹ Wesley Bernardini., *Becoming Hopi: A History.* The University of Arizona Press, 2021.

²⁰ Chip Colwell-Chanthaphonh., “Archaeology and Indigenous Collaboration,” in *Archaeological Theory Today.*” ed. by Ian Hodder. (p. 275.), *Polity Press*, 2012.

multivocality. This thesis will use the Echo-Hawk and Bernardini examples to discuss how archaeologists can approach the implementation of oral traditions and Indigenous Knowledge when constructing archaeological narratives. The Clovis Child case will serve as an example of a study that implemented collaborative methods for the Clovis age, however, this thesis will stress that the practice needs to become more commonplace.

Significance of the Study:

Now that I have explained the research problem and introduced the study, I will highlight how my research will make a difference and what implications it will have. This thesis will benefit the literature as it offers a practical application to the subfield of PaleoIndigenous archaeology that will promote the production of public facing narratives enriched by both science and Indigenous Knowledge. This thesis's proposal for a multivocal framework in PaleoIndigenous archaeology will work to provide a solution for the practical and theoretical issues which the peopling question has promoted. The middle ground offered by a multivocal approach will, in turn, promote an easier means for voluntary collaboration and NAGPRA consultation when it is required. This is especially relevant with the recent passing of the new NAGPRA regulations in January of 2024.

The Native American Graves Protection and Repatriation Act:

The Native American Graves Protection and Repatriation Act of 1990 has recently been updated with new regulations as of January 2024. The legislation is applied when funerary objects, ancestors (human remains) or objects of cultural patrimony are involved, but the law extends only to tribal or federal lands and the collections of museums or universities. Moreover, the legislation does not apply to the question of the peopling of the Americas, nor did it apply to

the case of the Anzick Clovis Child, where an ancestor was encountered on private land. The multivocal collaboration was entirely voluntary by all parties involved. The new regulations hold that consulting agencies must defer to Tribal Nations when determining the affiliation of funerary objects or ancestors for repatriation and that the agency is no longer allowed to claim objects or ancestors as, ‘not culturally affiliated.’²¹ This thesis’s proposal to move toward a multivocal approach for the subfield is to better facilitate NAGPRA when voluntary collaboration becomes legally mandated consultation.

Chapter Organization:

Chapter 2:

This chapter will review the current literature of the subfield of PaleoIndigenous archaeology. This chapter will cover the hypotheses and models proposed to explain the peopling of the Americas (Coastal Migration/Kelp Highway, pre-Clovis, Clovis-First, etc.). This chapter will serve to demonstrate the AHD regarding the question of origin for the First Peoples. This chapter will also provide evidence, through this literature review, that PaleoIndigenous, Clovis-based archaeology, largely, is not engaged in collaborative research.

Chapter 3:

This chapter will present multiple Indigenous origin stories. The two major forms of origin stories that this chapter will focus on are creation/emergence stories that use the motifs of the Diving Bird, and subterranean emergence. After presenting these narratives, I will discuss how these forms of knowledge are related to the study of deep time by reviewing literature that has

²¹ 88 FR 86452

linked these kinds of narratives to the late-Pleistocene and regarding the Diving Bird Myths (DBM) to one another.

Chapter 4:

This chapter will recount the story of the Anzick Clovis Child by synthesizing narratives that have been presented about him by collaborative efforts between scientists and Indigenous Knowledge holders. This chapter will serve to demonstrate that a multivocal approach can enrich narratives and benefit public knowledge.

Chapter 5

This chapter will summarize the conclusions made in the literature review, the review of Indigenous origin stories, the Anzick Clovis Child case and finally, reiterate the importance of this study and my proposal for a future implementation of a multivocal framework for the *peopling of the Americas*.

CHAPTER 2

PALEOINDIGENOUS ARCHAEOLOGY

Broadly, PaleoIndigenous archaeology seeks to better understand the First Peoples of the Western Hemisphere. In 2018, archaeologist Victor Thompson published a commentary to examine PaleoIndigenous scholarship as an outside academic. In this study, Thompson identified three major areas of inquiry which appear throughout the literature. These three areas are: (1) chronology, migration, and settlement research; (2) the study of technology, and (3) studies based on variations of behavioral ecology. For the purposes of this thesis, this chapter takes particular interest in the first major area, chronology, and settlement research, to review the current literature, which has seen some significant shifts since that review's publication. Through a review of current literature, this chapter will reveal the AHD that exists regarding the question of origin for the First Peoples.

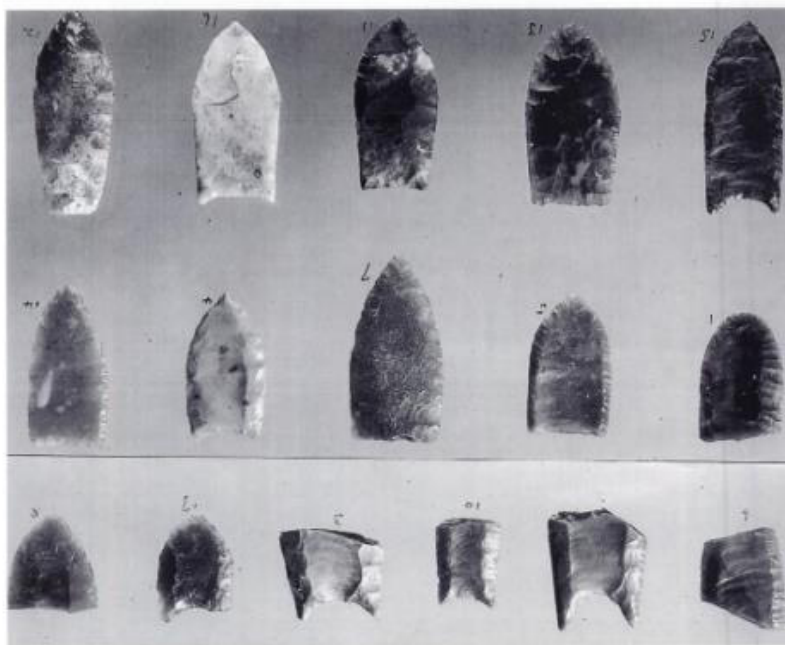


Figure 1. Fluted and unfluted projectile points from Blackwater Draw, Clovis, New Mexico.

This subfield has seen a schism, within itself, regarding the first major area of inquiry: (1) chronology, migration, and settlement research. In PaleoIndigenous scholarship there are two major camps which researchers fall into regarding the question of chronology and settlement, the first being those who follow the Clovis-First model and the second being those who follow the pre-Clovis model for settlement and migrations. The Clovis-First model contends that the First Peoples, named *Clovis* for the fluted lithic tools, (see Figure 1.) discovered outside of Clovis, New Mexico, were the first to migrate to the modern, lower 48 states around the end of the Last Glacial Maximum, sometime around 13,400-13,100 years ago.²² The pre-Clovis model is one which exists in multiplicity, but at its core, the model suggests that migrations were likely to have happened during, and in a few but less accepted cases, before the Last Glacial Maximum; the model contends that possibly multiple migrations occurred before the Clovis ~13,000 years ago date. Much of the argument for the possibility of pre-Clovis comes from coastal sites and the earliest peopling of south America, occurring before the opening of the Clovis-First Ice-Free Corridor (ICF) inland route (see Figure 2).²³

²² Spencer R. Pelton et al., “Accurate population proxies do not exist between 11.7 and 15ka in North America,” *Nature Communications* 13(4694), 2022.

²³ Loren G. Davis and David B. Madsen, “The coastal migration theory: Formulation and testable hypotheses,” *Quaternary Science Reviews* 249, 2020.



Figure 2. Map showing sites indicative of potential migration routes

Each of these camps have given way to a set of hypotheses that are closely linked to either the Clovis-First or pre-Clovis model. The developments of new hypotheses have certainly added to the two camps' entrenched nature.²⁴ Regarding the Clovis-First model, closely associated, chronology-based hypotheses include: the Overkill Hypothesis²⁵ and the Ice-Free Corridor (deglaciation) Hypothesis.²⁶ Regarding the pre-Clovis model, hypotheses include: the

²⁴ Bonnie L. Pitblado, "On Rehumanizing Pleistocene People of the Western Hemisphere." *American Antiquity* 87(2), 2022, pp. 217-235.

²⁵ Todd A. Surovell et al., "Test of Martin's overkill hypothesis using radiocarbon dates on extinct megafauna," *PNAS* 113(4), pp. 886-891, 2016.

Paul S. Martin, "The Discovery of America: The first Americans may have swept the Western Hemisphere and decimated its fauna within 1000 years," *Science* 179(4077), pp. 969-974, 1973.

²⁶ Jorie Clark et al., "The age of the opening of the Ice-Free Corridor and implications for the peopling of the Americas," ed. David Meltzer, *PNAS* 119(14), 1-6, 2022.

Paul S. Martin, "The Discovery of America: The first Americans may have swept the Western Hemisphere and decimated its fauna within 1000 years," *Science* 179(4077), pp. 969-974, 1973.

Coastal Migrations Theory (CMT),²⁷ Kelp Highway and Solutrean Hypotheses.²⁸ A third model, the Bering Standstill model, has begun to gain attention in the field. This model comes from the result of genetic research, moreover, it will be discussed in the section of this chapter which reviews genetic research as it relates to the peopling of the Americas.

Clovis-First Hypotheses	Description	Pre-Clovis Hypotheses	Description
Ice Free (deglaciation) Corridor Hypothesis (IFC)	<p>This hypothesis is closely linked to the Clovis-First Model and suggests that the First Peoples likely were coming from Asia and crossing into Alaska via Beringia (Bering Land Bridge) sometime around 13,000 years ago.²⁹</p> <p>A recent study, however, states that due to new data from both ancient genetics and archaeology are suggesting the ICF to have initially opened sometime around 14-15,000 years ago.³⁰</p>	Coastal Migrations Theory (CMT)	This theory has been described as “One of the two leading hypotheses in regard to the settlement of the Americas.” This theory proposes that multiple migrations are likely and that it is likely watercraft were used to migrate along the coast of Beringia and the Archipelagos.
Overkill/ Blitzkrieg Hypothesis	This hypothesis is also closely linked to the Clovis-First Model and suggests that late-Pleistocene megafauna extinctions were a result of incoming migrations of Clovis peoples who hunted them to extinction upon their arrival and rapid migrations following an inland route, first from the Asia to Beringia, then through the Ice-Free Corridor and into what is now the lower 48 states. ³¹	Kelp Highway Hypothesis	This hypothesis is an ecological hypothesis which is often linked to the CMT. Due to an accumulation of early sites, in proximity to observably productive kelp forests, this hypothesis suggests that these marine ecologies, “...could have facilitated the migration of maritime peoples into the New World,” anytime between 18,000 to 13,000 years ago. ³²

²⁷ Loren G. Davis and David B. Madsen, “The coastal migration theory: Formulation and testable hypotheses,” *Quaternary Science Reviews* 249, 2020.

²⁸ Jon M Erlandsen et al., “The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas,” *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., “Kelp forest ecosystems: Biodiversity, stability, resilience, and their future.” *Environmental Conservation*, 29, pp. 453, 2002.

²⁹ Jon M Erlandsen et al., “The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas,” *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., “Kelp forest ecosystems: Biodiversity, stability, resilience, and their future.” *Environmental Conservation*, 29, pp. 453, 2002.

³⁰ Jerome E. Dobson et al., “The Bering Transitory Archipelago: stepping stones for the first Americans,” *Geoscience* 353, pp. 55-65, 2021.

³¹ Paul S. Martin, “The Discovery of America: The first Americans may have swept the Western Hemisphere and decimated its fauna within 1000 years,” *Science* 179(4077), pp. 969-974, 1973.

Table 1. Chronology Based, Archaeological Hypotheses

These two archaeological models and their hypotheses regarding chronology and settlement patterns have caused some outside academics to argue that they, not only, deepen the divide in research, but they also *distract* the field from pursuing different questions or producing more productive narratives in research.³³ The subfield, because of its heavy focus on this area of inquiry, has been typified as a “peopling archaeology,” in one commentary, rather than truly a PaleoIndigenous archaeology.³⁴

³² Jon M Erlandsen et al., “The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas,” *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., “Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future.” *Environmental Conservation*, 29, pp. 453, 2002.

³³ Gesa Mackenthun and Christen Mucher, *Decolonizing “Prehistory:” Deep Time and Indigenous Knowledge in North America*, University of Arizona Press, pp. 1-21, 2021.

³⁴ Bonnie L. Pitblado, “On Rehumanizing Pleistocene People of the Western Hemisphere.” *American Antiquity* 87(2), 2022, pp. 217-235.

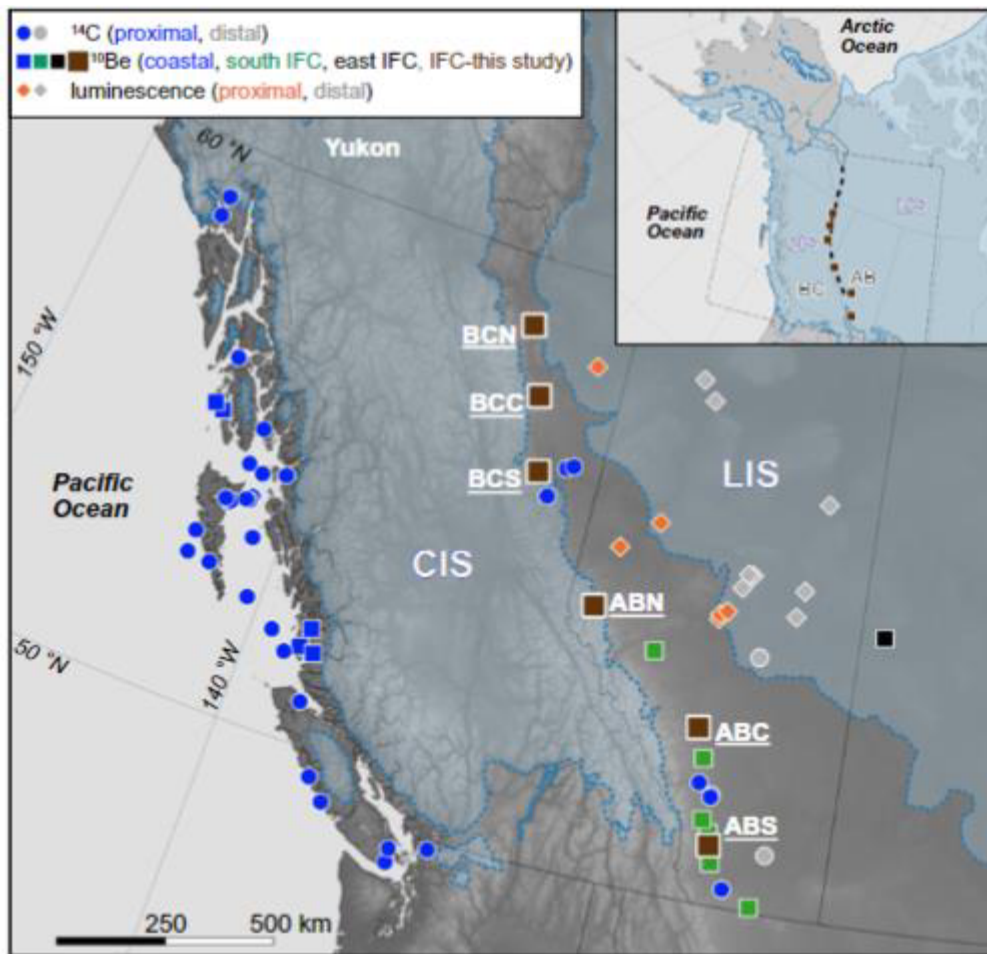


Figure 3. Ice Sheets after the opening of the ICF or Coastal Corridor, around 14,200 years ago, with locations of archaeological sites.

Review of the Scholarship:

For the past 10 years of scholarship, PaleoIndigenous archaeology has seen a few major shifts. The first comes with increased genomic research as it relates to the First Peoples,³⁵ the second is an increase in studies related to alternate hypotheses for the peopling of the Americas³⁶

³⁵ Fiedel, Stuart J. "The Anzick genome proves Clovis is first, after all." *Quaternary International*, 444 (2017), 4-6. Jennifer A. Raff, and Deborah A. Bolnick. "Genetic roots of the first Americans." *Nature* 506, 162-163 (2014). Morten Rasmussen et al. "The genome of a Late Pleistocene human from a Clovis burial site in western Montana," *Nature*, 506, 225-229, 2014.

³⁶ Braje, Todd J. et al, "Finding the first Americans: The first humans to reach the Americas are likely to have a coeval coastal route." *Science* 358(6363), pp. 592-594, 2017.

and the last being an increase in sites that greatly predate the Clovis-First model. This has resulted in tension among researchers that has resulted in back-and-forth response papers³⁷ and several outside academics have recognized this divisive literature and have published critiques, accordingly.³⁸

The first major shift comes with the proposed Bering Standstill model. In short, The Bering Standstill Model comes from ancient genomic research and contends that the ancestral group to Native Americans resulted from a convergence of two ancient groups somewhere in Asia; the ancestral group then migrated into Beringia, where the group settled for time. This pause was long enough for the population to adopt specific genetic mutations before then migrating southward. This hypothesis seeks to explain genetic variation across founding haplotypes distributed throughout North and South America.³⁹ Originally, proposed by Tamm et al in 2007 and suggested that, regarding archaeological evidence: it was likely that founding populations peopled the Americas sometime after the Last Glacial Maximum. However, another shift came with the sequencing of the genome for the only Clovis related ancestor, in 2014 (the Anzick Clovis Child), and the research which stemmed from this study revealed genomic

Jon M Erlandsen et al., “The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas,” *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., “Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future.”

Environmental Conservation, 29, pp. 453, 2002.

³⁷ Potter, Ben A., “Arrival routes of the first Americans uncertain — Response.” *Science* 359(6381), pp. 1224-1225, 2018.

Braje, “Finding the First Americans: the first humans to reach the Americas are likely to have a coeval coastal route, 2017.

³⁸ Paulette F.C. Steeves, *The Indigenous Paleolithic of the Western Hemisphere*, 2021.

Bonnie L. Pitblado, “On Rehumanizing Pleistocene People of the Western Hemisphere.” *American Antiquity* 87(2), 2022, pp. 217-235.

Jennifer Raff, *Origin: A genetic history of the Americas*, 2022.

Gesa Mackenthun and Christen Mucher., *Decolonizing “Prehistory.” Deep Time and Indigenous Knowledge in North America*. University of Arizona Press, 2021.

Bonnie L. Pitblado., “A Tale of Two Migrations: Reconciling Recent Biological and Archaeological Evidence for the Pleistocene Peopling of the Americas,” *Journal of Archaeological Research* 19, pp. 327-375, 2011.

³⁹ Erika Tamm et al., “Beringian Standstill and Spread of Native American Founders,” *PLoS ONE* 2(9), 2007.

information regarding the peopling of the Americas that gave way to new areas of interest, with the possibility of older, pre-Clovis migrations.

The second major shift, an increase in studies related to alternate hypotheses for the peopling of the Americas.⁴⁰ These hypotheses include Coastal migration⁴¹ and the Kelp Highway hypothesis.⁴² Increased interest in these hypotheses have caused dissention among scholars.⁴³ Some scholars writing in favor of a coastal route, as opposed to the Clovis-First, Ice-Free Corridor, state that the Clovis-First model has seen its demise and that this is a consensus among scholars.⁴⁴ This is, in fact, not the case as responses in the literature have fired back to state the opposite to be true. Much of the debate would likely not exist if it were not for the persistence of the Clovis-First model. What is clear is that while some archaeologists have moved to these

⁴⁰ Braje, Todd J. et al., "Finding the first Americans: The first humans to reach the Americas are likely to have a coeval coastal route." *Science* 358(6363), pp. 592-594, 2017.

Jon M Erlandsen et al., "The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas," *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., "Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future." *Environmental Conservation*, 29, pp. 453, 2002.

⁴¹ Loren G. Davis and David B. Madsen, "The coastal migration theory: Formulation and testable hypotheses," *Quaternary Science Reviews* 249, 2020.

Todd J. Braje et al., "Fladmark + 40: What Have We Learned about a Potential Pacific Coast Peopling of the Americas?" *American Antiquity* 85(1), 2020, pp. 1-21, 2019.

Knut B. Fladmark., "Routes: Alternative Migration Corridors for the Early Man in North America. *American Antiquity* 44, pp. 55-69.

⁴² Jon M Erlandsen et al., "The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas," *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., "Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future." *Environmental Conservation*, 29, pp. 453, 2002.

Oppenheimer, Stephen, Bruce Bradley, and Dennis Stanford., "Solutrean hypothesis: genetics, the mammoth in the room." *World Archaeology*, 46(5), pp. 752-774, 2014.

Source: Jorie Clark et al., "The age of the opening of the Ice-Free Corridor and implications for the peopling of the Americas," ed. David Meltzer, *PNAS* 119(14), pp. 2, 2022.

⁴³ Jon M Erlandsen et al., "The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas," *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., "Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future." *Environmental Conservation*, 29, pp. 453, 2002.

Oppenheimer, Stephen, Bruce Bradley and Dennis Stanford., "Solutrean hypothesis: genetics, the mammoth in the room." *World Archaeology*, 46(5), pp. 752-774, 2014.

Source: Jorie Clark et al., "The age of the opening of the Ice-Free Corridor and implications for the peopling of the Americas," ed. David Meltzer, *PNAS* 119(14), pp. 2, 2022.

⁴⁴ Todd J. Braje, "Finding the First Americans: the first humans to reach the Americas are likely to have a coeval coastal route, 2017.

alternative hypotheses to explain the peopling of the Americas, many have clung to the Clovis-First model.

When reviewing this literature, one begins to see the various ways that the pre-Clovis are refuted by Clovis-based archaeologists. Pre-Clovis sites are often discussed by Clovis-First followers as lacking the same uniformity displayed by the fluted projectile point types which characterize the Clovis assemblage. Others describe the pre-Clovis as a potential antecedent to the Clovis through some shared traits. Jennings and Waters conducted a study in 2014, which sought to compare the pre-Clovis assemblage known as the *Buttermilk Creek assemblage* to other site-level Clovis assemblages. However, while some similar traits have been identified (e.g., bifacial reduction, blades, and various flake tool types), from the *pre-Clovis Buttermilk Creek assemblage*, many traits which define Clovis technology are not present in the studies pre-Clovis (e.g., overshot flaking, fluting/channel flakes, blade cores or retouched blades).⁴⁵ There is a possibility that pre-Clovis could be the antecedent of Clovis, but further research needs to occur before any conclusions can be made in that regard.

Some scholars have cited this lack of uniformity as evidence for a lack of human presence at these sites. This point is stated by Braje et al (2017),

Answers to the questions of how, when, and where humans first reached the Americas remains tentative. The small sample of pre-Clovis sites has yet to produce a coherent technological signature with the broad geographic patterning that characterizes Clovis. Distinctive fluted Clovis, other fluted PaleoIndian, and fishtail points previously provided a roadmap that archaeologists used to trace the spread of PaleoIndians throughout the Americas. Such a roadmap is lacking for pre-Clovis sites.⁴⁶

⁴⁵ Thomas A. Jennings and Michael R. Waters., “Pre-Clovis Lithic Technology at the Debra L. Friedkin Site, Texas: Comparisons to Clovis Through Site-Level Behavior, Technological Trait-List, and Cladistic Analyses,” *American Antiquity* 79(1), 2014, pp. 38, 2014.

⁴⁶ Todd J. Braje, “Finding the First Americans: the first humans to reach the Americas are likely to have a coeval coastal route, 2017.

Without the marked *roadmap* offered by uniform assemblages, the pre-Clovis can prove more difficult regarding making it through the hyper critical lens of fellow researchers. Thompson describes the nature of this body of scholarship well when he stated that there is a “hyper-critical approach” within this literature where Clovis-based researchers criticize the validity of pre-Clovis sites and then refute them. Further, Thompson stated that: “In speaking with colleagues, one gets a sense there is something critically wrong with some of these studies that is agreed upon by those in the know, but which is unclear to me (or a broader public).”⁴⁷ Pitblado suggested, in her critique, that the field should venture to ask new questions that are beyond those related to topics like “movement, mobility, and migration” and “human-environment interaction.”⁴⁸

The last major shift has been the result of increased findings that predate Clovis significantly, that have also been widely accepted across the broader field but have remained contentious issues for Clovis-based research,⁴⁹ adding to this identified “hyper-critical approach” in the literature. There are many sites I could discuss in this review,⁵⁰ but I will focus on the recent pre-Clovis evidence observed at the White Sands National Park, was published as a

⁴⁷ Victor D. Thompson., “A Perspective on Paleoindian Research from the Opposite End of the Foraging Spectrum,” *PaleoAmerica*, 4:3, 177-182, 2018.

⁴⁸ Bonnie L. Pitblado, “On Rehumanizing Pleistocene People of the Western Hemisphere. “*American Antiquity* 87(2), 2022, pp. 227.

⁴⁹ Todd A. Surovell et al, “Late date of human arrival to North America: Continental scale differences in stratigraphic integrity of pre-13,000 BP archaeological sites.” *PLoS ONE* 17(4), 2022.
Ben A. Potter., “Current evidence allows multiple models for the peopling of the Americas.” *Science Advances* 4(8), 2018.

⁵⁰ Mario Pino and Tom D. Dillehay., “Monte Verde II: an assessment of new radiocarbon dates and their sedimentological context,” *Antiquity* 97(393), pp. 524-540), 2023.

Lisa-Marie Shillito et al., “pre-Clovis occupation of the Americas identified by human fecal biomarkers in coprolites from Paisley Caves, Oregon,” *Science Advances* 6(29), 2020.

Michael R. Waters et al., “The Buttermilk Creek Complex and the Origins of Clovis at the Debra L. Friedkin Site, Texas,” *Science* 331(6024), pp. 1599-1603, 2011.

James M. Adavasio., “Moments in time: differential site use patterns at Meadowcroft Rockshelter (36WH297). *North American Archaeologist* 31:287-303, 2010.

paradigm shifting discovery, suggested humans in the Western Hemisphere during the Last Glacial Maximum, and thus caused controversy.

In 2020, evidence published from the White Sands National Park, in New Mexico, would cause controversy in PaleoIndigenous archaeology.⁵¹ At this site, fossilized human footprints, associated with mammoth, camel and canid footprints were observed.⁵² The footprints were dated based on the radiocarbon age determined for seeds present in strata throughout the series of footprints. The dating of the seeds offered a relative date for human presence at this site sometime around 23,000 years ago.⁵³ This date significantly predated the Clovis and any other pre-Clovis sites in North America. These findings certainly stood out when the study was published. This is the only site that has provided, more widely accepted, evidence for human presence in the Western Hemisphere, *during* the Last Glacial Maximum.⁵⁴ While other pre-Clovis sites exist with dates that extend to this time and some of which are significantly older, White Sands is the only site which has *clear* evidence of humans—the footprints. Many other pre-Clovis sites are assessed more skeptically as it is unclear if reported artifacts are truly artifacts or products of natural processes.⁵⁵ White Sands definitively shows evidence of humans, but where skepticism comes in from the Clovis-First camp lies in the dating methods.

A series of response papers would flood the literature. The rhetoric within these responses either stated that these findings were not conclusive because of potential issues with site

⁵¹ Matthew R. Bennett et al., “Walking in mud: Remarkable Pleistocene human trackways from White Sands National Park (New Mexico),” *Quaternary Science Reviews* 249, 2020.

⁵² Ibid.

Matthew R. Bennett et al., “Evidence of humans in North America during the Last Glacial Maximum,” *Science* 373(6562), pp. 1528-1531, 2021.

⁵³ Ibid.

⁵⁴ Jeffery S. Pigati et al., “Independent age estimates resolve the controversy of ancient human footprints at White Sands,” *Science* 382(6666) pp. 73-75, 2023.

⁵⁵ S. R. Holen et al., “A 130,000-Year -Old Archaeological Site in Southern California, USA.” *Nature* 544, pp. 479-483, 2017.

formation or with the actual plant materials which were dated.⁵⁶ Some argued that because of factors like older strata mixing with younger strata, that the footprints could even be indicative of Clovis peoples and not pre-Clovis.⁵⁷ Eventually, much of the arguing in the literature would dissipate with an independent age estimate study.⁵⁸ However, for those in the know, this site and many other pre-Clovis sites still are highly contested within the subfield. As Matthew Bennett states in the introduction to his findings at White Sands, “Despite a plethora of archaeological research of the past century, the timing of human migration into the Americas is still far from resolved.”⁵⁹

As pre-Clovis archaeology has seen an increase in sites and research efforts, Clovis-based archaeology has largely remained constrained to the three major areas of research identified by Thompson: (1) chronology and settlement research; (2) the study of technology; (3) studies based on variations of behavioral ecology. However, a great majority of this research falls in the study of chronology and settlement and the critique of such studies. More specifically, the chronology and settlement research appear in the literature as largely combative to new, older than Clovis sites.⁶⁰ Clovis based archaeology has staked its claim, despite rising publication of pre-Clovis sites. Seemingly, to maintain their relevance, much of the literature has been typified

⁵⁶ C. Vance Haynes., “Evidence for Humans at White Sands National Park during the Last Glacial Maximum Could Actually be for Clovis People ~13,000 Years Ago,” *PaleoAmerica* 8(2), pp. 95-98, 2022.

⁵⁷ Ibid.

⁵⁸ Jeffery S. Pigati et al., “Independent age estimates resolve the controversy of ancient human footprints at White Sands,” *Science* 382(6666) pp. 73-75, 2023.

⁵⁹ Matthew R. Bennett et al., “Evidence of humans in North America during the Last Glacial Maximum,” *Science* 373(6562), pp. 1528-1531.

Tom D. Dillehay., “Probing deeper into first American studies,” *PNAS* 106(4), pp. 971-978, 2009.

⁶⁰ Todd A. Surovell et al, “Late date of human arrival to North America: Continental scale differences in stratigraphic integrity of pre-13,000 BP archaeological sites,” *PLoS ONE* 17(4), 2022.

Ben A. Potter et al., “Current Understanding of the Earliest Human Occupations in the Americas: Evaluation of Becerra-Valdivia and Higham (2020),” *PaleoAmerica* 8(1), pp. 62-76, 2021.

Potter, Ben A., “Arrival routes of the first Americans uncertain — Response.” *Science* 359(6381), pp. 1224-1225, 2018.

by response papers and studies that invalidate the integrity of sites that exist prior to the Clovis age.⁶¹

Gap in the Literature: The Indigenous oral tradition

After reviewing the state of contemporary PaleoIndigenous literature, from both the side of the Clovis-First model followers and the pre-Clovis model followers, neither side of this schism has worked to include Indigenous voices. It is also clear, however, that this area of inquiry is not tied to a single geographic or to the history of a single Sovereign Nation. Because of this, it becomes even more clear how difficult beginning to do collaborative research could be for researchers focused on the late-Pleistocene. While some PaleoIndigenous-focused archaeologists have recognized this issue,⁶² this field still lacks a practical solution.

In reviewing critiques of this subfield, written by outside professionals and Indigenous scholars, it becomes clear that many are beginning to urge that the field move away from the peopling question. However, Thompson makes a point which could lend itself useful to professionals researching the peopling question today. Instead of urging professionals to discontinue research into the peopling question, Thompson states that, "...Paleoindian researchers need to think about these studies in different and novel ways, if they are to remain relevant to anthropological archaeology."⁶³ Further, Pitblado suggests that other subfields have moved beyond outdated structures by:

⁶¹ Todd A. Surovell et al, "Late date of human arrival to North America: Continental scale differences in stratigraphic integrity of pre-13,000 BP archaeological sites." *PLoS ONE* 17(4), 2022.

Mary M. Prasciunas and Todd A. Surovell, "Reevaluating the Duration of Clovis: The Problem of Non-Representative Radiocarbon," in *Clovis: On the Edge of a New Understanding* ed. Ashley M. Smallwood and Thomas A. Jennings, Texas A&M University Press, pp. 21-33, 2015.

⁶² Bonnie L. Pitblado, "On Rehumanizing Pleistocene People of the Western Hemisphere." *American Antiquity* 87(2), 2022, pp. 231.

⁶³ Victor D. Thompson., "A Perspective on Paleoindian Research from the Opposite End of the Foraging Spectrum," *PaleoAmerica*, 4:3, 180, 2018.

...embracing new ontologies, overhauling their theoretical arsenals, decolonizing their vocabulary, and recruiting and embracing non-white-male practitioners, including and especially descendants of those we seek to understand.⁶⁴

This thesis agrees with Thompson and Pitblado's suggestions and further suggests that the field should begin to seek to include Indigenous collaboration in research to produce more meaningful, public facing narratives.

PaleoIndigenous research has seen a lot of forward movement in the current literature, and this forward movement has, in some part, overshadowed the fact that Clovis-First model following archaeologists are still actively adding to the literature. Because this Clovis-First vs. pre-Clovis debate is ongoing among researchers, it is safe to conclude that the current Authorized Heritage Discourse regarding the peopling question is *inconclusive* and very much rooted in western science. While much progress has been made toward better understanding the question of the peopling of the Americas, the answer is still far from being understood. The Discourse is that there is no single answer to explain the question of *who* the First Peoples were, *when* they arrived and *where* they came from. The subfield has split into two models seeking to understand the peopling question, but this question is far more complex. The discourse exists in a multiplicity, as does the Indigenous perspective on this question.

Some scholars state that because of epistemological differences these approaches, archaeological science, and Indigenous Knowledge, *cannot* be brought together in a productive manner. What this thesis proposes is that these forms of knowledge do not need to be brought together and meshed into a single narrative, but that rather both forms of knowledge should be *presented*, even if they do not agree. Including the voices of Indigenous descendants to better

⁶⁴ Bonnie L. Pitblado, "On Rehumanizing Pleistocene People of the Western Hemisphere." *American Antiquity* 87(2), 2022, pp. 231.

understand the answers to these questions can create meaningful connections between those who seek to answer the peopling question and Indigenous stakeholders.

CHAPTER 3

NORTH AMERICAN DEEP TIME ORAL STORIES

There are multiple ways of knowing regarding the Peopling question, and as I have discussed the scientific narratives, in the previous chapter, I will now address the Indigenous narratives which are rooted in oral traditions. North American Indigenous origin and creation stories are many in number, but they vary in their narratives. However, connective aspects have been identified by previous scholarship. In this chapter, I will focus on a couple of stories that can be classified as Diving Bird Myths (DBM) and one story that has been linked to the late-Pleistocene, both of which potentially hold information useful to better understanding the Ancient American History⁶⁵ of the First Peoples.

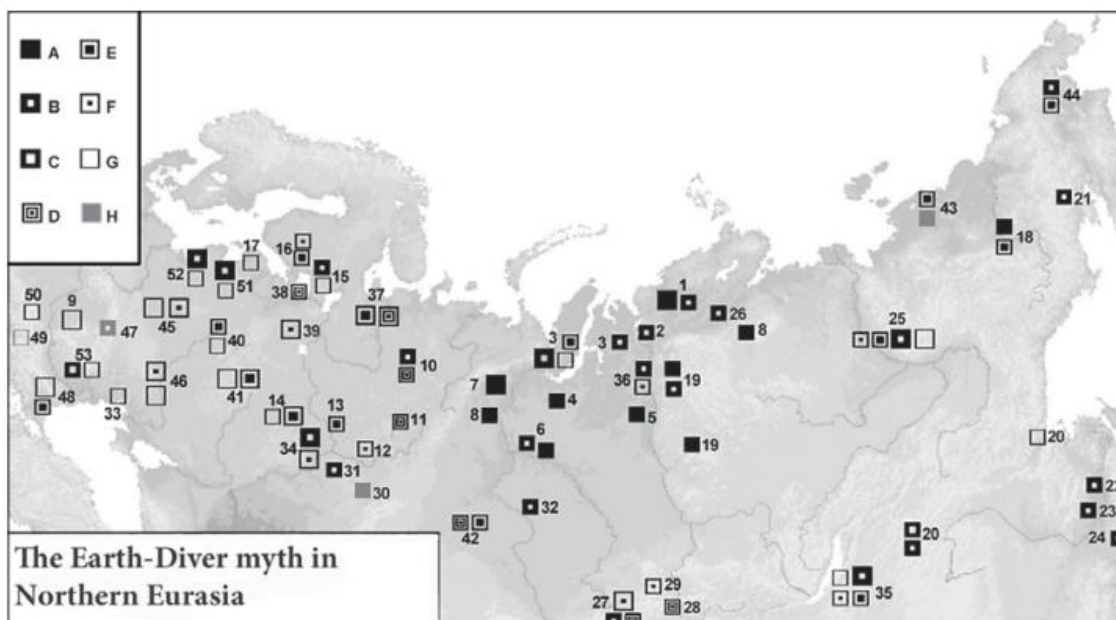


Figure 4. The Earth-Diver myth in Northern Eurasia

⁶⁵ Roger Echo-Hawk, "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time." *American Antiquity*. 2000;65(2):279.



Figure 5. Earth-Diver myth in North America

DBM stories are characterized by the motif of multiple anthropomorphic animals, often a kind of bird, diving deep into a body of water to retrieve soil for a Creator God, who uses it to form the first humans. DBM stories have been recorded and discussed as prevalent across Northern Eurasia, the arctic, and North America. Further, it has been suggested that DBM origins likely come from at least the late Pleistocene in Northern Asia.⁶⁶ Scholars, who have studied the DBM have split the story into categories which are indicative of their age (see Figure). DBM₀ is thought to be the oldest and is a version which does not specify a bird or animal, rather it focuses on the divers attempting to retrieve soil. Only the last diver of lower physical strength is

⁶⁶ Vladimir Napolskikh, "The Earth-Diver Myth (812) in Northern Eurasia and North America," in *Mythic Discourses. Studies in Uralic Traditions*. Ed. By Frog, Anna-Leena Siikala, Ella Stepanova / *Studia Fennica Folkloristica*, 20. Helsinki, pp. 120, 2012.

successful in the retrieval---a supernatural power is referenced to be the reason for the last diver's success. This preceding version gave way to the variants present in North America: DBM₀ (a later version of the aforementioned DBM₀, DBM₁ and finally a version that involves only non-bird, animal divers.

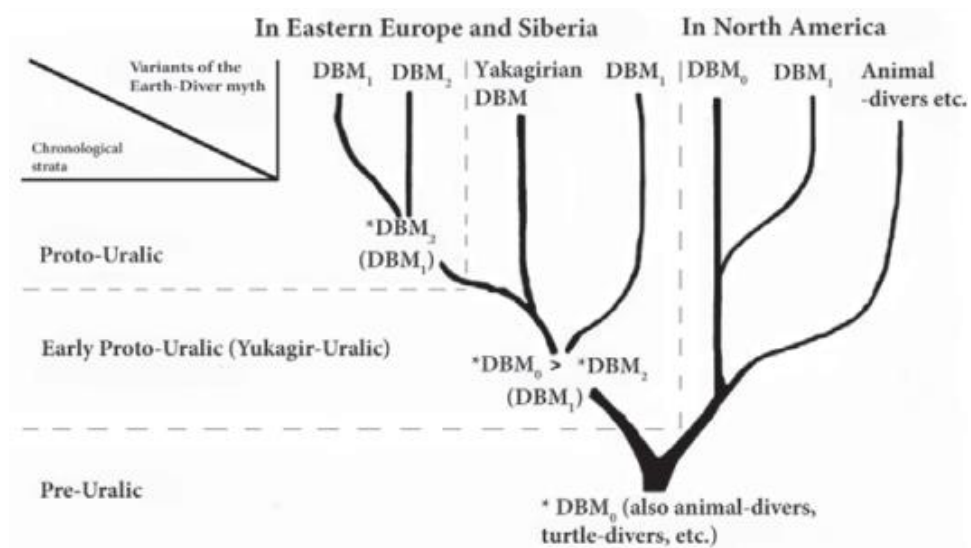


Figure 6. General evolution of the Earth-Diver myth

DBM ₀	DBM ₁	DBM ₂	Animal Divers
This version is thought to be the oldest and is the version which does not specify a bird or animal, rather focuses on the divers attempting to retrieve soil, with only the last of lesser physical strength being successful in the retrieval---a supernatural power is referenced to be the reason for the last diver's success. ⁶⁷	This version is a simplified variation of DBM ₀ --- instead of multiple divers, there is a single, successful diver. ⁶⁸	This version is discussed as “a more specialized kind of the Earth-Diver myth.” This version holds that the divers were birds. The success of the lesser and final diver (duck) caused a rivalry with the first diver (loon). ⁶⁹	A version of the Diver myth but no bird divers are present, only other non-bird animals. This version appears to be a later variation which occurs only in North America. ⁷⁰

Table 2. Recorded versions of the DBM/Diver Myth

Crow (Apsáalooké):

The Crow were named the “Crow” due to a misunderstanding by settlers, but many members of the Crow refer to themselves as the Absaroka or the Apsáalooké—both meaning “children of the Large-Beaked Bird.”⁷¹ Today, the Crow’s homelands are located across the states of Montana, Wyoming, and South Dakota. However, they first lived in a place known as

⁶⁷ Vladimir Napolskikh, “The Earth-Diver Myth (812) in Northern Eurasia and North America,” in *Mythic Discourses. Studies in Uralic Traditions*. Ed. By Frog, Anna-Leena Siikala, Ella Stepanova / Studia Fennica Folkloristica, 20. Helsinki, pp. 120, 2012.

⁶⁸ Vladimir Napolskikh, “The Earth-Diver Myth (812) in Northern Eurasia and North America,” in *Mythic Discourses. Studies in Uralic Traditions*. Ed. By Frog, Anna-Leena Siikala, Ella Stepanova / Studia Fennica Folkloristica, 20. Helsinki, pp. 121, 2012.

⁶⁹ Vladimir Napolskikh, “The Earth-Diver Myth (812) in Northern Eurasia and North America,” in *Mythic Discourses. Studies in Uralic Traditions*. Ed. By Frog, Anna-Leena Siikala, Ella Stepanova / Studia Fennica Folkloristica, 20. Helsinki, pp. 120, 2012.

⁷⁰ Ibid.

⁷¹ Phoenicia Bauerle et al, “The Apsaalooke (Crow Indians) of Montana: A Tribal Histories Teacher’s Guide,” Little Big Horn College Crow Agency, 2008.

the “Land of Forests and Many Lakes,”⁷² this place is known to have been the areas surrounding the Great Lakes.⁷³ The Crow oral tradition references their split from the Hidatsa and migration westward, sometime around 1400 CE,⁷⁴ where they would establish what became their homelands.

The Crow believe that their history dates to *time immemorial*, and the Crow origin story is one which comes in the form of a creation myth. This myth tells the story of how the Creator God/First Maker known as *Acbadadea*,⁷⁵ would create the first Crow. The myth recounts that First Maker asked four ducks to dive to the bottom of a lake and bring mud back with them so that the First Maker could create the first Crow. When this story takes place, the world is described as nothing but water. First Maker suggested that the ducks dive down to see what they could find, and each of the ducks dived down one by one. The first two ducks were unsuccessful. The third, smaller duck was successful in finding and bringing back a plant. The finding of this plant suggested to First Maker that there must have been earth below, and so he told the last duck to dive down and bring the earth up with him. The fourth duck would return with mud so that the other ducks and First Maker could then create the world.

After making the world, First Maker would make the first people. He made four groups of people and to determine who was the bravest, he asked them to run through a row of arrows. Whoever ran through the arrows, would be First Maker’s people and they would be brave and wise. The first three groups refused to pass through the arrows, but the final group did. First Maker would make this group his people and would name them the Apsáalooké.

⁷² James F. Brooks., “Sing Away the Buffalo,” in *Beyond Subsistence: Plains Archaeology and the Postprocessual Critique*, ed. Phillip Duke, Michael C. Wilson, University of Alabama Press, pp. 148, 1995.

⁷³ Ibid.

Phoenicia Bauerle et al, “The Apsaalooke (Crow Indians) of Montana: A Tribal Histories Teacher’s Guide,” Little Big Horn College Crow Agency, 2008.

⁷⁴ Ibid.

⁷⁵ Yellowtail, Thomas., *Yellowtail: Crow Medicine Man and Sun Dance Chief: An Autobiography, As told to Michael Oren Fitzgerald*, University of Oklahoma Press, pp. 3, 2014.

Arapaho:

The Arapaho homelands are in areas of Colorado and Wyoming that surround the headwaters of the Platte and Arkansas Rivers.⁷⁶ However, today the Arapaho are split into the Northern and Southern tribes. The Northern Arapaho are in Wyoming on the Wind River Reservation and the Southern Arapaho in Oklahoma. Before the Arapaho settled in Colorado and Wyoming, it is believed that they first inhabited areas near the Great Lakes and migrated westward sometime before 1700.⁷⁷

One version of the Arapaho Origin Myth states that in the beginning the world was nothing but water and birds/waterfowl. It is recounted that, "...the Grandfather saw that there was a Father [flat pipe] of the Indians floating on the water, on the four sticks (tripod)."⁷⁸ The Grandfather recognized that the Father was crying and was fasting. Because of this the Grandfather took mercy on the Father. The Father began to call all the fowl to him, and he then asked them to begin diving to bring up dirt from the bottom of the water. The fowl dived down one-by-one in the order of their size, largest to smallest. The fowl came back dead. Eventually, a timid duck's turn came and after days passed the duck returned with mud stuck to his feet. However, the duck did not bring up enough for the Father to use. A turtle came along and dived down to help the last duck. The Father took the clay and dried it out. He then, "blew it toward the northeast, and then toward the southeast and then toward the northwest and then toward the southwest, and what was left he took and gave it a swing and commanded that the earth come."⁷⁹

⁷⁶ Alfred L. Kroeber, *The Arapaho*, University of Nebraska Press, pp. 3, 1983.

⁷⁷ Oklahoma Historical Society, "Arapaho, Southern," *The Encyclopedia of Oklahoma History and Culture*, <https://www.okhistory.org/publications/enc/entry?entry=AR002>.

⁷⁸ George A. Dorsey and Alfred L. Kroeber., *Traditions of the Arapaho*, University of Nebraska Press, pp. 1, 1997.

⁷⁹ George A. Dorsey and Alfred L. Kroeber., *Traditions of the Arapaho*, University of Nebraska Press, pp. 1-2, 1997.

The Father would, then, make the mountains, the sun and moon to represent man and woman. Then he would make man and woman from the clays.⁸⁰

Other Deep Time Myths:

Pawnee Scholar, Roger Echo-Hawk has suggested that this story and other similar emergence stories that recount “a dark underworld’ could be indicative of memories tied to Beringia, during the late Pleistocene. Subterranean emergence stories are recounted across North America, like DBM myths. However, they are often discussed as being attached to migration stories rather than origin or creation myths.⁸¹

Arikara (Sahnish):

The Arikara refer to themselves as the Sahnish, which means “the original people from whom all other tribes sprang.”⁸² The tribes which sprang from the Arikara include the Mandan and the Hidatsa. The Arikara state that their early history begins, *time immemorial*, in “the South-central part of North America,” but they would travel northwest, settling along the way in areas of Nebraska and then finally in areas of both Montana and North Dakota.⁸³

The Arikara origin myth recounts a time when all of humanity was in a dark underground world---humanity would journey to emerge from this dark, subterranean place.⁸⁴ However, humanity had obstacles to overcome: a large body of water, a thick forest, and a large ravine.

⁸⁰ George A. Dorsey and Alfred L. Kroeber., *Traditions of the Arapaho*, University of Nebraska Press, pp. 1-2, 1997.

⁸¹ Roger Echo-Hawk, “Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time.” *American Antiquity*. 2000;65(2):282.

⁸² Linda Baker et al., “The History and Culture of the Mandan, Hidatsa, Sahnish (Arikara),” *North Dakota Department of Public Instruction*, pp. 2, 2002.

⁸³ Linda Baker et al., “The History and Culture of the Mandan, Hidatsa, Sahnish (Arikara),” *North Dakota Department of Public Instruction*, pp. 3-17, 2002.

⁸⁴ Roger Echo-Hawk, “Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time.” *American Antiquity*. 2000;65(2):275.

After passing through the three large obstacles, humanity would enter the Blue Mountains.⁸⁵

Eventually humanity would disperse and begin to speak different languages. Those who would become the Arikara (along with the Mandans and Pawnees) would leave the Blue Mountains for the Missouri River; the group would be given corn of varying sizes.⁸⁶

Conclusion:

There are various narratives rooted in oral tradition which each tell the stories of the First Peoples origins and early migrations. I have addressed a few of them here, such as the Diving Bird Myth (DBM) and subterranean emergence. These are, however, only a few examples of the numerous Indigenous deep time narratives. While they all vary, they share a common tie to the late Pleistocene and because of this, potentially hold information which can aid research in better understanding the First Peoples. The inclusion of Indigenous origin/emergence stories require collaboration between Indigenous Knowledge holders and researchers to best interpret the information held within these stories.

⁸⁵ Ibid.

⁸⁶ Roger Echo-Hawk, "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time." *American Antiquity*. 2000;65(2):275.

CHAPTER 4

THE ANZICK CLOVIS CHILD

In 1968, two men would accidentally reveal the remains of a late-Pleistocene child and a sizable assemblage of Clovis artifacts on private property owned by the Anzick family. This discovery would be subject to a few scholarly analyses but would mostly remain out of the public and professional view for about 46 years. In the mid-2000s, a renewed interest in the case, coupled with advances in ancient DNA (aDNA) techniques, the Anzick Clovis Child would yield data that would impact the field of PaleoIndigenous archaeology. Further, this data would yield information that worked to corroborate the beliefs of Indigenous collaborators on this project. I have chosen the Clovis Child as a case study because it provides evidence for the fact that when archaeological researchers volunteer to collaborate with Indigenous stakeholders, the results can be meaningful and can help us think about this time in novel ways. This chapter will reveal the multiple vocalities present in this case and present them in my proposed multivocal, interpretive framework that can be used to benefit public knowledge.

Historical Context:

The Anzick family operated a ranch in the Shields River Valley, located in Park County, Montana. In 1968, Calvin Sarver and Ben Hargis, two local contractors, came to a portion of the Anzick property to remove sandstone escarpments to use as gravel for a construction project.⁸⁷ the men worked to remove the sandstone, with a bulldozer, and they started to notice that chert artifacts and ochre, which the men referred to as “red stuff,”⁸⁸ started coming out of the area they were working. The men later returned, accompanied by their wives, and began to dig out the site.

⁸⁷ Samuel S. White V., “The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard).” *ScholarWorks* at University of Montana, 2015.

⁸⁸ Ibid.

The entire assemblage and burial consisted of 72 bifaces, 7 unifaces, 14 miscellaneous lithic fragments, 15 antler rods (including fragments) and the partial remains of a human child.⁸⁹ All the materials extracted, including the remains, were covered in ochre. Sarver would later recall that the artifacts, when *in situ* (in their original place), appeared in a “stacked”⁹⁰ manner, almost like cards. The child’s remains laid underneath the assemblage of artifacts.⁹¹ The group removed all the artifacts and remains from the site and then proceeded to wash off much of the ochre.⁹²



Figure 7. Artifacts from the Clovis Child Burial, Anzick Family Collection.

⁸⁹ Samuel S. White V., “The Anzick Artifacts: A High-Technology Forager Tool Assemblage.” *ScholarWorks at University of Montana*, pp. 53, 2019.

⁹⁰ Samuel S. White V., “The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard).” *ScholarWorks at University of Montana*, pp. 49, 2015.

⁹¹ *Ibid.*

⁹² Samuel S. White V., “The Anzick Artifacts: A High-Technology Forager Tool Assemblage.” *ScholarWorks at University of Montana*, pp. 51, 2019.

The men and their wives were not archaeologists, and the way in which they removed the artifacts and the child's remains from the ground, did not use any systematic archaeological field methods that a trained archaeologist would use to excavate. Further, when they recovered these artifacts, they were not aware of the importance of leaving them in situ or the importance of the ochre which covered them. Because this group had so thoroughly 'excavated' the burial, once professional archaeologists were made aware of the site, there was disappointment as it was evident that much of the archaeological context had been lost.⁹³

Eventually, Sarver would reach out to a local avocational archaeologist who would turn to Larry Lahren, a then graduate student at the University of Montana, and from this point on the Clovis Child burials would begin to be subject to academic inquiry. Lahren and another, then, graduate student, Robson Bonnichsen, would embark upon the study, analysis, and documentation of this site despite being told that the site's contextual integrity has been compromised.⁹⁴ This loss of context is something that Dee Taylor, an anthropologist at the University of Montana, would cite as qualifying the site as disturbed and essentially could not yield important archaeological information. Taylor would decline to study the site for this reason.⁹⁵

By the early 1970s, the site had begun to appear in academic literature with Lahren and Bonnichsen leading the way. However, it is also important to note that this site was published in public facing magazines as well. By 2000, the findings at Anzick had made the cover of National Geographic Magazine (1979), had been featured on the front page of the

⁹³ Samuel S. White V., "The Anzick Artifacts: A High-Technology Forager Tool Assemblage." *ScholarWorks* at University of Montana, pp. 50, 2019.

⁹⁴ Ibid.

⁹⁵ Ibid.

Samuel S. White V., "The Anzick Artifacts: A High-Technology Forager Tool Assemblage." *ScholarWorks* at University of Montana, pp. 52, 2019.

Billings Gazette (1983) and had been featured in an article in Outside Magazine (2000).⁹⁶ By 1991, Thomas Stafford Jr. would publish direct radiocarbon dates on collagen extracted from the child's remains.⁹⁷ The most reported calibrated date is around 12,680 years ago.⁹⁸ As academics interested in the child's burial continued to research and add to the body of literature, there was still a question which had yet to be answered—was this child an ancestor of modern Indigenous peoples in North America?

The Archaeological and Genetic Narrative:

In the mid-2000s, Eske Willerslev, a Danish geneticist, and a team of researcher embarked to sequence the genome of the Clovis Child. This study resulted from the collaboration of over 30 professionals from various disciplines. Of these professionals, Morten Rasmussen, and Sarah L. Anzick were lead authors. This article is "...the most substantial (in terms of global impact) ..., "⁹⁹ and provided a short site history, addressed ethical and legal concerns, discussed methods and results, and provided detailed graphic summaries of the team's findings.

Results and Responses in the Literature:

Data yielded from the biomolecular analysis of the Clovis Child's remains were cause for conflict in academic discourse, two-fold. (1) the ancient genome sequencing revealed that a great

⁹⁶ Samuel S. White V., "A Summary of Anzick Site History," December 11, 2020, Yellowstone Gateway Museum, <https://www.youtube.com/watch?v=XH2X6ofxG2A>.

⁹⁷ Thomas W. Stafford, Jr., et al., "Accelerator Radiocarbon Dating at the Molecular Level," *Journal of Archaeological Science* (18), pp. 35-72, 1991.

⁹⁸ Stuart J. Fiedel., "The Anzick genome proves Clovis is first, after all," *Quaternary International* 444, pp. 4-9, 2017.

⁹⁹ Samuel S. White V., "The Anzick Artifacts: A High-Technology Forager Tool Assemblage." *ScholarWorks* at University of Montana, pp. 50, 2019.

Samuel S. White V., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)." *ScholarWorks* at University of Montana, pp. 57, 2015.

majority of Native Americans (both in North and South America, but not including the Arctic) descend from this child's people group—this provided evidence contrary alternative hypotheses¹⁰⁰ and even put the Clovis-First model into question. However, it is important to be aware that the genomic data is only evidence from a single individual. (2) from the beginning of the study, there was some uncertainty which surrounded the nature of the burial and its archaeological context. Some, like Taylor, expressed distrust of the association of the child's remains with the actual artifact assemblage, this concern resurfaced when an antler rod was radiocarbon dated and shown to possibly be 200 years older than the child's remains.¹⁰¹ Questions swirled regarding the reason for this discrepancy: was this evidence of an older cache that the child was laid to rest in, was this rod a 'family heirloom' given to the child's mortuary assemblage, or was this an issue of biomolecular contamination that was disrupting the radiocarbon age?

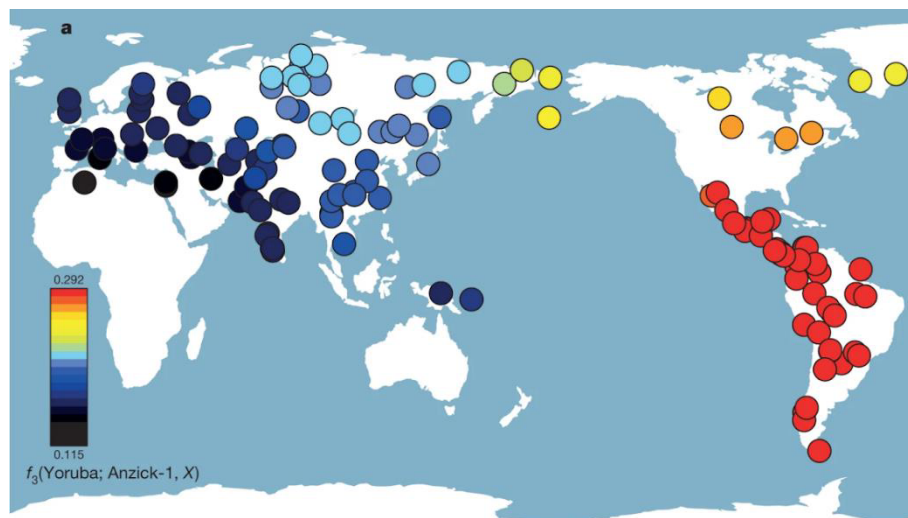


Figure 8. Anzick-1 Genetic affinity heat map.

¹⁰⁰ Stephen Oppenheimer, Bruce Bradley, and Dennis Stanford, "Solutrean hypothesis: genetics, the mammoth in the room," *World Archaeology* 5(46), pp. 752-774, 2014.

¹⁰¹ Michael R. Waters et al. "The age of Clovis—13,050 to 12,750 cal yr B.P." *Science Advances*, 6 (43), 2020. Stuart J. Fiedel., "The Anzick genome proves Clovis is first, after all." *Quaternary International*, 444, pp. 4-6, 2017.

Lorena Becerra-Valdivia., "Reassessing the chronology of the archaeological site of Anzick." *PNAS*. 115, 27, pp.7000-7003, 2018.

The first area of discourse for the field: the genetic results. The Rasmussen et al team found with the sequencing of the Child's genome, that his genetic affinity was more closely related to all the 52 Native American groups as opposed to extant Eurasian groups (see Figure 6).¹⁰² Because the child's genome also showed less genetic affinity with northern and Arctic groups than groups in Central and South America, this led the team to a few couple conclusions. However, Rasmussen et al suggests that it is *most likely* that this is because of a "basal diversification" or a split in the Northern and Southern people groups which likely happened during the pre-Clovis times.¹⁰³ Further, the team utilized outgroup F3 statistics (allows measurement of the amount of shared genetic drift between one population and another), with all the Native American groups and a sample from Siberia that dated to 24,000 years ago.¹⁰⁴ The results of this statistical analysis, again, led the team to believe that the child's level of relatedness to Eurasian populations is evidence that Eurasian gene flow to the child's group likely was an event that happened before the divergence of northern and southern Native populations.¹⁰⁵ Further, Willerslev states that genetic analysis cannot tell us *where* this divergence happened, but we know this divergence must have happened sometime around 20,000 years ago, and it *is* possible that this divergence could have happened in North America.¹⁰⁶

¹⁰² Rasmussen et al., "The genome of a Late Pleistocene human from a Clovis burial site in western Montana." Nature 506, (pp.226), 2014.

¹⁰³ Rasmussen et al., "The genome of a Late Pleistocene human from a Clovis burial site in western Montana." Nature 506, (pp.226), 2014.

¹⁰⁴ Ibid.

¹⁰⁵ Rasmussen et al., "The genome of a Late Pleistocene human from a Clovis burial site in western Montana." Nature 506, (pp.226), 2014.

¹⁰⁶ Eske Willerslev (geneticist) in discussion with the author, March 2024.
J. Victor Moreno-Mayar et al., "Terminal Pleistocene Alaskan genome reveals first founding population of Native Americans," Nature 553, pp. 205 ,2018.

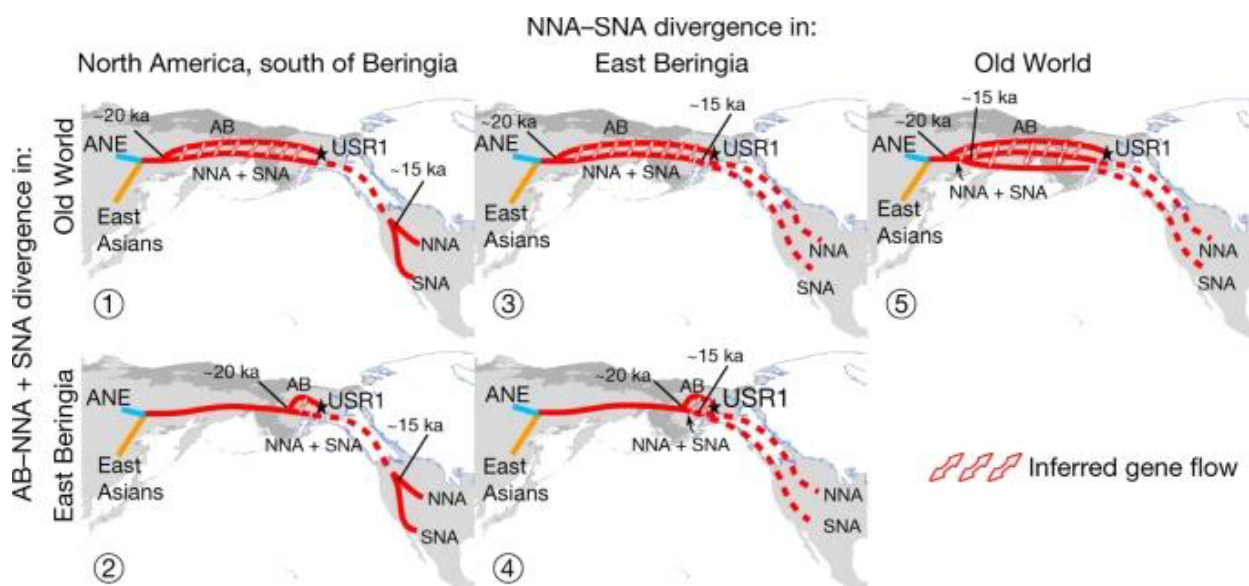


Figure 9. Possible locations for the genetic split between Northern Native Americans and Southern Native Americans. (USR1 represents the Ancient Beringian population which did not survive to the present and where those populations split.

The second area of discourse for the field: the age and association of the remains and the archaeological assemblage. The association of the remains and the archaeological material have been scrutinized since the earliest studies on this case.¹⁰⁷ Once the Rasmussen et al study's results had been published, it caused a stir in the PaleoIndigenous archaeological community. For proponents of the alternative hypotheses¹⁰⁸ and for the Clovis-First model.¹⁰⁹ Followers of this hypothesis and model, however, took the Clovis Child results to discuss how it either corroborated their extant hypothesis/model or how the results were irrelevant. These researchers cite Taylor and share his concern.¹¹⁰ Further, the authors state that the dating of the antler rod, as

¹⁰⁷ Samuel S. White V., "The Anzick Artifacts: A High-Technology Forager Tool Assemblage." *ScholarWorks* at University of Montana, pp. 52, 2019.

¹⁰⁸ Stephen Oppenheimer, Bruce Bradley, and Dennis Stanford., "Solutrean hypothesis: genetics, the mammoth in the room," *World Archaeology* 5(46), pp. 752-774, 2014.

¹⁰⁹ Stuart J. Fiedel., "The Anzick genome proves Clovis is first, after all," *Quaternary International* 444, pp. 4-9, 2017.

¹¹⁰ Dee C. Taylor., "The Wilsall excavations: an exercise in frustration," *Proceedings of the Montana Academy of Sciences* (29), pp. 147-150, 1969.

older than the remains, is further evidence that the artifacts and the child are not associated and states that the assertion that the age is due to the possibility of the artifact or artifacts being heirlooms, is “unsupported speculation.”¹¹¹ However, Fiedel proposes yet another interpretation. This interpretation holds that the Clovis Child's remains could have been contaminated and represented a younger burial. However, Fiedel’s main takeaway is that this case was a “minor complication” and that the Clovis Child is simply evidence that “Clovis was first, after all....”¹¹²

To conclude this section on the scientific results and how they were received or refuted, in the literature, I will quote Todd Surovell, “This field is incredibly fraught, in that, we all look at the same data and come up with completely divergent interpretations.”¹¹³ The publication of the Clovis Child’s genomic results did not serve to resolve the extant debates in PaleoIndigenous research. Rather, researchers held their ground and used the genomic evidence to further corroborate extant hypotheses and models.

Indigenous Collaboration:

Shortly after the Rasmussen study was published, a response paper would be published soon after which did not refute the scientific results, but rather would synthesize the ethical issues related to the handling of the child. This article particularly focused on the fact that many Indigenous stakeholders stated that they felt they should have been included in the research sooner.¹¹⁴ At the outset of the research being conducted on the child by Lahren and Bonnchison, no efforts to include Indigenous groups were made. However, when Willerslev joined the team,

¹¹¹ Stephen Oppenheimer, Bruce Bradley, and Dennis Stanford., “Solutrean hypothesis: genetics, the mammoth in the room,” *World Archaeology* 5(46), pp. 754, 2014.

¹¹² Stuart J. Fiedel., “The Anzick genome proves Clovis is first, after all,” *Quaternary International* 444, pp. 4-9, 2017.

¹¹³ Todd A. Surovell, "Why I am Skeptical of Most Claims for Pre-Clovis Colonization of the Americas w/ Dr. Todd Surovell" December 1, 2022, Crow Canyon Archaeological Center, <https://www.youtube.com/watch?v=YlcAEBTDJCY>

¹¹⁴ Ewen Callaway., “Ancient genome stirs ethics debate.” *Nature*. 506 (2014): 142-143.

he worked to include Indigenous collaborators. This article states that the Anzick case reveals that it is best practice to include Indigenous stakeholders as early as possible.¹¹⁵ The article also recognizes that there does not exist a single solution for issues regarding the involvement of Indigenous communities. Further, Willerslev has stated that the Anzick story has ignited conversations in the scientific community to reconsider the ways in which tribal ancestors should be handled, ethically. Willerslev has begun to embrace an approach to research which centers around the sovereignty of Indigenous stakeholders and states that research should be utilized to benefit these communities.¹¹⁶ In this next section I will recount how Indigenous perspectives were included in the study.

Determined to collaborate with Indigenous groups, Willerslev reached out to the Montana Burial Board (a government entity who were meant to connect the research team to tribes in the region). However, after multiple attempts, the board stated that there was no legal obligation to work with tribes, as the child was found on private property.¹¹⁷ Undeterred, Willerslev would connect with Shane M. Doyle (Old Buffalo Bull), a member of the Crow and professor at Montana State University. Doyle would connect the team with multiple Native American groups and reservations in the region.¹¹⁸ Those who were contacted in person include: the Crow, Northern Cheyenne, Salish, Blackfeet and the Kootenai, Assiniboine, Lakota, Gros Ventre, Chippewa, and Rocky Boys.¹¹⁹ Further, Doyle connected with tribes across the states of Arizona and Washington as well.¹²⁰ After representatives were contacted from all these groups, the

¹¹⁵ Ewen Callaway, "Ancient genome stirs ethics debate." *Nature*. 506 (2014): 142-143.

¹¹⁶ Eske Willerslev (geneticist) in discussion with the author, March 2024.

¹¹⁷ Ibid.

¹¹⁸ Eske Willerslev (geneticist) in discussion with the author, March 2024.

¹¹⁹ Rasmussen et al., "The genome of a Late Pleistocene human from a Clovis burial site in western Montana." *Nature* 506, (pp.225-229), 2014.

Samuel S. White V., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)." ScholarWorks at University of Montana, 2015.

¹²⁰ Eske Willerslev (geneticist) in discussion with the author, March 2024.

Willerslev team noted that many requested that the child be reburied, but no one contacted opposed the overall study. Regarding the premise of the study, the team received no objections. The reburial of the child was led by a Crow tribal elder named Larson Medicine Horse.¹²¹ The boy was reinterred in an area as close to the original burial as possible. Tribal representatives coming from tribes across Arizona, Washington, and Montana; the Anzick family; Willerslev and a graduate student named Samuel Stockton White came together to return the child to the place his family intended to leave him to rest.¹²²

Doyle had a significant role in the reburial and the collaboration, but Doyle, himself, as a member of the Crow Nation also offered his perspective on the Anzick site, the genetic analysis, and the results of the study. Doyle stated that, to him, the Anzick case has further proved that modern Indigenous people have always been here.¹²³ He went on to comment that the way his ancestors made sure the boy and his grave was taken care of, amazed him. It is Doyle's hope that other Indigenous people will begin to see the importance of this story and the efforts of the anthropologists that conducted the scientific study and reburial with Indigenous stakeholders.¹²⁴

Doyle served a vital role on the research team, not only by bringing multiple Sovereign Nations together to rebury the child, but also by sharing his perspective regarding the impact the Clovis Child has had on himself as a member of the Crow.¹²⁵ Doyle has given several public talks and has helped produce a teacher's guide with the Montana Office of Public Instruction as a

¹²¹ Ibid.

¹²² Samuel S. White V., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)." ScholarWorks at University of Montana, 2015.

¹²³ Catherine Brahic, "Landmark discovery of Anzick child has changed my life." *NewScientists* 221(2956), (pp. 9), 2014.

¹²⁴ Ibid.

¹²⁵ Eske Willerslev (geneticist) in discussion with the author, March 2024.

Rasmussen et al., "The genome of a Late Pleistocene human from a Clovis burial site in western Montana." *Nature* 506, (pp.225-229), 2014.

Evelyn Boswell, "Shane Doyle links Montana tribes, international researchers over prehistoric boy, MSU News Service, Montana State University, 2014.

part of the *Indian Education for All Unit*.¹²⁶ Doyle has worked to ensure that the story of the Clovis Child is told to as many people as possible, as he believes that the story's message is timeless and should be shared widely. Doyle offered an Indigenous perspective on what the discovery of this child and the sequencing of his genome meant for Doyle, personally. Doyle stated that the child's burial was evidence for how Indigenous people have always treated their children with care. In the teacher's instructional guide for teaching the Clovis Child's story, Doyle stated that this is what he wanted children in Montana to take away:

One of the most important things is how we treated our children. The kind of care that we always have had for our children... We don't skimp on our kids and that's the reason we have survived all these years. People will look into that [Clovis child] burial and they will see that this was a 2-year-old boy. He wasn't a chief. He wasn't a great hunter. He wasn't a great warrior. He had never really contributed any economic benefits to his tribe. But the respect and love that was shown for him was really beyond measure and would probably go beyond anything people do today. I guess the grief that those people expressed in that burial is timeless in my mind. And I think it is a story people everywhere around the world should know. How again, those values have survived for 12,600 years into today.¹²⁷

The way in which Doyle has detailed the meaning that this archaeological investigation has conveyed to himself and to his community, in a public manner is notable. This thesis recognizes the efforts of Doyle to share his perspective and the Clovis Child's story to further argue that Indigenous collaboration is important and can offer healing. This is an example of how collaboration in archaeological research can give space to Indigenous groups to determine what is important to them on their own terms.

¹²⁶ Montana Office of Public Instruction, "Investigating the First Peoples, The Clovis Child Burial: A Curriculum Guide for Grades 8-12," Indian Education for All Unit, 2014.

¹²⁷ Montana Office of Public Instruction, "Investigating the First Peoples, The Clovis Child Burial: A Curriculum Guide for Grades 8-12," Indian Education for All Unit, 2014.

A Multivocal, Interpretive Framework applied to the Anzick Clovis Child Case:

How do we utilize a multivocal approach for the peopling question? First, it is important to know a multivocal approach is one which is not simply a means for interpretation, rather it is a process which begins at the outset of research and centers around continuous collaboration.¹²⁸ One approaching the peopling question from a perspective formulated by western science should also consider how to properly approach multiple lines of independent evidence. This multivocal approach asserts that it is not efficient to only include lines of evidence from western science, but that because this question holds cultural weight, as good researchers we should seek to untangle¹²⁹ each line of evidence and present all of them to produce a more holistic narrative.¹³⁰ In this case, lines of evidence include archaeological, historical, oral tradition, Indigenous Knowledge, and genetics. All lines of evidence have strengths and weaknesses, but this approach emphasizes the fact that it is important to present all of them regardless. In creating a project that centers around multivocality, researchers and Indigenous collaborators can both present evidence pertinent to understanding the issue at hand. Further, all lines of evidence serve different, important purposes. While PaleoIndigenous research has less availability of evidence, researchers should seek to create relationships with Indigenous stakeholders who can supply Knowledge and/or oral traditions to better understand the First Peoples, if this is something stakeholders would be interested in doing. I want to emphasize that *first* researchers need to seek to create connections with Indigenous stakeholders

¹²⁸ Sonya Atalay, "Multivocality and Indigenous Archaeologies," in *Evaluating Multiple Narratives: Beyond Nationalist, Colonialist, Imperialist Archaeologies*, Springer, 2008.

¹²⁹ Wesley Bernardini et al., *Becoming Hopi: A History*, University of Arizona Press, pp. 8, 2021.

¹³⁰ Ibid.

Others who have written on the topic of integrating Indigenous Knowledge and Oral Traditions into the study of deep time have suggested that an important aspect of this work is to pull out potential histories from these sources.¹³¹ Much like the scientific and archaeological data must be tested and scrutinized, previous scholarship has suggested that oral stories be treated in this manner.¹³² Regarding the multivocal approach I propose, I hold that the treatment of Indigenous oral sources can certainly be a useful tool as it has been in extant studies. However, as I am not Indigenous, I do not find that it is appropriate for me to extract truths from the oral tradition, and it is not something I ventured to do in the writing of this thesis. Analysis conducted in this manner could improperly be leveraged to discredit Indigenous beliefs and traditions.¹³³ Moreover, I state that it is not the position of the western researcher to do this *alone*. For these sources to be understood and analyzed, collaboration with Indigenous stakeholders *must* be central to the project.

Indigenous origin stories and archaeological narratives are both forms of knowledge that help those in the present better understand the ancient past. Where these forms of knowledge differ is in an epistemological sense. Because of this, reconciling them is something which cannot effectively happen without one or both sides forfeiting integral facets. This in mind, my proposal for a multivocal framework is not one which blends epistemologies, but rather it is one which presents both sides of a story in a way that can convey the equaling value that both forms of knowledge bring to the interpretation of the peopling question. This section of the chapter will

¹³¹ Roger C. Echo-Hawk., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time," *American Antiquity* 65(2), pp. 271, 2000

¹³² David Henige, "Impossible to Disprove Yet Impossible to Believe: The Unforgiving Epistemology of Deep-Time Oral Tradition," *History in Africa* 36, pp. 129, 2009.

¹³³ Roger C. Echo-Hawk., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time," *American Antiquity* 65(2), pp. 287, 2000

propose how a multivocal framework should be employed in research and then will propose a multivocal, interpretive framework designed for public history.

In the Anzick Clovis Child case, researchers did collaborate with the Crow. While the Crow are not the most directly related modern Indigenous descendants to the child, they acted as consultants for the reburial and research. This case appears as an example of a *bivocal* approach rather than a multivocal approach, as much of the published vocality comes from members of the consulting tribe, the Crow, and no others. While this case's collaboration resulted in meaningful relationships between Indigenous stakeholders and interested scientists, the case could benefit from a multivocal approach. The implementation of a multivocal approach could present the perspectives of more than one tribe that may feel a deep connection to the child and the multiple lines of evidence coming from other disciplines that inform an understanding such as genetics, paleoenvironment and archaeology. Presenting all these lines of evidence would result in a multivocal representation of the Clovis age child in deep time context.

The Framework:

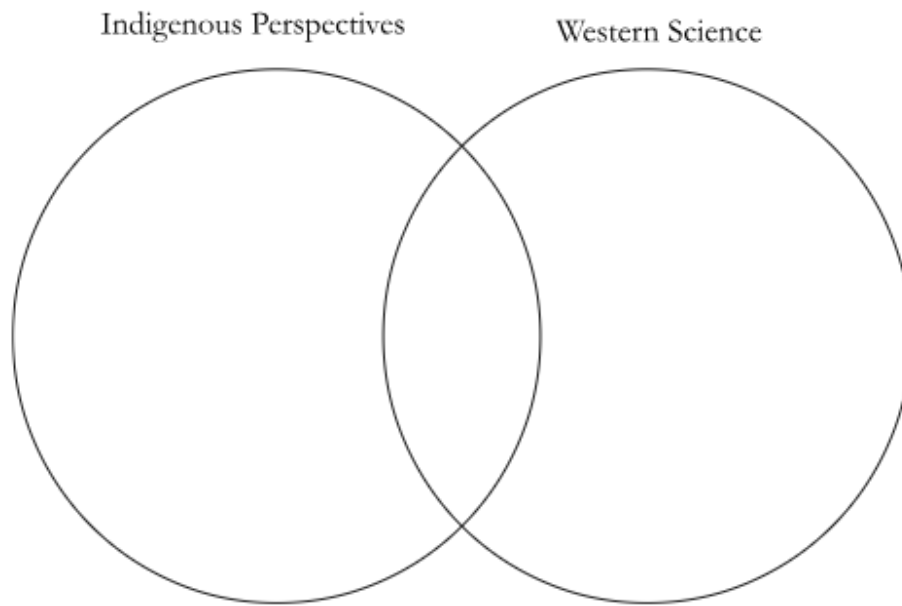


Table 3. A visual representation of a bivocal approach that uses two perspectives to better understand the First Peoples where there is overlap

Here, I will apply a bivocal, interpretive framework to the story of the Anzick Clovis Child as demonstrated through a visual format (see Tables 6-7). This framework represents the known perspectives on the Anzick Child, and I will use this to demonstrate how a multivocal presentation could further enrich the presented information.

I have chosen to propose a framework created for a broader public audience. Through reading Indigenous scholarship regarding the topic of the peopling of the Americas,¹³⁴ it became

¹³⁴ Steeves, Paulette F.C., *The Indigenous Paleolithic of the Western Hemisphere*. University of Nebraska Press, 2022.

Laluk, Nicholas C., et. al., "Archaeology and Social Justice in Native America." *American Antiquity*, 87(4), 2022, (pp. 659-682).

Mackenthun, Gesa and Christen Mucher, *Decolonizing "Prehistory." Deep Time and Indigenous Knowledge in North America*. University of Arizona Press, 2021

Steeves, Paulette F.C. "Singing to Ancestors: Respecting and re-telling stories woven through ancient ancestral lands," in *The Routledge Companion to Global Indigenous History*, Routledge, pp. 186, 2021.

Atalay, Sonya., "Multivocality and Indigenous Archaeologies," in *Evaluating Multiple Narratives: Beyond Nationalist, Colonialist, Imperialist Archaeologies*, Springer, 2008.

clear to me that archaeology has a legacy of *discrediting Indigenous ways of knowing*.¹³⁵

Presenting archaeology to the public can help alleviate some of these past pains, as the field has the potential to offer restorative justice.¹³⁶ Further, when archaeological research is not shared with a public audience, the public perception of past events can be biased.¹³⁷ It also became clear to me that much of the data published in other scientific disciplines (paleoenvironmental and genetic, for example) are not always considered by Clovis-based archaeologists, and multidisciplinary projects that include independent lines of related evidence are not common.¹³⁸ My proposal for a multivocal framework is in an effort to present multiple Indigenous narratives about deep time and the various lines of related scientific evidence in a manner which is available to a broader public so as to promote restorative justice and avoid biased, public knowing and overall, avoid presenting only the Authorized Heritage Discourse related to these topics.

Echo-Hawk, Roger., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time." *American Antiquity*. 2000;65(2):279.

Deloria, Vine Jr., *Red Earth, White Lies: Native Americans and the Myth of Scientific Fact*. Fulcrum Publishing (1997).

¹³⁵ Roger C. Echo-Hawk., "Ancient History in the New World: Integrating Oral Traditions and the Archaeological Record in Deep Time," *American Antiquity* 65(2), pp. 287, 2000.

¹³⁶ Bonnie L. Pitblado., "On Rehumanizing Pleistocene People of the Western Hemisphere," *American Antiquity* 87(2), pp. 225, 2022.

¹³⁷ John H. Jameson., "Presenting Archaeology to the Public: Digging for Truths," *Altamira Press*, pp. 27, 1996.

¹³⁸ Bonnie L. Pitblado., "A Tale of Two Migrations: Reconciling Recent Biological and Archaeological Evidence for the Pleistocene Peopling of the Americas," *Journal of Archaeological Research* 19, pp. 327-375, 2011.

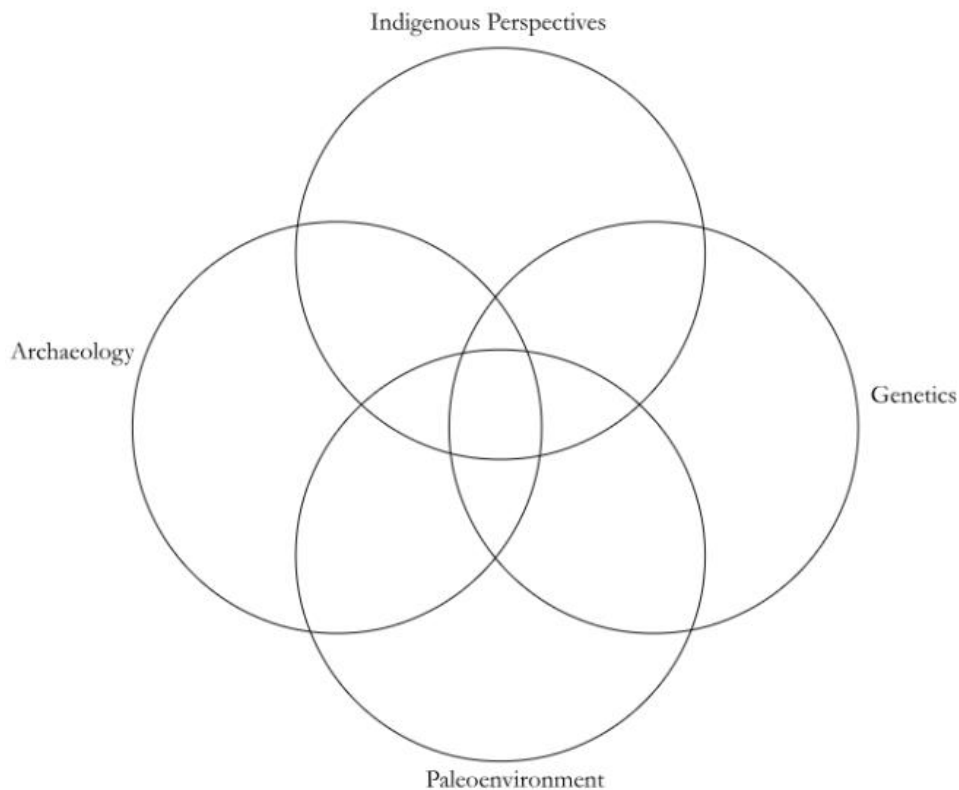


Table 4. A visual representation of a multivocal approach

This example of a bivocal framework (Table 5.) utilizes a three-column format, however more columns can be added to include more vocalities to achieve a truly, multivocal presentation: one (or more) column(s) to present Indigenous perspectives/stories and/or knowledge, one to introduce the topic of research and one to present the scientific and/or archaeological findings. The purpose of the multiple columns with single topics designated to each is to ensure that both vocalities are visually presented equally. I have designed this interpretive framework to be used to create informational plaques, brochures, or any other kind of visual aid for sharing public history. Finally, this framework requires that language choice be important, as the point of this interpretive framework is to be understood by a broader audience.

To do this, I suggest avoiding jargon and overly complicated terminology without proper and simple explanations.

[PRESENT INDIGENOUS PERSPECTIVE]	A MULTIVOCAL, INTERPRETIVE FRAMEWORK	[PRESENT THE ARCHAEOLOGICAL NARRATIVE]
[INSERT IMAGE]	[TEXT BOX]	[TEXT BOX]
[IMAGE CAPTION]	[INSERT IMAGE]	[TEXT BOX]
[TEXT BOX]	[IMAGE CAPTION]	[INSERT IMAGE]
	[TEXT BOX]	[IMAGE CAPTION]
		[TEXT BOX]

Table 5. A Multivocal Interpretive Framework

The Apsáalooke (Crow) Tribe

The Crow timeline begins time immemorial, during the "Long ago Times." The Crow's ancestral homelands are located across the states of Montana, Wyoming and South Dakota. The Crow were named the "Crow" due to a misunderstanding by settlers, but many refer to themselves as the Apsáalooke or the Apsáalooke—both meaning the "children of the Large-Beaked Bird."

Early Migration:
The Crow migrated to Montana from the "Land of Forests and Many Lakes," which is known to have been the areas surrounding the Great Lakes. The Crow Oral Tradition states that this migration occurred sometime around 1400 CE.

Connection to the Anzick Clovis Child:
The Clovis Child has been linked to several modern Indigenous tribes through the results of genome sequencing, and the Crow are among these tribes. Because of the contributions of the Crow Tribe to the research and reburial of the Clovis Child, their perspective has been highlighted here.




Figure 3: Clovis child burial location, the Crazy Mountains in the background.

Two Worlds Come Together

Eské Willerslev, a scientist who helped research the Anzick Clovis Child, wanted to reach out to Indigenous groups in the area, but as a geneticist from Denmark, he was not sure where to start. Willerslev was pointed to the Montana Burial Board in order to contact Indigenous groups for advice on reburial of the child. However, upon contacting this office, he was told not to be concerned with this as "...the remains were found on private land, NAGPRA [the Native American Graves Protection and Repatriation Act of 1990] did not apply and no consultation was needed."



Figure 4: Shane M. Doyle (left) singing an Anzick song to the Clovis child to heal the disturbance. Also pictured, scientist Eské Willerslev (center) and Larson Medicine Horse (right).

Willerslev persisted, urging the Burial Board to connect him with Indigenous groups in the area, but was repeatedly turned away. Still, he wanted to complete the consultation and obtain direction from Indigenous stakeholders. Willerslev would eventually be pointed to Shane M. Doyle, an Indigenous scholar at Montana State University, who would help connect him to Indigenous groups across the state of Montana as well as tribes in Oregon and Arizona. After communicating with tribes across the three states, it was clear that reburial needed to happen, and Doyle would advise Willerslev to rebury the child "where his parents left him." Crow Tribal elder, Larson Medicine Horse led the reburial.

The Scientific Analysis

Aging and Dating:
Because stone tools cannot be dated or provide us with biological information, scientists used the Anzick Clovis Child's remains for the purposes of dating and extracting DNA as well as an antler rod found with the child. Scientists determined the child was a boy aged between 1-2 years old who passed around 12,695-12,905 years ago.

Ancient DNA:
The ancient DNA (aDNA) that was extracted from the child's remains revealed to scientists that the child is ancestral to many modern Indigenous Tribes in both North and South America.

Results and Responses:
The results of this analysis caused some discourse in the field. Proponents of certain models focused on these early inhabitants of the Americas found issue with the results of this research. Some, for example, discredited the excavation methods which uncovered the child and the items. Others contested whether the child could definitively be associated with an elk antler buried with him due to the difference between the child's age and the antler's age, which was initially dated to 12,840-12,990 years ago. These concerns may have been assuaged by recent studies which re-dated the antler and found it to be contemporaneous to the child, dating it at 12,760-12,880 years ago.

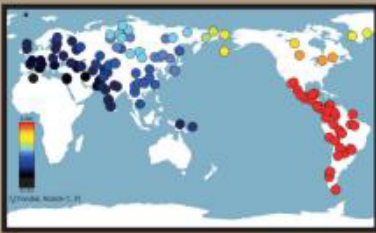


Figure 2: Anzick-1 Genetic affinity heat map.

Table 6. Anzick Clovis Child case applied to the interpretive framework (internal brochure pages or interpretive signage/plaque)


<p>The Apsáalooke (Crow) Tribe</p> <p>Indigenous Perspectives: Shane M. Doyle (whose name in the Crow World is Old Buffalo Bull) is a member of the Crow who participated in the study and re-burial of the Clovis Child. When discussing what he wanted people to take away from this story, and what it meant to him, he stated, "One of the most important things is how we treated our children. The kind of care that we always have had for our children... We don't skimp on our kids and that's the reason we have survived all these years. People will look into that [Clovis child] burial and they will see that this was a 2-year old boy. He wasn't a chief. He wasn't a great hunter. He wasn't a great warrior. He had never really contributed any economic benefits to his tribe. But the respect and love that was shown for him was really beyond measure and would probably go beyond anything people do today. I guess the grief that those people expressed in that burial is timeless in my mind. And I think it is a story people everywhere around the world should know. How again, those values have survived for 12,000 years into today."</p> <p>Doyle's perspective on the child is invaluable and highlights the importance of working with Indigenous collaborators on archaeological projects. After the Clovis child's genome was sequenced, Doyle stated, "It's one thing to believe and sense that your people have been here for thousands and thousands of years... It's another thing to have scientific evidence and proof that those paleo-Indians were us and we are them.... All my family comes from this place and to did this little boy.... We are not only connected by geography, but by blood. It was so moving for me." He further described this case as "...probably the greatest story about family that's ever been told... as going to be retold and retold by your grandchildren and their grandchildren, and its going to become their own. And that's how we take history and make it our own. We re-present it and we re-present it in what we know about American Indian people and who they really are."</p> <p>Perspectives on the radiocarbon discrepancy: Doyle believes that the discrepancy between the age of the Clovis child and the elk antler rod is due to the possibility of the rod being a family heirloom. The gifting of hundreds of tools (see Figure 1); was evidence of the love this boy's family held for him, but even further, this heirloom rod was symbolic of the grief felt by his parents who laid him to rest.</p>	<p>Bibliography: Boswell, Evelyn, "Shane Doyle Joins Montana tribes, international researchers over prehistoric boy, MUI News Service, Montana State University, 2014. Bradic, Catherine, "Landmark discovery of Anzick child has changed my life," <i>Northeastern</i> 221(2956), pp. 9, 2014. Collins, Eileen, "Ancient American genome rekindles legal row," <i>Nature</i>, vol. 522, no. 7557, 25, (2015) Eika Wilensky (geneticist) in discussion with the author, March 2024. Montana Office of Public Instruction, "Investigating the First Peoples, The Clovis Child Burial: A Curriculum Guide for Grades 8-12," <i>Indian Education for All Unit</i>, 2014. Munroe, Julie E. and Stuart Fiedel, "New Radiocarbon Dates for the Clovis Component of the Anzick Site, Park County, Montana," in <i>Paleoindian Archaeology: A Homophily Perspective</i>, University Press of Florida, 2006. Stuart J. Fiedel, "The Anzick genome proves Clovis is first, after all," <i>Quaternary International</i> 444, pp. 4-9, 2017. Rasmussen, Morten et al. "The genome of a Late Pleistocene human from a Clovis burial site in western Montana," <i>Nature</i>, 506, 223-229, 2014. White, V., Samuel S., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)," <i>ScholarWorks at University of Montana</i>, 2015.</p> <p>List of Figures: Figure 1. <i>Artifacts from the Clovis Child Burial, Anzick.</i> Source: White V., Samuel S., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)," <i>ScholarWorks at University of Montana</i>, 2015. Figure 2. <i>Anzick-1 Genetic affinity heat map.</i> Rasmussen, Morten et al. "The genome of a Late Pleistocene human from a Clovis burial site in western Montana," <i>Nature</i>, 506, 223-229, 2014. Figure 3. <i>Clovis Child burial location, the Crazy Mountains in the background.</i> White V., Samuel S., "The Anzick Site: Cultural Balance and the Treatment of Ancient Human Remains (Toward a Collaborative Standard)," <i>ScholarWorks at University of Montana</i>, 2015. Figure 4. <i>Shane M. Doyle, Crow, (left) singing an honor song to the Clovis Child to burial the disturbance. Also pictured: geneticist Erika Wilensky (center) and Sarah Anzick (right).</i> Source: Ibid.</p>	<p>Two Perspectives on an Ancient Child</p> <p>The Anzick Clovis Child</p> <p>Background: In 1968 on the Anzick family's Montana ranch, two construction workers accidentally discovered the remains of a late-Pleistocene child and a sizable assemblage of Clovis age artifacts (~13,000 years old) including fluted projectile points and an elk antler rod. In the mid-2000s, due to a renewed interest in the case and advances in ancient DNA (aDNA) science, researchers determined that the child belonged to a group of people ancestral to many modern Indigenous Tribes.</p>  <p><i>Figure 1. Artifacts from the Clovis Child Burial. Anzick Family.</i></p> <p>Two Ways of Knowing: The Crow Tribe believe that their history begins with immemorial, during "Long ago Times." The Crow Oral Tradition states that their ancestral tribe were nomadic hunters and warriors, who have now been connected to the Clovis child through genetic evidence.</p> <p>Scientists have long debated if modern Indigenous peoples really are the descendants of the earliest inhabitants of the Americas. They have further disputed who those early inhabitants really were, if they were the makers of Clovis tools or if they came before the Clovis era. The study of the Clovis child brought two ways of knowing together despite the history of</p> <p>A Multivocal, Interpretive Framework Shelby W. McWhirter</p>
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Table 7. Anzick Clovis Child case applied to the interpretive framework (a brochure cover)

CHAPTER 5

CONCLUSION

Late Pleistocene, PaleoIndigenous archaeology is a field which is riddled with warring models and hypotheses regarding the question of the peopling of the Americas.¹³⁹ Despite a growing archaeological record and advancements in scientific methods, the question remains unanswered.¹⁴⁰ Much of the rhetoric which exists within the academic literature suggests that the field has moved past the Clovis-First model, but when one spends time reading the back-and-forth debates between academics, it becomes clear that the Clovis-First model is still in use as an Authorized Heritage Discourse. Amidst the academic scrutiny and binary nature of the subfield, the fixation on this peopling question has caused much division both within the field and between Indigenous Knowledge holders and peopling-focused academics. There is a need to shift the field's gaze from resolving the peopling question, to seeking ways in which this research can be used to benefit interested descendant communities. The Anzick Clovis Child's case revealed, not only, the lineal connection between modern descendants and Clovis peoples,

¹³⁹ Jorie Clark et al., "The age of the opening of the Ice-Free Corridor and implications for the peopling of the Americas," ed. David Meltzer, *PNAS* 119(14), 1-6, 2022.

Jerome E. Dobson et al., "The Bering Transitory Archipelago: steppingstones for the first Americans," *Geoscience* 353, pp. 55-65, 2021.

Loren G. Davis and David B. Madsen, "The coastal migration theory: Formulation and testable hypotheses," *Quaternary Science Reviews* 249, 2020.

Jon M Erlandsen et al., "The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas," *The Journal of Island and Coastal Archaeology* 2(2), pp. 161-174, 2007.

Graham R. Steneck et al., "Kelp Forest ecosystems: Biodiversity, stability, resilience, and their future." *Environmental Conservation*, 29, pp. 453, 2002.

Paul S. Martin, "The Discovery of America: The first Americans may have swept the Western Hemisphere and decimated its fauna within 1000 years," *Science* 179(4077), pp. 969-974, 1973.

¹⁴⁰ Todd A. Surovell et al, "Late date of human arrival to North America: Continental scale differences in stratigraphic integrity of pre-13,000 BP archaeological sites." *PLoS ONE* 17(4), 2022.

Jennifer Raff, *Origin: A genetic history of the Americas*, 2022.

Paulette F.C. Steeves, *The Indigenous Paleolithic of the Western Hemisphere*, 2021.

Ben A. Potter., "Current evidence allows multiple models for the peopling of the Americas." *Science Advances* 4(8), 2018.

Todd J. Braje et al, "Finding the first Americans: The first humans to reach the Americas are likely to have a coeval coastal route." *Science* 358(6363), pp. 592-594, 2017.

but also how this area of research has the potential to reveal meaningful historicity from deep time to a public facing audience.

The Authorized Heritage Discourse exists in an unresolved binary within the confines of archaeological research: the First Peoples either were Clovis and were first or the First Peoples arrived before or during the Last Glacial Maximum. Many Indigenous perspectives cite *time immemorial* for the origins of their ancestors. As we have seen throughout the unfolding of this thesis, when older archaeological evidence is found, they largely have served as corroborative evidence for Indigenous descendants, proving their ties to these landscapes is one which extends deep into the past. As many, who have critiqued this field of study, suggest scholars need to begin to think about these questions that drive research, this research that has been so polarized.¹⁴¹ This thesis suggests that this research should seek to work with descendants to think about Clovis time in a novel way which has the potential to create relationships like the ones created through the Clovis Child research. Importantly, this research should not be confined to cases like Anzick, where archaeologists felt the need to include Indigenous stakeholders due to the sensitive nature of the archaeological evidence. This kind of research should begin to occur broadly.

With the recent passing of the new NAGPRA regulations, it becomes even more apparent that should consultation need to occur for PaleoIndigenous archaeology, establishing relationships between researchers and Indigenous stakeholders is important. Extant relationships will ensure that consulting agencies will be better equipped to facilitate NAGPRA when voluntary collaboration becomes consultation. While this thesis studied a story which has already been revealed and shared in a way which has amplified the multivocality needed to holistically

¹⁴¹ Bonnie L. Pitblado., “On Rehumanizing Pleistocene People of the Western Hemisphere,” *American Antiquity* 87(2), pp. 225, 2022.

understand these questions, this thesis also recognizes that, as Bernardini and Atalay suggest, multivocality is more than just an interpretive framework. Multivocality is an approach which should be implemented from the beginning of research and collaboration must be integral throughout the entire duration of the research project. I proposed my multivocal, interpretive framework by using extant research conducted regarding the Clovis Child, but this thesis urges that future research should begin to implement fully multivocal research projects regarding deep time.

Future Directions:

While I sought to propose an answer to the contingency of the peopling question, I will address the fact that there is still much work to be done. Before a multivocal framework can be effectively implemented in deep time research, researchers will first need to take the time to foster relationships with Indigenous stakeholders. Further, researchers of other disciplines conducting research in areas of genetics and paleoenvironment will also need to seek relationships with one another. This proposal suggests that collaboration among these various stakeholders will yield more holistic interpretations of deep time.

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