

GENDER, IDENTITY, AND BELONGING: A COMMUNITY-BASED SOCIAL
ARCHAEOLOGY OF THE NUNALLEQ SITE IN
QUINHAGAK, ALASKA

by

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A DISSERTATION

Presented to the Department of Anthropology
and the Division of Graduate Studies of the
University of Oregon in partial fulfillment of the
requirements
for the degree of
Doctor of Philosophy

June 2021

DISSERTATION APPROVAL PAGE

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Title: Gender, Identity, and Belonging: A Community-based Social Archaeology of the Nunalleq Site in Quinhagak, Alaska

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DISSERTATION ABSTRACT

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Department of Anthropology

June 2021

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This dissertation presents a social approach to archaeology at the Nunalleq site, located just outside the contemporary Yup'ik community of Quinhagak, Alaska. Nunalleq is a pre-contact village comprised of two sod house complexes occupied intermittently between about AD 1570 and 1675, concurrent with the Bow-and-Arrow Wars period on the Yukon-Kuskokwim Delta. Since 2009, the site has been the subject of the Nunalleq Archaeology Project, a collaboration between the University of Aberdeen, Scotland, and Quinhagak's Qanirtuuq Inc., an Alaska Native Village Corporation. Threatened by climate change, Nunalleq has yielded a stunning array of well-preserved material culture, including masks, human and zoomorphic figurines, wooden tool handles, grass basketry and cordage, lithic artifacts such as knife blades and drill bits, clay lamps, and abundant faunal, botanical, and paleoentymological remains. Residents of nearby Quinhagak feel connected to the site, and consider its inhabitants to be their ancestors.

Following Indigenous, decolonizing, and community-based approaches to archaeology; gender archaeologies; and Native feminist theories, this project uses local knowledge about Yup'ik social identities to interpret three material culture categories at

Nunalleq: 1. objects related to facial adornment, including labrets and human representations featuring tattoos and nose beads; 2. *uluat*, or “women’s knives;” and 3. bentwood vessels featuring incised *qaraliq* markings. Anthropological and archaeological methods are combined in this research. While semi-structured ethnographic interviews from Quinhagak residents guide project themes and interpretations, the results of archaeological stylistic analyses and 19th and 20th century ethnographic materials are also woven in, creating a multidimensional assessment of how site inhabitants expressed gender, identity, and belonging.

While gender, age, status, and forms of family, village, and regional identity were all likely important in the social world of the ancestors, overarching concepts of Yup’ik personhood cross these categories and come to the fore as key to identity formation. Conceptions of the social world authored by Quinhagak residents and other Yup’ik culture-bearers helped reveal these dynamics. Methods of listening and a focus on local iterations of identity were important components of the research, and may be useful approaches for future community-based archaeologies of past social worlds

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Sloan, Anna. 2020. "Learning to Listen: Stakeholder Perspectives on Gender at a Thule-Era Alaskan Village." *Archaeological Papers of the American Anthropological Association* 31: 96-109.

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ACKNOWLEDGMENTS

This project was made possible by the help and support of many people. At the University of Oregon, my graduate advisor and committee chair Madonna L. Moss has been a sage, fearless, and engaged mentor to me for nearly ten years. I am also grateful to committee members Stephen Dueppen, Lynn Stephen, and Brian Klopotek for all of their help and guidance. In the Anthropology office, both Leah Frazier and Lisa Clawson have worked to ensure success for me and other graduate students, and deserve many thanks.

From the University of Aberdeen, I am grateful for Nunalleq Archaeology Project co-PI's Rick Knecht, Charlotta Hillerdal, and Kate Britton, who generously agreed to my participation in their project. They are some of the hardest-working archaeologists I know, and it has been a privilege to work amongst their team. Fellow project participants Véronique Forbes, Paul Ledger, Edouard Masson-MacLean, Julie Masson-MacLean, Anna Mossolova, Alice Watterson, Jonathan Lim, Kotsja Junglas, Sandra Toloczko, Cheryl Heitman, Tricia Gillam, Lise Bos, and Leonie Redgate have provided valued lessons in archaeology, moral support, and friendship over the years. While in Quinhagak, I am grateful to have met two Alaska anthropologists who had a marked impact on my work: Ann Fienup-Riordan and Sven Haakanson. Thanks also go to the countless other researchers, students, journalists, and volunteers who I was lucky to meet as a result of the Nunalleq Archaeology Project — I'm so glad that our paths crossed.

I owe perhaps the largest debt of gratitude to members of the Quinhagak community who not only allowed me to learn about their village and that of their

ancestors, but who treated me as a friend during the process. A big thank you to Warren Jones and the Qanirtuuq Corporation for facilitating my Quinhagak research, and to Louie Johnson for helping with logistics and planning in 2015. Mike Smith, dear friend and fellow project participant, helped to organize the 2017 interviews and with innumerable other questions and tasks, and Meta Williams served as my research assistant and local guide in 2019 — I couldn't have finished the project without them. I am deeply grateful for the Quinhagak residents who became my friends through this project: Willard, Mary, and Lynn Church; John Teddy and Nellie Roberts; John Smith and his family; Annie Cleveland; Grace and Julia Hill; Jamie Small and the maqii ladies; Sarah Brown; and others — your warmth and kindness have had an immeasurable impact on my life. A big “quyana” also goes to all others who participated in interviews and helped me to learn: Jimmy and Grace Anaver, Jim Barthelman, Pauline Beebe, Ferdricka Carter, Wade Church, Joshua Cleveland, Lorena Ford, John Foster, John Fox, Emily Friendly, Fannie Johnson, Evelyn Jones, Louisa Kuku, Edward “Sammy” Mark, John O. Mark, Frank and Martha Matthew, Pauline Matthew, George Pleasant, Grace Pleasant, Anna Roberts, Bav'illa Small, and Emma White.

I am grateful for funding received to complete various portions of this dissertation project. The Center for the Study of Women in Society (CSWS) at the University of Oregon provided funding for 2015 pilot interviews. A National Science Foundation Doctoral Dissertation Improvement Grant (#2006F0) funded my return visits to Quinhagak in 2017 and 2019, and many thanks go to Anna M. Kerttula de Echave, Program Director for Arctic Social Sciences, for her support of the project.

For Adam,
who has taught me more about kinship
than I could ever express in words.

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CHAPTER I: INTRODUCTION

Arrival

The part of visiting Quinhagak when I always start to feel like a “lower-48er” is the flight transfer through the Bethel airport. The small room is full of folks waiting, often for many hours, for their flights to the 56 rural villages scattered across Alaska’s Yukon-Kuskokwim Delta. A few check-in agents help travelers weigh their baggage, make phone calls, and reschedule after weather delays, which are frequent. A bulletin board close to the small metal sliding door that serves as baggage claim lists a number of local restaurants that one can call to have food delivered directly. Planes, predominantly light aircraft, arrive and depart. One quickly realizes that many disparate groups passing through seem to know one another— a 75,000 square mile region, but one intimately connected through ties of kinship and camaraderie.

On my first trip to Quinhagak, this airport is where I really began to feel nervous, excited, and eager to learn a new place. Whenever I leave to travel back to Oregon, it is where I feel departure from village life most acutely. I have passed through Bethel airport many times since that first layover, and still love how it captures the spirit of rural Alaskan ingenuity, friendship, humor, and novelty. The airport feels this way to me because I am not a local, but a visitor, an anthropologist, traveling to Quinhagak to learn from residents about their history and how it relates to Nunalleq, an archaeological site on the outskirts of the modern village. My role in this context requires care. The Bethel airport is a good place to ask: Why do I do this research, and who does it serve? Is it relevant to the Quinhagak community? How would I know? How can I be a responsible steward of this work and act in reciprocity for the generosity, kindness and openness that the people of this place have shown me?

The Place of Quinhagak

The village of Quinhagak (Figure 1) is oriented in a long strip running roughly parallel to the winding Qanirtuuq River, a 75-mile waterway running from the Ahklun

Mountains into Kuskokwim Bay that is the lifeblood of this community and has been for millennia. The name Quinhagak is a shortened version of the Yup'ik term *kuingnerraq*, meaning “newly formed river,” an allusion to the village’s founding in pre-contact times along what was then a new river channel (Fienup-Riordan 2013, xxxiii).



Figure 1. The location of Quinhagak in southwestern Alaska. Original map courtesy of Véronique Forbes.

Walking southeast from the river, one encounters several abandoned fish racks nestled amongst long grasses, with Quinhagak's multi-colored rectangular houses rising in the background, interrupting an otherwise starkly open horizon (Figure 2). Further out, one long road runs west and southward in one direction towards the coast and the garbage dump, and in the other, northeastward to the airport. A few looping dirt roads organize the village houses, which are lifted off the wet tundra by piers and clustered into mini neighborhoods. The houses are close together, and a fortunate few have small two-room steamhouses in their yards; these are used for taking *maqii*, or steam baths, still an important practice in the village but even moreso prior to the introduction of residential plumbing to Quinhagak, only completed in 2012. Most homes are surrounded by outbuildings and vehicles indicative of a predominantly subsistence-based lifestyle: smokehouses, boats, snow machines (known locally as "snow-go's"). For most folks in the village, such vehicles allow for weekly, if not daily, trips out on to the landscape-- to the river or the ocean to fish; or to the tundra to hunt for moose, caribou, or birds, to trap beaver and other fur-bearers, and to pick berries and greens. In the warmer months, the four-wheeler is a ubiquitous sight about Quinhagak, and only a handful of cars and trucks are on the road. Quinhagak is not connected to the road system in Alaska, so to travel out one goes by plane, boat, or directly across the tundra.

As of 2018, Quinhagak was home to just under 800 people, predominantly of Yup'ik descent. The village is the type of place where everyone seems to be related; if you mention someone's name, you will learn that you are speaking to their cousin, in-law, aunt or uncle, or sibling. Families are large and cohabit in diverse formations, with households often containing several members of multiple generations. The village K-12 public school, called Kuinerrarmiut Elitnaurviat, is the place where children spend their days most of year, with the exception of summer, when the lingering sun entices groups of kids to play outside for hours. Adults find work at the health clinic, in the general or hardware stores, as day laborers, or in the fishing industry. Many are also involved in a growing informal economy of craft sales in the region, making earrings, fur hats and coats, baskets, dolls, and ivory carvings. Employment is hard to come by in Quinhagak,

where the median household income is under \$35,000 and the poverty rate is just over 34% (DataUSA, n.d.).



Figure 2. Views of the village of Quinhagak, including the sign for Qanirtuuq, Inc at upper left, and the Moravian Church at lower left.

Community spirit is strong and palpable in this village. During the day, the roads are busy with activity: parents taking their kids shopping at the grocery store, perched atop the front of a slow-moving 4-wheeler; folks dropping by the post office to pick up their mail; friends walking together or chatting by the side of the road. There is immense pride in the school sports team— the Seahawks— with parents and students sporting local gear year-round. The Moravian Church, a Quinhagak institution since the early

1900s, brings members together for services on weekends and holidays, its bell schedule a timepiece for religious and secular thinkers alike. Village announcements are broadcast over CB (citizens band) radio, a necessity in nearly every household. On a given day, the radio might announce an invitation to a potluck feast to honor a dead relative or a throw party to honor a child's first subsistence catch, a plea about a coat left at the bingo hall, or a call for a certain type of fish desired by an elder. Quinhagak is a close-knit place, and everyone knows and looks out for everyone else.

Qanirtuuq, Inc., an Alaska Native Village Corporation founded in 1973 following the passage of the Alaska Native Claims Settlement Act (ANCSA), provides care and services for Yup'ik shareholders in the village. In 1971, ANCSA consolidated Native land claims in Alaska under tribal entities, which lawmakers hoped would both resolve continuing land ownership claims in the state and jump-start economic development for tribal and non-tribal corporations alike. As a private, for-profit entity, Qanirtuuq, Inc., (known locally as Q-Corp) represents the interests of the village (many Yup'ik residents are shareholders) and is a primary entity making decisions related to the local economy, infrastructure, and policy. The corporation is governed by a Board of Directors (currently comprised of four women) and employs a CEO and administrative staff. The village general store is owned and operated by Q-Corp, and the corporation also maintains local offices in the upstairs of a community space affectionately known as "the Red Building." With its goal of being "an Alaska Native Corporation that is sustainable, culturally focused, profitable and benefits our shareholders," Qanirtuuq, Inc., is a fixture of daily village life (Qanirtuuq Incorporated 2017).

Located along the Bering Sea coast, Quinhagak is one of many Alaskan villages very palpably bearing the brunt of climate change (Britton and Hillerdal 2020; Knecht and Jones 2020). Rising sea levels, increased coastal erosion, melting permafrost, intensifying winter storms, shifting temperatures, and changes to the seasonal migration cycles of animals are just a few of the impacts affecting the day-to-day lives of residents. For people in Quinhagak, climate change has meant that the ground beneath their homes is less stable; that staple resources are not always available for fishing, hunting and

gathering (no small thing in a low-income village that relies on subsistence for food); and that the very location and safety of the village are increasingly threatened by changing river and coastline topographies (Sloan 2020; Warren Jones 2017; Willard and Mary Church 2017). In an interview with Rearden and Fienup-Riordan (2013, 372), Quinhagak elder George Pleasant explained that “the entire ocean shore...has moved back at least about a thousand feet” since when he first saw it as a child. Quinhagak's current residents and their ancestors have been observing and interacting with their local landscape since time immemorial, and many of these environmental experts are concerned about their community's future.

Yet change has long been a part of village life. Elders recount a local legend of a shaman from times past predicting that the village of Quinhagak would move five times. As George Pleasant recounted (in Rearden and Fienup-Riordan 2013, 378-380), “they say that person said, ‘The village of Quinhagak will move five times.’ When they move for the fifth time, they will finally move to the place where they will live permanently and not move again.” In the same conversation, elder Martha Mark added that “the village has moved and formed three times in my presence,” referring to changes in the location of village houses and buildings throughout the 20th century largely as a result of coastal and riverbank erosion (Rearden and Fienup-Riordan 2013, 380). Even before the founding of Quinhagak, movement, adaptation, and change were interwoven into the lives of Yup'ik people living along the Qanirtuuq and Arolik rivers, the ancestors of contemporary Quinhagak residents. The lives of these ancestors, and especially how these are envisioned, understood, and honored by Yup'ik people in Quinhagak today, are the subject of the rest of this story.

Studying Gender, Identity, and Belonging at Nunalleq

Quinhagak residents were aware of Nunalleq's existence long before the site was known to archaeologists and outsiders. Community members travel the stretch of coast bordering Quinhagak nearly daily for subsistence trips, and tales abound of parents or grandparents finding various artifacts on the beach over the years. Elders understand

Nunalleq, or “the old village” in Yup’ik, to have been proximate to the setting for a specific and significant local story related to the Bow and Arrow Wars, a period of intertribal warfare on the Yukon-Kuskokwim Delta dating from about AD 1300 to 1800 (Fienup-Riordan and Rearden 2016, 75; Knecht and Jones 2020, 29). As George Pleasant recounted (in Rearden and Fienup-Riordan 2013, 398), that “old village of Agaligmiut down the coast...there are two homes...[archaeologists] are digging in them, and they find things.” Local oral history states that, in revenge for an injury incurred during a dart-throwing game, warriors from the neighboring village of Pengurpagmiut attacked and burned Agaligmiut to the ground (Fienup-Riordan and Rearden 2016, 75-76; Rearden and Fienup-Riordan 2013, 394-398). This incident plays out in archaeological reality; the upper layer of Nunalleq is burnt, and evidence suggests a bloody battle (Knecht and Jones 2020, 33). Although the existence of the old village was never a surprise, the amount and quality of archaeological information available from its remains has stunned both archaeologists and Quinhagak residents. The depth, nuance, and quality of the archaeological remains match that of the oral legend surrounding it, creating an unparalleled opportunity for the collaborative pursuit of knowledge between the Yup’ik community and researchers (Knecht and Jones 2020).

In 2007, after a number of artifacts were observed eroding from a stretch of sea cliff between the Qanirtuuq and Arolik rivers a few miles outside of Quinhagak, Qanirtuuq, Inc., invited archaeologist Rick Knecht, then of the University of Alaska Fairbanks, to come and assess the area (Knecht and Jones 2020, 26). Knecht and Warren Jones, CEO on Qanirtuuq, Inc., began to work together to plan a salvage excavation of the archaeological materials. The two quickly recognized the site’s immense potential as a source of information, both for the village interested in expanding its knowledge of pre-contact heritage, and for the archaeological community, which only has scant data about this region of Alaska (Knecht and Jones 2020, 27). Though initially a rescue excavation, by 2012 the site had been stabilized, funding and personnel had grown, and a field school had been established, resulting in a full-fledged interdisciplinary research project led jointly by the University of Aberdeen, Scotland (Knecht’s new institution), and

Qanirtuuq, Inc. (Knecht and Jones 2020; Masson-MacLean et al. 2019).

The Nunalleq site is situated at the edge of a coastal bank abutting the Bering Sea mudflats (Figure 3). On clear days, one can see all the way to the mountains towards the south, and several miles out into Kuskokwim Bay. Although different areas of the site have been variously opened each season, the entire expanse measures about 912 square meters, and contains at least two different occupational layers indicated by sod house architecture. Radiocarbon testing puts site occupation from about AD 1400 to 1640, though more recent Bayesian modeling suggests a more concentrated, three-generation occupation of the uppermost layer from AD 1570 to 1630 (Ledger et al. 2018). Over 60,000 artifacts have been excavated from the site over eight field seasons, all of which are now housed in Quinhagak's new Nunalleq Culture and Archaeology Center. The archaeology at Nunalleq is probably the best that many team members will encounter in our careers: from perfectly preserved wooden masks; to a paintbrush with bristles and lashing intact; to cuttings of hair and fingernails, the detritus of everyday grooming; to braided grass baskets holding complete oil lamps— the quality of preservation at this site is phenomenal. This abundance of well-preserved artifacts also affords a unique opportunity for high-resolution analysis, as data include large samples of different artifact types and precise locational information. Equally extraordinary is the vibrant descendant community living adjacent to the site in Quinhagak. Many village residents are interested in the archaeology of Nunalleq and hold invaluable knowledge about its history and contents (Knecht and Jones 2020). Nunalleq, in terms of its history and contemporary relevance, is by all accounts remarkable.

This dissertation is designed to honor these exceptional qualities of Nunalleq and the site's connectedness to the descendant community at Quinhagak. Recognizing that possibilities for rich archaeological interpretation grow when diverse lines of evidence and ways of knowing intersect, my goal is to better understand Yup'ik social life at Nunalleq through a combination of archaeological, anthropological, and ethnographic approaches. Given the significance of Nunalleq to Quinhagak's story and the depth of knowledge that locals hold about the village, I began my inquiry in the community,

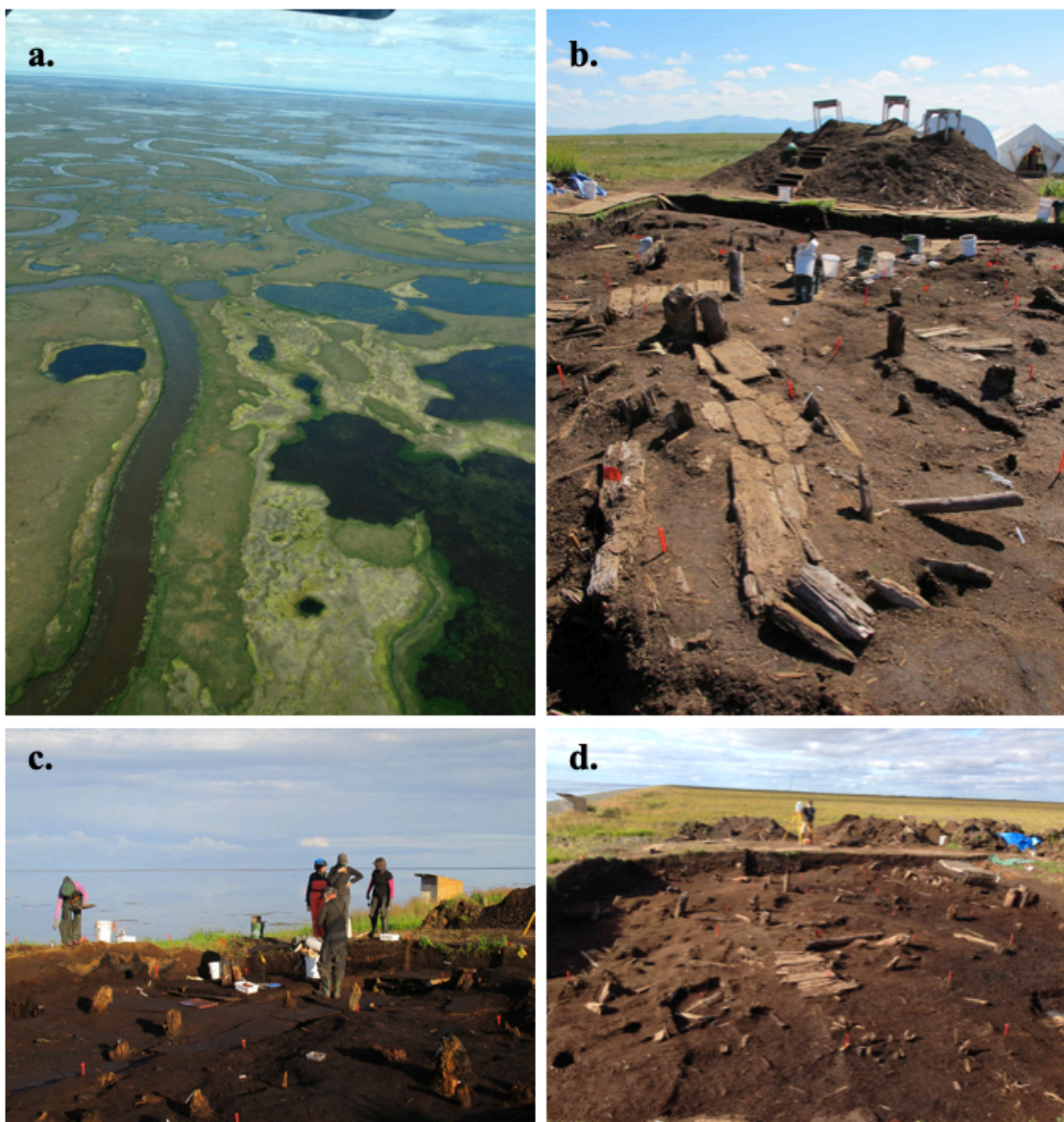


Figure 3. The Nunalleq site and surrounding area. a) A view of the Delta from above. b) Facing southward from the site. c) The edge of the site abuts the eroding sea cliff. d) Facing northwards from the site.

asking residents about their perspectives on Yup'ik gender and social relations, how these manifest in the material world, and where archaeologists might recognize them at Nunalleq. I then applied this community-based knowledge to archaeological evidence from the site, focusing on three artifact categories with demonstrated social significance to Yup'ik communities: labrets, which were worn on the face as personal adornment up until historic times; *uluat*, or “women’s knives,” still used today for a variety of subsistence tasks; and bentwood vessels with *qaraliq*, or markings, that speak to a variety of identity- and affinity-based questions relevant to the present and the past. Centering Yup'ik perspectives on identity and sociality, fostering multi-vocal interpretations of Nunalleq's archaeology, and growing our understanding of the pre-contact Yup'ik past in ways that benefit both the village of Quinhagak and the larger archaeological community are the primary goals of this work.

The Question of Gender

Gender has been at the center of this project from its inception. Arctic anthropologists have long recognized gender as an important social organizing principle for Yup'ik people (Ackerman 1990; Fienup-Riordan 1994, 2007; Frink 2007, 2008), though it has not always been forefront in research (Frink et al. 2002). More generally, gender has become a subject of serious archaeological study within the past 40 years (e.g., Conkey and Spector 1984; Gilchrist 1999; Wylie 2007), but in many ways is still a marginalized subfield of the discipline (Fryer and Raczek 2020). Outside archaeology, scholars have been increasingly attending to gender equity issues that affect Indigenous women (e.g., Arvin et al. 2013; Green 2007), who are disproportionately affected by violence, poverty, and discrimination (Tauli-Corpuz 2018). Expanding our knowledge of gender in the past, particularly in the Arctic and in collaboration with Indigenous communities, thus contributes to larger conversations.

My identity and positionality have affected my choice to study gender at Nunalleq. When I first learned of gender archaeology as an undergraduate, the subfield's existence felt like a revelation: its critiques of androcentrism in dominant narratives about the past

made perfect sense to me, and the critical perspective afforded by its attention to marginalized experiences helped me see the potential for archaeology as an agent of social change. As a queer (but straight-passing) woman participating in academia and in our largely patriarchal world, my gender identity has affected my life deeply, in ways both subtle and overt. The same is true of other facets of my identity— for instance, as a white person benefitting from racial and wealth privilege. I participate in and observe all of these embedded identity power dynamics, and they are not separate from my work. For this reason, I have found multi-vocality to be an especially important feature of this research, because it is only at the nexus of several (sometimes contradictory) perspectives that I can approach a sense of understanding the past.

Gender is a complicated but important analytic, particularly when accounting for the cultural situatedness of all social categories and their intersections (Sloan 2020). Neither my positionality as a woman nor my personal interest in gender provide me with understanding of gendered experiences through all times and places. This is especially true of gender manifestations in cultures different from my own, in places where misguided researchers would sometimes historically tout their own observation-based expertise, unfortunate side effects of the racism, xenophobia, and ethnocentrism of our discipline's nascence. Most of today's anthropologists and archaeologists are careful to interact with communities in ways that are respectful, ethical, and cognizant of their autonomy— a vast improvement on practices of the past, though much work remains. For anthropologists working with Indigenous communities in North America (of which there are hundreds, each distinctive in terms of history, positionality, identity, and goals for the future), the legacy of anthropology has largely been one of damage and devastation. Given this history, this is a research context where special care must be taken. Addressing questions of gender in Indigenous communities thus requires close work with stakeholders to understand 1) whether gender is an important category of analysis within the cultural context, and 2) if so, how the category is defined and manifested. It is imperative that gender-based (and all other) research in Yup'ik and other Indigenous communities be carried out with the permission and collaboration of the community. This

is the approach I have attempted to follow in this dissertation.

The above concerns are those of Indigenous and decolonizing approaches to archaeology, from which I draw deep inspiration in this work. This dissertation is situated specifically within the realm of community-based archaeology, an approach distinct from but largely informed by Indigenous archaeologies. Community-based archaeologies are reciprocal, engage diverse publics, acknowledge multiple knowledge systems, and help communities to build capacity (Atalay 2012). In North America, community-based archaeology must necessarily intersect with decolonizing practice. I strive to make my research as decolonizing as possible (though I acknowledge that I cannot define my own research as such, and that archaeology can never be completely decolonizing) by sharing power over the narrative with Yup'ik residents of Quinhagak, providing the community with research products that they can use in the future (e.g., audio recordings of all interviews gathered for this project and a detailed interview inventory that locals can use in their own research) and by centering the conversation on how gender and social identity are expressed in Yup'ik perspectives.

Native feminist philosophies assert that “settler colonialism has been and continues to be a gendered process” (Arvin et al. 2013, 9). Key strategies of colonialism have always included the demonization of Indigenous gendered lifeways, the exploitation of Native women’s labor, explicit and covert gender violence against Native women, and the imposition of Euroamerican gender and social categories onto tribal communities (Sloan 2020). As such, we cannot extract the mission of gender equity from that of Indigenous sovereignty. Through this research, I hope to demonstrate how attention to gender enhances the goals of Indigenous and decolonizing archaeologies, particularly when this work is community-based. Expanding upon Barnett’s (2015) notion of an Indigenous feminist archaeology and other specifically feminist archaeologies authored by women of color (e.g., Battle-Baptiste 2011), I explore what such an approach might look like in the contexts of Nunalleq and Quinhagak. How do categories of gender and identity shift in form, content, and quality when refracted through the lens of familial obligation, intergenerational survivance, and processes of teaching and learning, as they

are for the Yup'ik community in Quinhagak? Can we see gender and identity take shape in this way at the Nunalleq site, and if so, where and how? How does this archaeological knowledge then circle back to become meaningful for Nunalleq's descendants in Quinhagak? How does it become meaningful for the pursuit of more equitable and community-based archaeologies and anthropologies as a whole?

The Dissertation

This dissertation is composed of nine chapters. In Chapter II, I discuss the theoretical orientation of my research, which is situated at the nexus of Indigenous, decolonizing, and feminist approaches to archaeology. These approaches lead me to rely on Yup'ik theories of identity and belonging, which I explore. I argue that an intersectional approach to social categories is not only necessary to decolonizing archaeology, but also revelatory of novel patterns in the data, ultimately resulting in more thorough, ethical, and relevant scientific practice.

Chapter III details the history of Yup'ik communities on the Yukon-Kuskokwim Delta from AD 1000 to the present, focusing wherever possible on local Quinhagak history. I rely on information from archaeological, ethnographic, and oral historical sources to paint a multi-vocal backdrop for happenings at both 16th-17th century Nunalleq and contemporary Quinhagak.

Chapter IV provides an archaeological orientation to the Nunalleq site and the Quinhagak Archaeological Project. I describe the artifacts, features, and architecture of the site; provide the basic chronology of its occupations; and discuss some of the current interpretations of the village from project leaders.

In Chapter V, I present the structure and methods of my own research on the Nunalleq site, and describe how my project articulates with the broader Quinhagak Project. I explain my ethnographic interviewing methods and introduce the archaeological approach that I elaborate in subsequent chapters, discussing some of the challenges and opportunities inherent in this interdisciplinary work.

Chapters VI, VII, and VIII present the results of my research. In Chapter VI, I

discuss the archaeology of facial adornment at Nunalleq, focusing on labrets, tattoos, and nose beads as expressions of various facets of embodied identity. Subsistence is the focus of Chapter VII, which includes an analysis of uluat from Nunalleq and an assessment of how these objects relate to social categories like gender, age, and family. In Chapter VIII, I explore how the qaraliq, or markings frequently found on bentwood vessels and other objects at Nunalleq, may reflect aspects of social organization as it relates to cosmology, personhood, and obligation in Yup'ik society. Each chapter provides a combination of archaeological, ethnographic, and oral historical data which intersect to help me form inferences about the site's inhabitants.

Chapter IX concludes the dissertation. I discuss the major findings of the project and my reflections on its trajectory and outcomes, with an eye towards how it contributes to larger conversations in archaeology and anthropology.

As in Yup'ik ways of knowing, the ideas presented here cycle, intersect, and encircle one another. Several themes and threads of understanding run throughout the work, including:

1. Listening. An act of utmost importance in how Yup'ik people learn to be good members of their communities, this is also one of my primary methods as an anthropologist conducting interviews in Quinhagak.
2. Teaching and learning. All cultures embrace this dynamic to some degree, but specific pathways of knowledge between generations are central to how Yup'ik people enact social identities, and to how elders envision the survivance of their communities. Listening is a primary mechanism for sharing knowledge, for as Rearden and Fienup-Riordan (2013, xxviii) explained, “elders teach more than facts; they teach listeners how to learn.”
3. Multi-vocality: As Sam Carter stated to Fienup-Riordan (1994, xiii), “this Yup'ik way cannot be told only one way. The aperyarat (sayings) can only be told in many different ways.” Multi-vocality is significant in both Yup'ik tradition and Indigenous archaeology more generally, and it is a central tenet of this work. My intent is to populate this document with as many diverse Yup'ik voices as

possible, from both Quinhagak and surrounding communities, in order to honor this ethic.

4. Future generations: Yup'ik communities cherish the children they raise, seeing their wellbeing not only as joyous in its own right, but also as significant to the continued prosperity of Yup'ik culture. During interviews, most elders I spoke with made it clear that they see the heritage of the village as belonging to its future generations. This work also belongs to them, a fact I bear in mind throughout.

A Note on the Writing

This is an unconventional dissertation for the field of archaeology, its format and content more typical of ethnographic and cultural anthropological texts. I have explicitly chosen this form of writing for this feminist project given the opportunities it provides for self-reflexivity, creativity, and multi-vocality. In doing so, I draw inspiration from literary theorists like Cixous and Clément (2001), anthropological texts such as Behar and Gordon (1995) critical responses such as Moraga and Anzaldúa (2015), and innovative archaeological narratives like Spector (1993). I begin each chapter by recounting an ethnographic moment related to the ensuing content, which provides a refractory lens for me to examine my positionality, assumptions, and growth throughout the work. Inspired by Spector (1993), Chapters VI, VII, and VIII each conclude with an imagined story from Nunalleq, personifying the ancestors and incorporating artifacts analyzed in the text. In this, my goal is to foster empathy and “give faces” (sensu Tringham 1991) to the pre-contact people who are at the center of the archaeological research.

As part of my commitment to honor Yup'ik voices as primary sources, I choose to cite each ethnographic interview as a source in the bibliography rather than just in the text, even though these are unpublished (see Chicago Manual of Style 14.211). Direct quotes or information from Quinhagak interviews are cited in-text with the source's full name and year. In the case of group interviews, one or more people may be cited in-text at once, depending on the part of the conversation referenced. For published interviews

with Yup'ik culture-bearers who are not from Quinhagak, I include the speaker's home village in the in-text citation, as village affiliation is a critical aspect of Yup'ik identity. Whenever possible, I give primacy to perspectives from Quinhagak, given the local focus of my analysis.

CHAPTER II: THEORETICAL ORIENTATION

I first spoke with Annie Cleveland in 2015 at the suggestion of local leaders. As a respected elder and former teacher, she is as an important village representative and someone who could share relevant knowledge of Yup'ik culture and lifeways. Annie agreed to an interview on the subject of gender roles and relations, and it was a pleasure to talk with her and learn about her life. I became familiar with the particular cadence of her voice and the careful, economical way she chose her words, describing things “just so.”

In 2017, Annie was one of the first people I thought to talk to when pursuing additional interview topics of materiality, subsistence, and identity. Annie agreed to an initial interview where we discussed subsistence lifeways, gender and identity, and family structures of the past. At the end of our time together, I invited Annie out to Nunalleq for an on-site interview and to see the progress of that summer's dig. Annie tentatively accepted the invitation, but had a request for me, too: had I read any of Harold Napoleon's writing? She wanted to bring me an article that I should read and review before we met again. I understood that this was an assignment of sorts, and the maintenance of a gentle boundary. There was knowledge I didn't have that was important for my future interactions with Annie.

Annie arrived at the Red Building promptly the next day to deliver me her copy of a Harold Napoleon article. I read it that night in my shared quonset hut bedroom, taking notes in my fieldwork journal. This was an article about the devastating effects of colonialism and epidemic in Alaska Native communities. I realized that the day before I had been asking Annie many questions about how she had learned subsistence as a child, but she was an orphan, her life trajectory intimately affected by the major changes to Yup'ik culture and population that occurred in the early 1900s. These things were interconnected. Although family is a deeply seated Yup'ik value, historically, it has also been a place of colonial interruption, dismantlement, and violence. In the village today, family is discussed as imperative to Yup'ik survivance, resilience, and well-being, its

entrenchment and affirmation perhaps as resistance to historical trauma. I interpreted Annie's insistence that I read Napoleon's work before engaging in future interviews as an act of friendly and productive critique. I needed to check my positionality as a *kassaq*¹ and outsider to this community, recall the colonial context I was working in, and use care to follow the lead of community members in enacting my research.

* * * * *

In his essay "Yuuyaraq: The Way of the Human Being," Napoleon (2005) recounted the story of contact between Yup'ik people and white Westerners.² Although Yup'ik people "resisted Russian efforts to colonize them" and "did not abandon their spirit world or their beliefs upon first hearing the Christian message of the priests," such contact with outsiders brought about a "Great Death," or *yuut tuqurpallratni*, "when a great many died" (Napoleon 2005, 9-10). As a result, "the Yup'ik world was turned upside down, literally overnight," and a period of major trauma, loss of collective memory, and cultural devastation followed (Napoleon 2005, 11). Missionaries took advantage of this traumatic vacancy, providing Yup'ik people with new narratives about which lifeways, languages, belief systems, and traditions were the "correct" ones to follow. Napoleon (2005) postulated that such actions following major loss of life resulted in an entire generation of Yup'ik people experiencing post-traumatic stress disorder, which has gone on to affect the well-being of communities to this day. Napoleon's own story is devastating: a former community leader, he became an alcoholic as an adult, and killed his four-year-old son in a tragic accident. Napoleon originally wrote his essay from prison in 1988, but it has since been disseminated widely and is acknowledged as an important piece of writing on Alaska Native survivance and recovery in the face of colonial oppression. His words "appeal for Native people to talk about, and thus eventually alleviate, that part of their pain he sees as having originated in the trauma following the Great Death" (Madsen 2005, vii).

¹ *Kassaq* is the local term to refer to white people, usually used affectionately and jokingly.

² Although they are generalizations, I use the concepts of "Western" versus "Indigenous" throughout this work to point to important historical power dynamics and fundamental differences in philosophy.

As Napoleon (2005, 2) explained in his essay, “I do not hold a master’s or a doctorate, but I am a Yup’ik Eskimo and I was born into a world which no longer exists.” This positionality is meaningful, as it speaks to Napoleon’s knowledge as a cultural insider and a person with subjective experience of the effects of colonial injustice. Napoleon’s and Annie’s concerns are shared by scholars who have been working in decolonizing and Indigenous approaches to anthropology, archaeology, and the social sciences more generally. Such approaches are at the center of my research ethos, though I have rarely enacted them perfectly, as the above anecdote suggests.

This chapter explores the theoretical underpinnings of my dissertation project, including the Indigenous, decolonizing, and community-based archaeologies referenced above; feminist and Indigenous feminist theory; and both Yup’ik and anthropological perspectives on social relationality, gender, kinship, and materiality. For each body of theory, I first discuss foundations and central tenets, then identify how the approach is woven into the project. With this chapter, I address the following questions:

1. What is my approach to working with the Yup’ik community of Quinhagak, and why use this approach?
2. Why focus on gender in this study? How does gender relate to other identity categories in Yup’ik ways of knowing?
3. What is Yup’ik theory, and why is it important to this project?
4. What does it look like to do an archaeology of gender, identity, and belonging from a Yup’ik perspective? What is significant about such an archaeology?

Indigenous, Decolonizing, and Community-Based Archaeologies

Indigenous Archaeologies

Although this research draws on multiple bodies of theory, Indigenous perspectives are its backbone. Developed out of the American Indian Movement of the 1970s and the social justice movements that followed, Indigenous archaeologies critique and seek to remedy the multitude of ways that traditional archaeology has exploited

Native peoples (Atalay 2006; Colwell-Chanthaphonh et al. 2010; Deloria 1969; Gonzalez et al. 2006; McGuire 1992; Trigger 1980). These include: shaping early narratives about Indigenous groups as simple, savage, and uncivilized; assisting in the colonizing mission of land acquisition; authoring museum representations of Indigenous nations that suggest their impermanence; continuing refusals to treat tribes as sovereign nations in their own right. Indigenous archaeologies are global, with local iterations responding in kind to their particular geographic, historical, and political contexts (Nicholas 2008; Bruchac et al. 2010). With research situated in Alaska, my focus is on perspectives from North America, which advocate collaboration with Indigenous communities; repatriation of human remains and artifacts removed without tribal consent; and better inclusion of Indigenous people, ideas, and methods in research. I am not an Indigenous person, but my adoption of Indigenous archaeological theory follows Nicholas's (2008, 1660) statement that "what matters is not the identity of the practitioner but rather achieving the goal of decolonizing the discipline and otherwise questioning the knowledge we obtain through archaeology." In this work, I have relied as much as possible on scholarship and knowledges authored by Indigenous people, and Yup'ik people in particular.

Relevant to this research is Indigenous archaeology's emphasis on bringing Indigenous ways of knowing into conversation with more traditional archaeological approaches (Atalay 2006; Echo-Hawk 2000; Lonetree 2012; Nicholas 2008). Post-processual critiques demonstrated our discipline's entrenchment in Enlightenment forms of science and in Western intellectual tradition (Trigger 1980), which Schmidt and Kehoe (2019, 3) described as "a broad, persistent epistemic culture valuing formal logic and classifications, authority in written documents, ostensible observation, and rejection of immaterial sources of knowledge." Such Western approaches are only one amongst a multitude of ways to understand the realities of our world. Within Western science, archaeology is a peculiar field in that the material evidence it depends on to understand the past is always, at best, partial. As such, it has consistently needed to argue its objectivity to be considered legitimate. Along with Gero (2007), Wylie (1992) and others (e.g. Schmidt and Kehoe 2019), I argue that the objective possibilities of archaeology

have been overemphasized to the discipline's detriment. Rather than getting us closer to understanding the "one truth" of past human lifeways in a given time and place, archaeology is just one (albeit important) perspective amongst many that must be harnessed in tandem with others to paint a more complete picture of the past.

Indigenous people have always had their own means of historical scholarship and science, and a goal of Indigenous archaeology is to bring these to the fore (Atalay 2006; Echo-Hawk 2000; Lonetree 2012; McGuire 1992). As Kawagley (2006) explained, Indigenous ways of knowing differ markedly from their Western counterparts in their cyclical nature and their emphasis on concepts of balance and integration. Rather than being compartmentalized as separate from everyday life and only practiced by educated "experts," Indigenous science is enacted in the process of everyday life: through deep, long-term observations of the natural world, through trial-and-error experimentation with materials, and through reliance on time-tested theory. Oral history is a skilled method of historical documentation utilized by many Indigenous groups—Yup'ik orators, for example, are accomplished speakers who are able to recite stories, sometimes days long, from memory. Quinhagak's oral histories about Nunalleq (Agalik) are rich and revelatory, as is information shared by village residents about Yup'ik ways of knowing and being. A goal of this project is to put these forms of knowledge into conversation with more traditional archaeological analyses to form a holistic social analysis of the site.

Decolonizing Methods

Developed concurrently with Indigenous archaeologies and similar in many aspects, decolonizing methodologies consider how research writ large has negatively impacted Indigenous communities (Atalay 2006). Not isolated to the field of archaeology, decolonizing methods are broadly applicable across disciplines. Smith's (1999) landmark book outlines the ways in which traditional Western dogma surrounding science, knowledge, and authority regularly dismiss Indigenous ways of knowing and often cause real damage through affecting biased policy, ignoring community concerns about consent, and shaping the status quo to benefit whiteness. In Indigenous communities

facing poverty, illness, limited education and career opportunities, and legacies of forcible removal, violence, and abuse, survival is necessarily prioritized over research. The goal of decolonizing methods is to transform research practice into something that, at the very least, does no harm in Indigenous communities and, at its best, would actually bring net benefits. Smith (1999) identifies “reporting back” and “knowledge sharing” as important components of such work.

My intent is for this dissertation research to be decolonizing, but as a white researcher, this is not a label I could assign to my own work. At their core, decolonizing methods point us towards action rather than definable conclusions— they only take on meaning in the “doing.” Thus, I consider “decolonizing” to be a constantly-evolving process, a negotiation rather than an endgame. I try to fulfill this commitment to decolonizing action through gaining consent for all aspects of my research through Qanirtuuq, Inc., and each individual community member that I work with, through compensating all Yup’ik people who have shared their knowledge and skills in ways that have benefitted my research, and through developing concrete research products that could serve the Quinhagak community into the future— in this case, in archival copies of recorded interviews and a detailed interview inventory to be on file at the Nunalleq Culture and Archaeology Center. A decolonizing perspective has served as an ethical “check” on this imperfect work as it progresses.

Community-Based Approaches

Community-based archaeologies and Indigenous and decolonizing approaches overlap, as all of these perspectives aim to disrupt the traditional power structures of research and increase the equitability of “researcher” and “researched.” However, community-based approaches are applicable beyond colonial contexts. Such archaeologies suggest that involving local stakeholders in the research process brings immeasurable benefit to both community and research project. These are democratic perspectives advocating for multi-vocality, accessibility, reciprocity, and equitability, all with the goal of fostering public, non-expert engagement and increasing archaeology’s

relevance as a tool for understanding across difference. As Atalay (2012) outlined, community-based approaches push archaeologists to work with, by, and for the stakeholders that have an interest in sites— an endeavor that can prove complex.

The Quinhagak Archaeology Project has been community-based since its inception, long before I was a part of the research team. Key aspects of the project have set its tone as a collaborative venture: the archaeologists were invited to excavate Nunalleq rather than coming on their own accord, project goals are set jointly by the corporation and the archaeologists, the corporation maintains ultimate control over site and artifact access, and community members are welcomed to participate in the project in various ways (Hillerdal et al. 2019; Knecht and Jones 2020; Watterson and Hillerdal 2020). My dissertation project builds upon this collaborative base, using knowledge gathered from Yup'ik community members as a primary source in site and artifact interpretation.

Archaeologies of Listening

Synthesizing many of these theoretical threads is the emergent field of “archaeologies of listening,” which understand community members as experts and theorists themselves, an idea that “has yet to gain traction in archaeological practice” (Schmidt and Kehoe 2019, 2). Advocates of such approaches find that the “deep experience and historical knowledge” possessed by local peoples improves archaeological science by providing opportunities for growth beyond the field’s inherent methodological limits (Schmidt and Kehoe 2019, 3). Archaeologies of listening are intensely local in that each community has unique knowledge to express. Schmidt and Kehoe (2019, 3) point to this singularity as a strength, explaining that in this era of anthropological scholarship “differences may be more crucial than regularities” when it comes to cultural comparison. In post-colonial contexts, archaeologies of listening have the potential to be decolonizing; Schmidt and Kehoe (2019, 5) posit that “imperial colonizing nations’ . . . denial of indigenous histories— propaganda that reifies domination—

can be countered by listening to communities imposed on.” As with similar approaches, humility and patience are important aspects of this practice.

Listening is the primary method that I use in this study to fulfill my commitment to Indigenous, decolonizing, and community-based archaeologies. I began this research with a pilot project in Quinhagak interviewing village residents about Yup’ik conceptions of gender, and followed this work with more intensive interview research in 2017 and 2019. The goal of this listening was to understand local perspectives on gender and social relationality, out of which I would determine a schema for archaeological analysis at Nunalleq. This listening was instructive, guiding my project in new directions and growing my relationships to Quinhagak residents in the process.

Feminist Theory, Indigenous Feminisms, and Intersectional Archaeologies of Gender

Defining Feminist Archaeologies

Though distinct from Indigenous approaches, feminist archaeologies share many attributes with these, including a similarly critical stance toward mainstream archaeology, advocacy for multi-vocality as a means of achieving more representative science, and an awareness of how identity plays a role in the creation of knowledge (Conkey and Spector 1984; Gero 2007; Wylie 1992). Feminist archaeologies are distinctive in highlighting gender as their key analytic. Emerging in the 1980s from earlier second wave feminist movements and subsequent critiques of science and academe, feminist approaches explore how gendered power dynamics in the current world affect archaeology in terms of both the content and practice of research (Conkey and Spector 1984, 5). These perspectives have drawn critical attention to archaeologists’ tendency to interpret the past through present-day conceptions of gendered bodies, gender roles, and gendered power (Gifford-Gonzalez 1993; Nelson 2004, 2007). They also ask while why the experiences of women, people of other genders, and the old and young (i.e. anyone that is not an able-

bodied adult man) have been little studied in archaeology (Conkey and Spector 1984; Gilchrist 1999; Wylie 2007).

I found my footing in anthropology as a feminist archaeologist. This was the first theoretical perspective that resonated with me when I was an undergraduate at NYU, where I learned about Rita Wright's research on gender in archaeology (1996), and was lucky to get the chance to work with her. Feminist perspectives convinced me that archaeology could affect communities for the better. A feminist archaeological perspective thus informs this research at a fundamental level. Feminist archaeology can be performed in multiple ways (in fact this multiplicity is a hallmark), and my specific approach for this project is described below.

An essential feature of feminist archaeologies is their attention to the diverse ways that gender has been enacted in human societies through time and across space. Though these approaches take gender as a critical category of archaeological analysis, they do not assume its meaning, manifestation, or salience; rather, the goal is to critically assess the evidence at the sites we study to answer these questions objectively (Claassen and Joyce 1997; Conkey and Spector 1984; Gero 2007; Gilchrist 1999; Wylie 1992, 2007). Feminist archaeologies do assert that gender is a worthy category of study, and that we learn more about the past when we take its mechanics into account, whatever they may be in our project context. An interest in gender is what initiated my work at Nunalleq, and though community-based perspectives have guided me to a broader conception of local social identities, gender remains a central area of interest.

Feminist archaeologies remain relevant today despite considerable pushback from the academy, likely to do with misinterpretations of feminism's mission and a fear of politicization (Conkey 2013; Conkey and Gero 1997; Englestad 2004, 2007; Moss 2005). Feminist archaeologists would assert that their perspectives— which, like all theoretical standpoints, are indeed political— serve as a necessary intervention counteracting the underrepresentation of marginalized groups in the field, taken as “status quo” in our current heteropatriarchal system (Bolger 2012; Englestad 2007). Like Indigenous approaches, feminist archaeologies argue that identity cannot be compartmentalized away

from research; that who we are and the experiences we've had affects how we do our work (Wright 1996; Wylie 2007). Similarly, feminist approaches argue that a "political perspective" improves our science, as acknowledging our potential biases allows us to check for and work against them (Gero 2007; Wylie 1992). Self-reflexivity, or the process of situating oneself within one's identity contexts, is thus an important component of feminist archaeological practice. As such, I've attempted to be transparent about my identity throughout this work, both with readers and with community members in Quinhagak.

Like Indigenous archaeologies, feminist approaches strongly advocate for multi-vocality, accessibility, and the incorporation of non-traditional forms of knowledge and expression (Bolger 2012; Conkey 2005; Gero 2007). Multi-vocality, or the inclusion of multiple voices in interpretation ensures that the perspectives of marginalized people have a space to be heard, while also helping ensure objectivity, for only at the confluence of multiple subjectivities do we approach a sense of the "truth." Part and parcel with this is an embrace of alternative forms of writing and language. Rather than privileging the technical, feminist archaeologies seek to open new spaces for creative and accessible expression (Joyce and Tringham 2007; Spector 1993; Wright 1996). This project relies on concepts of expertise that transcend the academy, looking to locally-held Yup'ik knowledge about society, culture, family, and history as primary loci of theory. Perspectives from Quinhagak are diverse, complex, and do not fit neatly into theoretical boxes— a situation that feminist approaches to archaeology, which embrace ambiguity and problematize certitude (Gero 2007), are well-equipped to manage.

Intersectionality and Indigenous Feminisms

Intersectional feminist critiques are crucial for feminism's continued cross-disciplinary relevance and applicability as critical theory. Arising out of "third wave" movements and predominantly authored by women of color, intersectional feminisms problematize feminism's claims to represent *all* women while in reality centering the values, needs, and desires of *white* women (Arvin et al. 2013; Battle-Baptiste 2011;

Crenshaw 1995; Lorde 1984; Mohanty 2003; Moraga and Anzaldúa 2015). Intersectional perspectives document the negative impacts of feminists ignoring or claiming "not to see" race, effectively disregarding the racialized experiences of women of color and alienating these identity categories from the benefits of the movement. Though often not intentional, such ignorance inflicts real damage on women in these already marginalized communities. As such, intersectional feminisms attend more deliberately to the ways in which persons at the nexus of marginalized gender, racial, class-and ability-based, sexual, and other identity categories are often doubly (or triply, or quadruply) oppressed. Crenshaw (1995) first articulated the concept of intersectionality through identifying the ways in which both feminist and Black communities continually fail to prioritize women of color in discourse and action surrounding sexual and domestic violence. As she explained, intersectionality "account(s) for multiple grounds of identity when considering how the social world is constructed" (Crenshaw 1991, 1245). While initially rooted in the work of Black women (e.g. Crenshaw, the Combahee River Collective, Patricia Hill Collins, bell hooks, Audre Lorde), intersectional feminisms have become relevant to myriad communities and have multiple expressions. Unfortunately, feminist archaeology has been late to incorporate these important perspectives, but the work of intersectional feminist archaeologists (e.g., Barnett, Battle-Baptiste, Franklin, Fryer, Million, and others) is reinvigorating the field.

Listening to intersectional critiques is imperative for feminist archaeologists working in post-colonial contexts. Indigenous feminisms attend to the ways that feminism can subvert goals of decolonization when the complexities of racialized gender identities are ignored (Arvin et al. 2013; Finley 2011; Green 2007; Simpson 2014). As a body of theory examining how "settler colonialism has been and continues to be a gendered process," Indigenous feminisms identify how sexism, racism, and colonization intersect to oppress Indigenous women and people of non-binary gender identities (Arvin et al. 2013, 9). Such perspectives demonstrate the complex ways that colonialism and heteropatriarchy are mutually constituted, with gender violence as a key strategy of colonialism, through the eradication of traditional Indigenous gender categories, and

through the forced imposition of Western gender constructs onto the colonized. “Whitestream feminisms” that fail to take these dynamics into account have done a poor job of serving Native communities and have often been unwelcome, particularly in groups with pre-colonial histories of matrilineality (Arvin et al. 2013; Green 2007). Indigenous feminisms center those specifically Indigenous identities that have been targeted under colonial heteropatriarchy, keeping gender dynamics at the forefront as they work towards tribal sovereignty, decolonization, and Native autonomy (Green 2007).

As a white woman and self-identified feminist working in a Yup’ik village on questions of gender and social identity, all of this is intimately relevant to my research. The feminist perspective that I bring to this work is mine alone— no one in the village has ever identified themselves to me as a feminist, and I specifically avoid using this term when conversing with community members, lest I come across as “pushing an agenda” as a white woman in a politically diverse Native constituency. Despite my trepidation about the implications of feminism, it is possible to explore gender at Nunalleq from a specifically feminist perspective that aligns with community-based approaches. It is an attempt at *Indigenous* feminist perspectives that provide this opportunity.

Indigenous feminisms would identify gender as an important subject of study at Quinagak and Nunalleq, especially in this latter pre-colonial context where we may be able to learn about Yup’ik gender formations prior to the imposition of colonial gender categories. These approaches would caution, however, that archaeological conceptions of gender originating with the colonizer are likely to be inaccurate, unsanctioned by the community, and potentially harmful. Indigenous, decolonizing, and community-based archaeologies might suggest that collaborative work with, by, and for the Native community in question would remedy some of these issues. Such an enterprise would necessitate beginning from square-one in defining gender’s limits, importance, and relevance in the community: is gender of interest? How is gender defined? How does gender manifest in village life today? Absent this knowledge and a commitment to prioritizing community welfare, we could not move forward ethically with any white-authored archaeological study of gender in an Indigenous community.

This ethos is the crux of my dissertation project. In order to study gender accurately, compassionately, and productively in archaeological contexts significant to living stakeholder communities, we *must* do so with the consent and collaboration of the community in question. This is especially true for Indigenous communities, where gender has too often been weaponized as a tool of colonial domination. Understanding a Yup'ik perspective on gender— and how gendered social identities articulate with the world writ large— thus becomes a central aim of this work. To do this, I begin by reading “the social from the cosmologies that inform it, rather than beginning with a gendered reading of cosmologies” (Lugones 2014, 16); that is, Yup'ik ways of knowing must be the starting point for any decolonizing, community-centered approach to gender at Nunalleq.

Yup'ik Ways of Knowing

Chapters VI, VII, and VIII discuss various Yup'ik gender and identity conceptions as they relate to different aspects of Nunalleq's social and material worlds, including embodiment and the individual; subsistence, teaching, and learning; and kinship and group affinity. Here, I present some of the concepts I have been learning from Yup'ik theorists and Quinhagak stakeholders to orient these subsequent discussions.

Learning Yup'ik philosophy begins with listening to Yup'ik people, who are avid ecologists, thinkers, orators, and observers of the surrounding world, and whose distinctive lifeways, philosophies, and values have been honed over millennia (Fienup-Riordan 2007; Kawagley 2006). While Yup'ik philosophy does not boast a large written canon, traditional teachings have been passed down orally for thousands of years. The incursion of white missionaries and settlers at the end of the 19th century brought sweeping societal changes and affected the continuity of oral knowledge transmission in the Yup'ik region. Even so, Yup'ik elders and other knowledge-bearers continue to curate a wealth of information about the right way to live as a Yup'ik person, and contemporary anthropologists like Ann Fienup-Riordan have contributed considerably to

documentation.³ Yup'ik lifeways have long been known for their resiliency and flexibility in the face of environmental, political, and historical changes, and this sense of adaptability extends to the cosmological realm (Kawagley 2006).

In this section, I've relied primarily on descriptions of Yup'ik worldviews authored by Yup'ik scholars Theresa John (Nightmute) and Oscar Kawagley (Bethel), while also incorporating the insightful perspectives of Fienup-Riordan (1994) and other anthropologists working in Yup'ik communities through time (Ackerman 1990; Jolles and Kaningok 1991; Oswald 1963). Kawagley (2006) noted that we should expect definitions of Yupiaq philosophy to differ from person to person (as we would with any other worldview shaped by experience), but interweaving these perspectives may point to places of overlap and disjuncture.

Ella, Ellarpak, and the "Big Picture"

Kawagley (2006) situated Yup'ik knowledge systems within broader Alaska Native ways of knowing that espouse harmonious living with nature, respect and reciprocity between all living beings, and values of sharing, cooperation, and balance. Yup'ik cosmology centers the concept of *ella*, defined somewhere between outside, weather, world, creative force or god, universe, sky, earth, and overarching awareness or consciousness, with this latter concept as the key component (Kawagley 2006, 14). John (2010, 10) referred to the related idea of *ellarpak*, or "the big world," as "the overarching Indigenous framework that describes the holistic interconnectedness of the Ellam Yua (the creator), the human/non-human, and the Universe." In a Yup'ik worldview, all life is connected, conscious, and sentient. *Ella* and *ellarpak* are open-ended concepts: they express breadth, dynamism, possibility, and expansiveness. Resisting

³ A few anthropologists are notable for their longstanding community-based work with Yup'ik communities, which has shaped my own research trajectory. Ann Fienup-Riordan has worked in collaboration with Yup'ik peoples all across the Yukon-Kuskokwim Delta since the late 1970s to document cultural lifeways and the stories of elders. Her canon of work (Fienup-Riordan 1990, 1994, 2005, 2007, 2017, 2018a, 2018b; Fienup-Riordan et al. 2015, 2016; Rearden and Fienup-Riordan 2013, amongst others) has informed my own project enormously. Liam Frink is an archaeologist who uses a community-based perspective to study gender, subsistence, and colonialism in the pre-contact Yup'ik past (Frink 2007, 2008, 2009, 2016; Frink et al. 2002, 2003; Frink and Giordano 2015). Both scholars have laid the groundwork for studies like this dissertation project.

compartmentalization and emphasizing interdependence, *ella* and *ellarpak* encourage Yup'ik people “to live as part of and participant in ‘the big picture’” (John 2010, 6). Kawagley (2006, 14) pointed to the ecological implications of these ideas “as a manifestation of their *ella*, the Yupiaq developed a body of values and traditions that would enable them to maintain and sustain their ecological worldview.”

Both Kawagley (2006, 15) and John (2010, 18) utilized visual metaphors to aid their respective interpretations of *ella* and *ellarpak*. Kawagley (2006, 15) presented the Yupiaq worldview as a “tetrahedral universe,” based on the Yup'ik design for a three-footed fish or meat drying rack. Humanity, nature, and the spiritual realm are the three balanced poles meeting at the apex of “worldview,” and the whole structure hovers over a disc-shaped universe/circle of life centering “self, family, and community mindfulness.” Forces and relations, represented by double-sided arrows, flow freely between these axes. Kawagley’s diagram portrayed a sense of strength and balance while also highlighting constant communication and negotiation between distinct realms. Central to his imagining is that humans are important, but not any more so than the other constituent parts; as he explained, “the human being is a participant observer in this universe” (Kawagley 2006, 15).

John (2010, 18) presented her interpretation of *ellarpak* via two adjacent images: an *ellam iinga*, or eye of the universe, and a shaman’s drum. The *ellam iinga* is a symbol common across Yup'ik communities (with several representations found at Nunalleq) consisting of a series of concentric circles radiating outward, representing “both spiritual vision and the creation of a pathway between the human and spirit worlds.” Fienup-Riordan (1994) understood the *ellam iinga* as representative not only of Yup'ik cosmology, but as a metaphor for the cyclical nature of subsistence, ritual practice, and life and death. In John’s (2010, 20) image, the shaman’s drum is divided horizontally into two sections, with the top depicting the “upper world” of “cosmology, birds, and the homeland of the supernatural spirits called *ircinrrat* (the little people)” and the bottom depicting “the lower world,” which is “the homeland of sea mammals, fish, and *ircinrrat*.” The line separating these realms is the middle world, a place of balance, where

both humans and non-humans reside. In explaining her model of *ellarpak*, John (2010, 17) identified the “key conceptual theoretical framework” as “the essence of the unified sense of core elements’ interconnectedness, interrelationship, and transparency, allowing multi-dimensional dynamic shifting of the layered elements.” Both Kawagley (2006) and John (2010) chose imagery common to Yup’ik subsistence and ritual practice to express their understanding of worldview, confounding dichotomies of material versus spiritual and sacred versus profane. Their models emphasize the circularity, permeability, and balance of the Yup’ik universe.

Balance between Beings

Fienup-Riordan (1994, 46) described Yup’ik cosmology as based on a notion of an original, undifferentiated universe requiring that order be preserved through human mediation and action. In such a world, beings are not inherently different from one another; rather, the focus is on “the creation of difference out of an original unity” (Fienup-Riordan 1994, 48). Fienup-Riordan (1994) observed that Yup’ik people maintain these divisions through creating boundaries and clearing passages, metaphors enacted through rule and ritual. The numerous guidelines, teachings, and proscriptions for proper living that are at the center of Yup’ik ways of knowing serve as a “container,” helping to create order in an otherwise undifferentiated and potentially chaotic world (Fienup-Riordan 1994, 48).

In the Yup’ik worldview, the creator, or *Ellam Yua*, is said to have “created all living inhabitants of the earth equally,” including humans, animals, earth, air, water, and trees (John 2010, 21). All of these beings have *yua*, or spirit; are sentient; have consciousness; and are to be “regarded with respect and dignity” (John 2010, 8). Since all beings are similar in origin, capacity for consciousness, and connection to *Ellam Yua*, none is dominant or more deserving than any other. Ensuring balance between beings is a significant preoccupation in Yup’ik philosophy. For Yupiit reliant on subsistence, maintaining good relationships with the beings in various realms-- animals that provided food and clothing; the natural world that provided raw materials for tools and shelter; and

the land, water, and weather that provided the conditions under which these things could be collected— was a question of survival.

The relationship between humans and animals was the most important of all Yup'ik cosmological negotiations (Fienup-Riordan 1994). A multitude of rules, rituals, ceremonies, and everyday practices govern this relationship for Yupiit (e.g., when and how to hunt, how to treat the body and remains of an animal, how to create the type of household that animal spirits will be attracted to, etc.). Underlying these relationships is mutual respect, with a common code of conduct shared between human and animal social worlds. As with relationships between humans, Yup'ik people see their interactions with the animal realm as a set of obligations to maintain; animal spirits are hosted and feasted as guests when they enter human spaces. The continuity of the relationship is not guaranteed without conscious human action.

In this fluid universe populated with sentient souls, “inter-being mobility and transformation,” particularly between human and animal forms, is always possible (Kawagley 2006). Shamans, or *angalkuut*, often changed forms and moved between realms as part of their work maintaining communications with non-human beings (John 2010, 26). The role of the shaman was significant in traditional Yup'ik communities— these were the “healers” with “ultimate psychological powers to protect the people” (John 2010, 25). With their abilities to transcend dimensions, communicate with non-human beings, and know the future, shamans were charged with maintaining balance and ensuring survival. Though shamans led the way in terms of these activities, all members of a community were expected to participate in the maintenance of spiritual relations with other realms throughout their daily thoughts, tasks, and actions.

Individuality and Personhood

Yup'ik and other “Eskimoan” peoples have often been pigeon-holed in the ethnographic literature as “rugged individualists,” a characterization lacking in nuance (Fienup-Riordan 1994, 47). While a deep sense of individual responsibility is central to Yup'ik notions of the self, Yup'ik people do not see themselves as alienated from a larger,

universal whole. Rather, having control over one's own actions directly relates to the well-being and continuity of all life. For instance, an individual's work ethic, austerity, and humility have a direct relation to the availability of subsistence harvests and to natural phenomena like the weather. This does not imply that one should not feel pride in one's self or one's work, but that moderation of morale is necessary, for as Kawagley (2006, 18) stated, "a person had to have a dynamic sense of self-esteem, self-confidence, and pride without arrogance to survive in a very harsh environment." Individual freedom is possible because of the common capacity for consciousness shared by all lifeforms, but this is not freedom in the sense of "doing what one wants." These concepts of consciousness and awareness are at the crux of Yup'ik psychology, as well as the larger universe (consider, for instance, the centrality of "consciousness" to notions of *ella* and *ellarpak*).

Yup'ik conceptions of children and childhood further demonstrate the salience of consciousness as a human quality. The first critical moment in a person's life is referred to as "becoming aware" (Fienup-Riordan 1994, 143; John 2010, 13), which typically happens around the age of 4 or 5. Elders reference such moments frequently in relaying stories about their lives (see Rearden and Fienup-Riordan [2013] for a collection of such stories from Quinhagak). Prior to this time, children are thought to be incapable of awareness, consciousness, or responsibility, and are thus doted on by loved ones (Fienup-Riordan 1994, 143). Once a young child "becomes aware," they enter into a new developmental phase where they are expected to gain a sense of self-awareness and responsibility. The preferred environment for bringing up a proper Yup'ik person with a strong sense of awareness is one that is quiet and orderly, where instructions can be imparted gently and listened to carefully. John (2010, 35) identified self-awareness as the ultimate goal of learning in Yup'ik culture, explaining that "we learned to contemplate our own inner voices and to analyze our behaviors into adulthood."

Self-awareness is an important quality of Yup'ik personhood in part because of the perceived strength of the human mind (John 2010, 46). In the Yup'ik worldview, the minds of all conscious beings can be read by others; as such, it is imperative to always

keep one's mind in good order. The thoughts in one's mind can affect change out in the world-- animals, for instance, are sensitive to the thoughts not only of the hunter, but of his wife, and will only allow themselves to be caught by households whose members are thinking in the proper way. Each human person is responsible for their own mind, emphasizing the significance of being self-aware and cognizant of one's own thoughts. Shamans, great negotiators with other realms, are thought to be particularly adept at controlling their minds, and John (2010, 29) explained that they nurture "higher psychological powers." Because the human mind is so powerful, John (2010, 47) noted that "it is critical to act with compassion, knowledge, and respect at all times."

Gender in Yup'ik Worldview

According to Fienup-Riordan (1994, 159), the central gendered relationship for Yup'ik people was that of the wife-and-husband economic unit.⁴ The success of human-animal relationships and the subsistence lifestyle that depended on these were mediated through the spousal team, so much so that "the Yupiit joined hunting and procreation in a reproductive cosmology focused on insuring continuity in both human and animal life" (Fienup-Riordan 1994, 159). Rather than being in natural opposition, women and men are complementary actors in Yup'ik cosmology (Ackerman 1990; Fienup-Riordan 1994; Jolles and Kaningok 1991). This arrangement has implications for how equality and power are expressed in Yup'ik society, even today-- several Quinhagak residents I interviewed discussed women's and men's roles as equally significant in village life, with a sense of mutual appreciation for the other.⁵

This complementarity is metered by strict gender rules and separations that were once a focal part of Yup'ik social life. Although men and women may complete one

⁴ Minimal literature exists on the subject of third or non-binary genders in Yup'ik societies, and none of my interview subjects brought up such categories during my research, perhaps a result of longstanding Moravian influence in the community. Saladin d'Anglure (2005) documented third gender categories amongst the Inuit, but more work is needed to determine whether analogous categories existed for Yupiit.

⁵ Gender inequality certainly exists in contemporary Quinhagak, but the words of these community members suggest to me that the Yup'ik ideal is more egalitarian.

another, in practice their worlds were apart. In traditional Yup'ik society, boys over the age of 5 or 6 would go to live with adult men in the *qasgiq*, or communal men's house, while girls and women of all ages lived in *enet*, or smaller single-family houses. As inextricably connected as they were in subsistence practice, both women and men needed to observe extreme care not to negatively affect the other's skills or success. An amalgam of proscriptions speak to women's proper behavior in dealing with menstruation, pregnancy and birth, death, and other life passages, for women's power of mind could come to affect the hunting success of their husbands, fathers, and sons (see Chapters VI and VIII). Fienup-Riordan (1994, 175) described the essential husband-wife relationship as "living so as not to injure each other's mind." The relationship between genders was one of care, necessity, power, and balance, mirroring that of humans and animals (Fienup-Riordan 1994) and of *ella* and *ellarpak* more broadly.

Kinship and Social Relationality

For contemporary Yup'ik people, concepts of family and kinship are flexible, expansive, and connected to a desire for cultural survivance. Whereas the anthropological literature cites the nuclear family consisting of a husband, a wife, and their offspring as the social locus of village life (e.g. Fienup-Riordan 1994; Oswalt 1963), my own experience in Quinhagak suggests family structure to be far more creative. There are households comprised of grandparents and grandchildren, a single parent and children, single people, and diverse amalgams of relatives.

The nuclear family unit was traditionally "the basis of the present and future support and social composition of the community" due to its productive capacity (Fienup-Riordan 1994, 169). In Quinhagak today, however, many different woman-and-man arrangements beyond that of husband-and-wife (e.g. uncle and niece; mother and son; grandfather and granddaughter, etc.) serve the purpose of provisioning, and the social obligations of subsistence certainly extend beyond the nuclear family.

Though bloodline is important to Yup'ik concepts of kinship, biology is not the only means through which people become related. Adoption both within and outside of

the extended family is not uncommon. Fienup-Riordan (2005, 140) noted that in Tooksook Bay in 1990, 40% of households had either “given up a child for adoption, adopted a child, or both.” Several Quinhagak interview participants have adoption as part of their kinship story. Julia Hill (2017) explained that, after a difficult miscarriage affected her ability to have children, she adopted all three of her kids from outside her family. John Fox (2017) himself was adopted by his paternal aunt, and often refers in interviews to the late Julia Fox as “my adopted mother. But biologically she’s my aunt, because I was born...(to) my adopted mother's younger brother.” There are numerous reasons that adoptions might occur: childlessness, a family’s desire to have a child of a different gender than the one they had, having too many children, or just “wanting to” (Bodenhorn 1990, 139). Sometimes a child might decide themselves to switch households, as was the case with one of my young Quinhagak informants, who decided he preferred living with his maternal grandparents rather than as part of his father’s household. In these cases, the children took the last name of the family that adopted them, creating a tangible kinship tie. At the same time, the lineage claims of a child’s biological family might still be acknowledged.

The relationship between generations present and past is expressed best through the Yup’ik tradition of namesakes. In Yup’ik cosmology, spirits of humans and non-humans alike are thought to cycle through to new generations, with babies representing the reincarnation of beloved elders since passed— a good reason to treat young children with abundant kindness and care (Fienup-Riordan 1994, 143). When a member of the community recognizes an aspect of a deceased person’s personality or abilities in a new baby, the child will take on the name of that person, inheriting a part of the ancestor’s soul along with their living relationships. People in Quinhagak commonly refer to one another in namesake kinship terms— for instance, an adult man referring to baby girl as “mom,” or an older woman jokingly calling a boy her “husband.” Choosing the right namesake for a child is serious business, and in traditional Yup’ik society death or disease were thought of as potential consequences of the wrong name (Fienup-Riordan 1994).

The namesake tradition crosses gender lines, with children of any gender recognized as relatives of the same. Children can have more than one namesake, and more than one child can share the same namesake— it is an expansive intergenerational kinship system. As Kawagley (2006, 18) explained, the naming process creates “a ‘new relative’... whether blood related or not.” Children who are named in this way are sometimes said to begin acting like their namesake, or to be able to access that person’s memories, and are thus seen as creating a strong bond between the worlds of the living and the dead (Fienup-Riordan 2005, 110-111).

Following concepts of *ella* and *ellarpak*, the Yup’ik individual only exists as part of a larger integrated whole. Although a person may be singular in thought, action, and intention, the singular existence of each conscious spirit reverberates through the entire connected system, and thus one can never think, act, or exist in isolation. *Ella* and *ellarpak* are, by definition, ubiquitous in all things, and the microcosm exists in each living spirit. Such concern for the larger world is reflected in the structure of Yup’ik social relations, which are founded on notions of generosity, reciprocity, and sharing. Yup’ik people place a premium on providing for and pleasing those who cannot provide for themselves, including elders, orphans, and the impoverished (John 2010, 42). Sharing as a cultural value is still deeply embedded in Yup’ik communities today, particularly regarding food and sustenance.⁶ The continuity of abundant harvests is seen as dependent on the generosity of the hunter. Yup’ik philosophical models mirror the structure of extended family relations, where inclusivity is the rule, the collective is at the fore, and forces of obligation and responsibility are constantly tended to. As dictated by *ella* and *ellarpak*, cooperation is considered “a condition of the universe,” and this is embodied in the ways that humans relate to one another (Kawagley 2006, 17).

⁶ I feel this value intimately whenever visiting Quinhagak, and was especially cognizant of it during my March 2019 trip to village. Upon learning that I was living on my own, one local woman who has become a dear friend began inviting me to her home for every meal, even though I had brought most of my own provisions so as not to tax the local food system. Her consistent and unwavering generosity was astounding to me.

Sharing and Expressing Knowledge

Methods for learning and teaching are “holistic and an integral part of everyday life” (Kawagley 2006, 21), and are central to Yup’ik philosophy (John 2010). Yup’ik ways of knowing are passed down by elders using culturally-specific pedagogical forms, including *qanruyutet* (advice), *qulirat* (personal accounts and stories), and *qanemcit* (oral narratives; John 2010, 14). These are all oral forms of sharing knowledge. Within *qanruyutet*, Fienup-Riordan (1994, xiv) identified *alerquutet*, or prescriptions advising listeners of proper behavior, and *inerquutet*, or prohibitions admonishing listeners about what to avoid. Yup’ik elders would share knowledge in these various forms in communal settings— often in the *qasgiq*, or men’s community house, during public celebrations where adults and children of all genders could listen and learn. John (2010) noted the collaborative and interactive nature of these teaching methods wherein people from multiple generations, led by elders, can learn together.

Kawagley (2006) suggested additional important Yup’ik teaching and learning methods: those of observation and experience. In talking to Quinhagak community members about how they were instructed in Yup’ik lifeways as young people, the notion of hands-on experience was frequently mentioned. A majority of people had learned by first watching, then doing, with little spoken instruction by the adults and elders doing the teaching. While knowledge about Yup’ik cosmology, philosophy, and history is often relayed in oral format, the process of learning how to do the tasks required by these theoretical frameworks is more action-based. Even seemingly technical tasks, such as butchering an animal, are inscribed with deeper meanings and values related to knowledge shared as *qanruyutet*, *qulirat*, and *qanemcit*. Oral instruction, observation, and experience depend on one another in a well-rounded Yup’ik education. As Kawagley (2006, 17) explained, “the Yupiaq person’s methodologies include observation, experience, social interaction, and listening to the conversations and interrogations of the natural and spiritual world with the mind.” He continued: “Yup’ik science gets its profound discoveries from interacting with the mystical, transcending man’s ability to analyze and understand the world through mathematics, sciences, and

colonization” (Kawagley 2006, 8). Yup’ik teaching and learning are multi-faceted, multi-dimensional, open-ended, and deeply entwined with the spiritual balance of the universe.

Materiality and the Physical World

In communities of the past (less so in the present), Yup’ik cosmology has found material expression in multiple formats: through village structure, architecture, artifacts, and iconography (Kawagley 2006). Kawagley (2006) explained the sanctity of the material world for Yup’ik people, who for millennia constructed their entire existence from the natural landscape. Kawagley (2006, 7) understood the by-laws of Yup’ik life to be “inscribed indelibly into tools, both intellectual and material.” Similarly, Fienup-Riordan (1994, 251) explained that “Yup’ik Eskimos inscribed their ideas about the human and animal worlds onto the physical world, which they viewed as a concrete manifestation of their cosmology.” Such care and attention to cosmological expression through material means is evident at Nunalleq, where hundreds of elaborate and evocative artifacts have been uncovered (see Figure 4).



Figure 4. Evocative artifacts from the Nunalleq site. Images courtesy of nunalleq.wordpress.com.

In past times, Yup'ik space was constructed as to mirror central cosmological concepts and their attendant social relations. The distinctions between women and men were emphasized in separate living quarters (qasgiq for men, enet for women), and the shape and arrangement of these held meaning related to gender. Fienup-Riordan (1994, 251) suggested that “the women’s house or domestic apartment was comparable to a womb in which biological, social, and spiritual production were accomplished.” Qasgiq, which each had their own names and received gifts, were treated as “respected person(s)” (Fienup-Riordan 1994, 253). Traditional Yup'ik villages were spatially oriented as to represent the ellam iinga, with the qasgiq serving as the “spiritual window” at the center, ringed by enet (Fienup-Riordan 1994, 253). The notion of movement between concentric circles, as represented in the ellam iinga, would have been enacted at the village level, as well as in the seasonal subsistence cycle that took Yup'ik families out from the central village and into different realms of land, river, and sea.

The Yup'ik physical world is largely representative of cosmology, putting archaeologists at an advantage in seeking to understand the lives of the ancestors at Nunalleq based on the material remains they left behind. Nunalleq serves as an example of human actors “entangled” (Hodder 2012) or “enmeshed” (Ingold 2011) with the physical world of their creation, where objects became “partner(s) in the structuring and negotiation of social relations” (Sorenson 2010, 47). The study of such objects and the social meanings embedded within them is the subject of this dissertation.

An Intersectional Approach to Yup'ik Sociality in Archaeology

Studying gender and the social world at Nunalleq using feminist, decolonizing, and community-based methods means first turning to the community at Quinhagak, and to the Yup'ik community more broadly, as the most relevant and ethical sources of social theory for this project (Sloan 2020). The colonial relationship between whiteness (as manifested in mainstream research, traditional archaeology, heteropatriarchy, white feminisms) and Indigeneity (as manifested in local communities such as Quinhagak, Indigenous feminisms and other bodies of theory) dictates that the social world of the

ancestors at Nunalleq is best assessed by local voices speaking to local concepts – descendants telling the stories of their ancestors. Listening attentively, consensually, radically, and with humble compassion and patience is the only way for a white researcher to (imperfectly) learn these Indigenous perspectives.

Yup'ik philosophy, with its expression of belief through the physical realm, has innumerable lessons to teach the archaeologist seeking to better elucidate the connections between material worlds and social expressions. This study also serves as a testing ground for how Yup'ik philosophy and the specific case of Nunalleq can improve material culture approaches in archaeology as a whole. Though a marginalized and intensively localized approach, Yup'ik theory is an expert science deserving of consideration within our disciplinary canon. Voices from Quinhagak have much wisdom to share, and from here forward it is the imperative of this anthropologist to listen.

CHAPTER III. HISTORICAL CONTEXT FOR YUPIIT OF SOUTHWESTERN ALASKA

The summer of 2018 was a momentous time for the Quinhagak Archaeology Project: finally, the Nunalleq Culture and Archaeology Center was scheduled to open. Housed in a former school building directly behind Quinhagak’s centrally-located “Red Building,” the Center was an accomplishment a decade in the making (Figure 5). Project leaders had long shared the goal of having Nunalleq’s artifacts— a world-class collection — permanently housed in the village, on the land where they were originally created and used. By 2018, the majority of items that had been shipped to the archaeology lab in Aberdeen following each field season had arrived back in Quinhagak, preserved and cataloged. Local builder Johnny Jones and his team of handymen had designed the new Center’s interior “in the Yup’ik style,” beautiful woodwork throughout. The newly made cabinets and drawers were all in place, and many project team members stayed up late the night before the opening, carefully loading the preserved artifacts into their new homes.

The next day, locals, visitors, and honored guests from across the Delta and the state began arriving at the Red Building for a potluck celebration. Project volunteers and Quinhagak residents worked to set up a large serving area for food and finish the preparations. Before long, a line of people snaked throughout the Red Building, waiting patiently for food. I spied many a familiar face in the crowd, and took a few moments to catch up with folks I hadn’t yet seen that summer as I served one of the four kinds of available agulaq from large, stainless steel bowls.

The highlight of the day was when the village dance troupe, reconvened by local kids after a decades-long hiatus, performed their tribute dance to the Nunalleq site. They had created this dance especially for the Quinhagak Archaeology Project, and it involved a sweeping, troweling motion and caricatures of project leader Rick Knecht, known for his propensity for identifying culturally modified wood and scolding those who could not do the same. It was incredibly moving to witness this group of young people enacting a centuries-old Yup’ik art form in conversation with present-day archaeological discourse



Figure 5. Images from the Nunalleq Culture and Archaeology Center opening in August 2018.

— both an expression of pride and a revitalization of something lost to the 19th and 20th century colonialism that drastically altered the lives of these kids’ grandparents and great-grandparents. It felt like why we do this work.

After the dancing, everyone moved outside to watch the ribbon-cutting ceremony. Elders were allowed inside the Center first, followed by other guests. Inside, the project team watched as elders opened drawers holding the treasures of their ancestors, pointing certain objects out to children and telling their stories. That the collection was being housed here in Quinhagak was no small thing, because access meant everything to these local stakeholders. Six months later, during my February, 2019, visit to Quinhagak, I spent many hours in the new Center working amongst the artifacts. There, I was frequently visited by Alaks, a young girl that I knew from the village who had grown up around the archaeology project. I was amazed at how she knew the locations of all the artifact types in the Center — the uluat, the ivory earrings, the large harpoon points— because she had been there many times before and was familiar with the collection. Knowing this region’s history, the contrast felt notable: a young Yup’ik woman given free access to a heritage that had been wrested from her forbears.

* * * * *

Nunalleq’s artifacts tell the story of a specific time and place in Yup’ik history — a history that belongs to the people of Quinhagak, but also to their relatives and neighbors across the Yukon-Kuskokwim Delta. Situating Nunalleq and contemporary Quinhagak within a broader spatial and temporal context helps us understand the forces that shaped these communities and the lives of the people who lived (and continue to live) there. Anthropologists have often portrayed “Eskimo” history as atemporal, with canon texts often describing day-to-day life with little reference to time and place (e.g., Lantis 1946; Nelson 1899). To avoid the appearance of a uniform or uncritical past and to better explain how Nunalleq’s heritage remains relevant in contemporary Quinhagak, I present a “big picture” review of Yup’ik history, focusing as closely as possible on the area now known as Quinhagak.

Although a considerable body of work exists on Yup'ik communities of the mid-20th century onwards (e.g. Ackerman 1990; Fienup-Riordan 1994; Lantis 1946) and the lives of Yup'ik people at or during contact (e.g. Frink 2016; Oswalt 1990; Nelson 1899), little is known of the region archaeologically (Knecht and Jones 2020, 27; Shaw 1998, 234-236). Nunalleq's discovery is especially significant for this reason— the site fills a considerable gap in our knowledge about the pre-contact Yup'ik past. My understandings of Yup'ik history are informed by the temporal markers emphasized by the Quinhagak residents who contributed to this project— for example, the horrifying epidemics of the early 20th century that made Annie Cleveland an orphan, or the brief 19th century presence of Russian traders on the Agalik River immortalized in local stories about resistance at “the Fist.”⁷

My focus is the Yukon-Kuskokwim Delta, the area roughly from the Yukon River in the north to Goodnews Bay in the south. Central Yup'ik people have been the primary inhabitants of this region for the past several thousand years. Writ large, the Yup'ik culture encompasses groups beyond the Delta, including the Siberian Yup'ik and St. Lawrence Island Yup'ik, who speak differing dialects of the Yup'ik language. The Cup'ik, another linguistic subgroup of Yup'ik, is also spoken on the Delta in Chevak, Hooper Bay, and on Nunivak Island. Central Alaskan Yup'ik is currently the largest cultural and linguistic group in Alaska in terms of both speakers and population. It is primarily this group's story that is told below.

The Ancient Times to AD 1000

Many Alaska Native groups have ties to ancestral lands that have existed since time immemorial. Archaeologically, the earliest evidence for human occupation in southwest Alaska is found around the Kilbuck and Kuskokwim mountains from the period after deglaciation, between about 8000 and 6000 years ago (Shaw 1998, 238, 243). After about 4000 BP, there is some evidence for side-notched points in the region, and for

⁷ Local lore states that this feature of the Bering Sea coast landscape was named as such because it was the location where an early missionary attempted to come to shore, but was violently thwarted by a group of Yupiit who were fearful of the strange-looking person.

Arctic Small Tool Tradition complexes (Shaw 1998, 243). The current scarcity of archaeological information about ancient occupations of the Yukon-Kuskokwim Delta belies the general dearth of local research, particularly compared to research programs further north (e.g., around the Seward Peninsula) and south (e.g., on the Aleutian Islands). Knecht and Jones (2020, 27) noted “a deeply held but understandable reluctance to allow ancestral sites to be disturbed, the artifacts removed by outsiders and never returned” amongst many Delta communities (see Frink 2016, viii).

Evidence for the Norton Tradition appears in the region between about 3000 and 2000 years ago (Frink 2007). An archaeological culture found both north and south of Bering Strait (Dumond 1987; Mason and Friesen 2018), Norton people initially established villages along the coast of the Yukon Kuskokwim Delta beginning about 2400 years ago, likely a dispersal from the north (Frink 2016, 20). Frink (2016) noted that the earliest Norton sites in the region are on Nunivak and Nelson islands, suggesting an initially maritime adaptation. From the coast, Norton communities expanded into the inland river systems of the Delta, a trend that Shaw (1998, 242) explained as a response to population growth as documented in midden deposits and an increase in the number and size of villages. The technological innovation of the fishing net, suggested by the novel presence of net weights and sinkers in Norton sites, may explain this surge in population (Shaw 1998), while also pointing to the antiquity of local mastery over Delta fisheries that continue to sustain communities to this day.

As the Norton population spread on the Delta, villages expanded and grew closer to one another, and cultural similarities between groups increased, marking a definitive Norton phase (Shaw 1998, 242). Dumond (1987, 109) characterized Norton occupations of the Bering Strait area as “particularly intensive, widespread, and durable,” archaeologically identifiable by the use of polished slate; check-marked pottery with fiber temper; the use of small semi-subterranean houses; and the first suggestions of qasgi, or communal men’s houses, as village institutions. Salmon was likely a primary food resource for Norton peoples, and the extensive use of antler as a raw material suggests that caribou were also significant. The Norton florescence included some fairly large

village sites, and Shaw (1998, 242) noted the “considerable individual cultural character” to be found in these, particularly along the coast.

Time of the Thule: AD 1000 Onwards

Around AD 1000, the Thule cultural phase becomes apparent in Alaska’s archaeological record. Though the Thule were likely a different population from the earlier Norton, evidence suggests that the Norton – Thule transition was a peaceful one, deemed by Frink (2016, 20) as “uneventful and rapid” and by Dumond (1987) as likely an intermingling of people. The Thule would eventually come to occupy the entire North American Arctic by about AD 1500.

The Thule peoples who flourished in Alaska about 1000 years ago were sea mammal hunters known for the whaling adaptations that sustained their more northerly communities. The Thule hunted sea mammals, caribou, fish, and birds with increasing intensity and expertise, indicated by faunal evidence and the well-designed, elaborate, and often beautiful hunting technologies recovered in abundance from their sites (Frink 2007, 353). The Thule are also known for their polished slate, gravel-tempered pottery, and oil lamps (Dumond 1987). Umiaks, kayaks, and dog traction were utilized for transport. Thule villages were larger than those that preceded them, and contained middens. The Manokinak site illustrates the typical Thule seasonal pattern; in winter, people lived in semi-permanent clusters of sod houses, often with tunnels to guard against wind and cold, and then would disperse across the landscape in summer for hunting, likely living in skin tents (Frink 2016, 21). Nunalleq was a village of the Thule era, occupied most intensively between AD 1570 and 1630, though some evidence suggests intermittent settlement starting as early as the late 14th century (Ledger et al. 2018).

With their pan-Arctic spread, the Thule are considered ancestral to contemporary Yup’ik, Iñupiat, and Inuit. Archaeologists and anthropologists identify a palpable continuity in the material culture of these more contemporary Yup’ik groups and their Thule antecedents. For example, artifact forms found in Nelson’s (1899) historic-era Bering Sea collections are similar to those found at Nunalleq, and Knecht and Jones

(2020, 38) described the cultural tradition for the Nunalleq area as “generally conservative.” Ethnographic analogy has been an oft-used strategy for anthropologists seeking to understand the Thule past. This perceived material continuity has both benefits and disadvantages. Parallels between contact-era collections and pre-contact materials help us to better understand how Thule communities interacted with the world around them, contributing to a more accurate and nuanced anthropology. At the same time, the world of the Thule and their Yup’ik descendants (note that the line between the two is arbitrary) changed markedly throughout both the pre- and post-contact eras, and an over-reliance on material continuity may obscure more complex historical dynamics. Even so, continuity between past and present proves a powerful descriptive force, particularly within a context of Yup’ik resilience. When considered with a critical eye, the combined forces of archaeology, ethnography and oral history can offer a potentially robust vision of the Yup’ik world in times past.

The Bow and Arrow Wars: AD 1400-1750

During the latter centuries of the Thule era, different regional factions on the Yukon-Kuskokwim Delta were embroiled in a period of ongoing warfare. Fienup-Riordan and Rearden (2016, 7) noted that although anthropological literature often portrays Yup’ik, Inuit, and Iñupiaq as peaceable and docile, in reality “homicide, the publicly condoned execution of dangerous individuals, and warfare appear to have been regular aspects of precontact intragroup and intergroup relations.” Funk (2010, 535) similarly described war as “a constant way of life in oral histories” of the Yup’ik region. Burch (2005) discussed patterns of warfare and factionalization further north in Alaska during this same period, suggesting a broader trend towards violence encompassing much of the western Arctic immediately preceding Russian contact. Intensive climate change and increased resource stress may have played a role in these widespread tensions (Knecht and Jones 2020, 33; Masson-MacLean et al. 2019).

Sources variously suggest that this period of warring began somewhere between AD 1300 and 1500 (Fienup-Riordan and Rearden 2016, Funk 2010). Fienup-Riordan and

Rearden (2016, 18) found the onset of war to be a primary temporal distinction in Yup'ik oral history, with “most important events...described as having occurred before, during, or after the period of bow-and-arrow wars.” Although the Bow and Arrow War period contains distinctive stories about specific battles and warriors, Funk (2010) noted that much of the action occurred in a sort of amalgam “past time,” without reference to specific dates.

Oral accounts of the Bow and Arrow Wars usually center on revenge and retribution as the primary factors in conflict (Fienup-Riordan and Rearden 2016, 19). The common origin story of “the war of the eye” purports that the impetus for war was a *qasgi* dart game gone awry. As the story goes, when one young boy accidentally poked another’s eye out during a game of darts, the injured boy’s father retaliated by blinding the offender, to which the blind boy’s father reacted by killing the first boy, thus setting off a chain reaction of vengeance as kin joined in with either side within the village and, eventually, within the region.⁸ The main denominations in this prolonged conflict were the peoples of the Yukon River versus an allied group from the middle Delta, sometimes joined by the peoples of coastal Hooper Bay, Nelson Island, and the Lower Kuskokwim. In oral historical accounts, the people of the Yukon are often painted as the common foe.

Some Bow and Arrow War tales also speak of the war-like Aglurmiut tribe, thought to be descended from the Yukon peoples of the north, who eventually settled further south but were general aggressors against any new neighbors they encountered. The Aglurmiut play a major role in the story of Nunalleq, described in more detail below. Within the general bounds of the Yukon versus Lower Delta division, different village-level communities would have allied in various formations throughout long-standing conflicts, with some groups likely engaging more regularly than others. Oswalt (1990) characterized this Bow and Arrow warfare as based largely on kinship ties that united men in villages across the whole Delta. In these conflicts of vengeance, surviving relatives in other villages were obligated to join the feud on behalf of family and faction.

⁸ See Alice Watterson’s stop-animation video, made in collaboration with children from Quinhagak, recounting this story of “the war of the eye:” <https://vimeo.com/284514257>.

Oral historical and archaeological evidence suggests that Nunalleq was burned to the ground in an act of violence during the Bow and Arrow War period (Knecht and Jones 2020, 33). This event may have been one and the same with the battle of Agaligmiut, which is well-known in Yup'ik history. As local legend suggests, warriors from an area west of Kuskokwim Bay near Tuntutuliak were planning an attack on the Agaligmiut in revenge for the deaths of the sons of respected elder Qiangialliqu'ur (or "Who Was Unable to Cry"). These Kuskokwim warriors launched their attack successfully against the Agaligmiut, and then burned their village to the ground, showing no mercy for women and children and leaving the entire area in ruins (Fienup-Riordan and Rearden 2016, 74-75). In some tellings, the Agaligmiut survivors become the Aglurmiut group that ends up moving further south to the Nushagak drainage area (Oswalt 1990, 42). The population of Nunalleq may have been part of this "enemy" faction with northern ties. In 1816, the Aglurmiut refugees engaged in a further confrontation with the local Kiatagmiut people who had previously occupied the Nushagak drainage, resulting in numerous deaths on both sides and the eventual interference of the Russians. One report has the Aglurmiut population at only 60 men following this event (Oswalt 1990, 42).

Yup'ik society on the Yukon-Kuskokwim Delta was necessarily affected by the centuries-long shadow of Bow and Arrow warfare. Frink (2016, 71) described how the Thule-era site of Qavinaq was "built for warfare," boasting a large men's house that would have been used for war planning, storage features indicative of a need to draw upon surplus in times of conflict, and an elaborate tunnel system for security. Common features in Bow and Arrow War-era villages such as Qavinaq, such tunnel systems "not only connected the gendered living quarters of villagers but also acted as an interstitial medium that made gendered barriers more permeable—barriers between women and men as among village women" (Frink 2008, 110). While warfare may have brought frequent destruction and hardship to Yup'ik villages, it may also have provided novel opportunities for social engagement and changes to identity and gender-based dynamics.

Most scholars agree that the end of the Bow and Arrow War period coincides with the arrival of Russian traders onto the Yukon-Kuskokwim Delta at the beginning of the

19th century (Fienup-Riordan and Rearden 2016; Frink 2016; Funk 2010; Oswald 1990). The relationship between Russian presence and the cessation of warfare was likely complex. While in some cases Russians actively worked to curtail the bloodshed (at Nushagak, for instance, where they banded with the Aglurmiut group to quell retaliatory violence from the Kiatagmiut; Oswald 1990, 42), some have suggested that it was merely the fear and rumor of Russian firearms that put an end to Yup'ik intergroup aggressions (Frink 2016, 55-60). Some communities were said to have been heavily depleted and even starving by this point in the conflicts (Funk 2010, 557), but such conditions may have resulted from a combination of factors, including what would be the first of many devastating disease epidemics to come (Fienup-Riordan and Rearden 2016, 20). Whatever the causes, the end of Bow and Arrow warfare co-occurred with many other drastic changes to Yup'ik life in the region, with a general trend towards the cessation of inter-group hostilities in the face of large societal shifts.

Contact with Cossacks: Russian Trade from AD 1790 to 1860

Against this backdrop of war, violence, and intertribal tension, Russian traders began making inroads into southwest Alaska in the 1790s. As some of the first non-Natives to establish a permanent presence on the Yukon-Kuskokwim Delta, the Russian entrée into the region marked a sea change in Yup'ik ways of life. To this day, white people in Yup'ik communities are referred to as “Cossacks,”⁹ an allusion to this early period of contact.

The particular character of Russian colonial contact in southwestern Alaska had ramifications for Yup'ik life in the region over the next few centuries. Unlike many other Indigenous groups of North America and elsewhere, the Yupiit and their neighbors were not subject to forced removals from their land, nor to the implementation of a reservation system. Multiple factors contributed to this, including the Arctic's environmental constraints and the colonial goals of the Russians. Oswald (1990, xvi) thought that the inaccessibility of Yup'ik villages during the contact era played a major role in the

⁹ In Quinhagak, the term is “kassaq,” as described in Chapter II.

relatively late impact that colonizing forces had in the Yukon-Kuskokwim region.¹⁰ Fienup-Riordan (1994, 30) suggested that it was not only the inaccessibility of the Yukon-Kuskokwim Delta that kept settlers at bay, but also the relative dearth of available marketable natural goods, compared to the more lucrative resources of whales, sea otters, and gold found north and south of the Delta. Ultimately, the Russian focus on trade, rather than on land acquisition, resulted in overall peaceful relations between Native communities and the first settlers, whose survival often depended on their ability to work well with local guides (Fienup-Riordan and Rearden 2016, 9; though note that we do not have accounts from Yup'ik people from this time to verify this from an Indigenous perspective). Despite what appears to be a less intense experience of colonialism on the Yukon-Kuskokwim Delta in comparison to other regions of Alaska and the “lower 48,” Frink (2016, 5-7) cautioned that it would be inaccurate to say that Yup'ik lives were little affected by colonialism; rather, the effects here were nuanced, gradual, and complex.

At the beginning of the 19th century, in the midst of Bow and Arrow warfare, most Yup'ik communities were comprised of several related families who would come together to live in multi-house village settlements in winter, while dispersing across the landscape to hunt and fish in summer. Winter villages were composed of multiple enet, or residential houses, and usually multiple qasgit, or men's houses. Communities might have as few as 20 residents, or as many as a few hundred (Shaw 1998, 240). Fienup-Riordan (1994, 29) estimated that the population of the Yukon-Kuskokwim Delta may have been as many as 15,000 people in the early 1800s. At the time of contact, the Delta population was divided into 12 socio-political units that maintained territories and fostered allegiance across smaller communities—likely the factions that battled during Bow and Arrow Wars. Sovereign in their own right, these Yup'ik communities likely interacted with Russian traders as locals welcoming visitors into their nation.

¹⁰ Issues of accessibility remain at the forefront of village life today. Although many families still hunt, fish, and gather regularly for their food, most still maintain at least some reliance on store-bought goods, which in Quinhagak are only available locally from the Qanirtuuq general store. The availability of market goods is entirely dependent on air shipments that arrive during good weather from larger hubs in Bethel and Anchorage. Bad weather can prevent such transport, sometimes even for weeks at a time. This was the case during my stay in Quinhagak during February and March, 2019, and I recall how the shelves of the Qanirtuuq general store were shockingly bare.

Russian traders established the first permanent trading posts on the Yukon-Kuskokwim Delta between the 1820s and 1840s (Shaw 1998, 240). Often with the help of local groups like the Aglurmiut, the Russian-American Company ran expeditions along the Kuskokwim River during this time in the hopes of establishing long-term productive fur trading operations with Yup'ik communities (Oswalt 1990, 43-44). Though lucrative fur-trading along the Kuskokwim was ultimately unsuccessful, the Russians did have some initial success in opening the St. Michael and Kolmakov redoubts in 1833, as well as the construction of a permanent trading post on the Kuskokwim in 1841 (Frink 2016, 21). Along with larger trading posts, smaller posts called *odinochkas* were opened, mostly maintained by Russian men but sometimes by Native managers (Frink 2016, 22).

The Russian mentality towards trade on the Yukon-Kuskokwim Delta was one of working within local infrastructure to achieve gains of market growth, and direct trade with villages was encouraged. Oswalt (1990, 54) identified a policy of general even-handedness towards Kuskokwim peoples by the Russian-American Company, which tried to curtail intertribal feuding and provided business opportunities to Yup'ik people and "creoles" (those with mixed European and Native blood). At the same time, the Russians had an unwritten policy of fostering local dependence on market goods (Oswalt 1990, 54). Alongside the trade for furs existed a growing exchange in beads, tobacco, sugar, and molasses for Native foods such as dried fish, berries, greens, wildfowl, and seal oil, which the Russian-American Company came to depend on to supplement the diets of its employees (Frink 2016, 22). While men were typically the trappers in Yup'ik communities, this exchange economy brought women's labor to the fore, as food preparation, processing, and storage were all under women's auspices (Frink 2016). Despite their central role in helping to provision Russian traders, Yup'ik women likely lost some of their control over household management during this time. At the contact-era site of Kashunak, changes to household storage strategies used by Yup'ik women are apparent (Frink 2007, 2016). Pre-contact sites often had food storage pits located within house interiors, pointing to women's near complete oversight over food preparation and distribution within the family. At Kashunak, however, storage features have moved

outside of the home and to the outskirts of the village, indicating a loss of women's control over subsistence resources concurrent with a shift to more commercialized economies and production (Frink 2007, 2016).

Although the market economy impacted Yup'ik communities, Oswalt (1990, 54-55) portrayed the early relationship between Yupiit and Russian traders as ambivalent, at least on the part of the locals, who maintained their footing in trans-Siberian trade routes throughout this era. The Yup'ik were not dependent on Russians to make their livelihood, nor to trade within the global economy. At the Crow Village site (occupied until 1910), the vast majority of artifacts are traditional Yup'ik forms made of local materials, with only a few examples of metal and beads (Oswalt 1990, 69). Such material culture suggests the resiliency of Yup'ik lifeways and traditions, even in the face of novel experiences with the global market.

The nature of life on the Yukon-Kuskokwim Delta would change monumentally with the catastrophic and massively destructive epidemics that hit the region beginning in the mid-1800s. Prior to Russian contact, the Yup'ik population on the Delta is estimated as high as 15,000 people (Fienup-Riordan and Rearden 2016, 15). The 1838-1839 smallpox epidemic was first to affect the region, and an estimated 60% of the Kuskokwim population perished by the summer of 1839 (Fienup-Riordan 1994, 29; Oswalt 1990). Influenza hit in 1852-1853, and again in 1861, with measles and influenza following in 1900, and Spanish influenza in 1919. While epidemics affected the entire region, they hit the northerly groups hardest, with some communities completely destroyed, and others suffering losses of about half of the population. Yupiit may have interpreted these devastating diseases as the "intrusion of a foreign substance," and found them incurable by shamans (Oswalt 1990, 51; Napoleon 2005). Russians, who had access to vaccines, did not become ill and may have seemed the intentional perpetrators of disease, leading to tension between Yup'ik villages and Russian traders— for example, the attack on Russian Mission in 1839 (Oswalt 1990, 51-52).

Americanization and Missionization from AD 1880-1930

When the United States purchased Alaska in 1867, Russian presence dissipated, and the American settler colonialism to follow took on a decidedly different flavor. While the Russian American Company had prohibited the sale of firearms and alcohol to Native communities, the American Commercial Company had no such rule (Frink 2016, 23), and previously-encouraged kin-based relationships created through intermarriage were now frowned-upon (Frink 2007, 360). Missionization became a primary vector for colonialism throughout the territory, and had a major impact on the course of Yup'ik history (Fienup-Riordan 1994, 30-31). Although Russian Orthodoxy was established in southern Alaska beginning in the 1790s, few religious inroads had been made on the Yukon-Kuskokwim Delta, with the exception of a few baptisms along the Kuskokwim in the 1830s and 1840s, and the opening of Russian Mission on the Yukon River in 1845 (Fienup-Riordan 1994, 31; Oswalt 1990, 71). The Moravians, who established a mission in Bethel in 1885, eventually made a greater impact in the region, as did the Catholics, particularly on Nelson Island. As the direction of colonial entanglements turned towards religious doctrine, community histories further diverged, with each missionizing group using its own strategies and circumstances to affect local contexts in different ways.

Quinhagak was missionized by Moravians, a form of Protestantism spread under the guidance of Reverend Sheldon Jackson. The Moravian gospel was one of industriousness, piety, and civilization meant to bring Alaska Native communities into a more Western way of life. In 1885, John Henry Kilbuck (a member of the Delaware tribe) and Edith Kilbuck became two of the first missionaries to settle in Bethel and establish a mission there (Oswalt 1990, 81). Although the Kilbucks' writings are disparaging of Yupiit, they were also known for spending considerable time amongst villagers, with John even learning the Yugtun (the Yup'ik language) (Oswalt 1990, 85). Late 19th century Moravianism condemned traditional Yup'ik religious practices such as mask-wearing, dancing, and shamanism (Mossolova et al. 2020; Mossolova and Knecht 2019). Oswalt (1990, 86) noted that one of the Kilbucks' major successes was Kwethluk locals' 1889 burning of their own dance masks—devastating to consider in contemporary context.

Throughout the 1890s, Moravian missionaries along the Kuskokwim recruited Yup'ik helpers from various villages to bring consistent church presence to village life.

An offshoot from the Bethel mission, Moravianism reached Quinhagak early, and has had an immense impact on village culture for nearly 125 years. As Annie Cleveland (in Rearden and Fienup-Riordan 2013, 392) stated, “I think there were no longer any shamans in Quinhagak before other villages. The missionaries went to Quinhagak first.” In 1893, a mission house was built in Quinhagak, where Reverend John Schoechert and his family were stationed in the early 1900s (Rearden and Fienup-Riordan 2013, xxxv). Mrs. Schoechert established Quinhagak's first school shortly thereafter, and a small store was opened in the village (Rearden and Fienup-Riordan 2013, xxxv). In the early decades of the 1900s, Quinhagak built a new church with a 40-foot steeple, said to serve about 80-90 people at major holidays (Rearden and Fienup-Riordan 2013, xxxv). Big lifestyle changes happened quickly in Quinhagak during these years, much due to the sustained Moravian presence—a missionary was stationed in Quinhagak “almost nonstop” until the 1940s (Rearden and Fienup-Riordan 2013, xxxv).

As part of their civilizing mission, Moravian missionaries brought particular ideas about “proper” ways for Yup'ik people to earn a living and interact with the natural world. In 1894, the Bureau of Education provided reindeer herds to mission stations in Alaska to introduce a new livelihood to the Yup'ik people and guard against starvation (Rearden and Fienup-Riordan 2013, xxxvi-xxxvii). According to Sheldon Jackson, reindeer herding should transform people of the Yukon-Kuskokwim Delta “from the savage employments of hunting and fishing into a higher grade of civilization, that of herdsman and teamsters” while also working to “reclaim and make valuable vast areas of land otherwise worthless” (Rearden and Fienup-Riordan 2013, xxxvi-xxxvii). The first herds arrived in Bethel in 1901, and by 1906, the reindeer population had grown to over 1000, necessitating a move down to Quinhagak. Some Quinhagak families took up reindeer herding at this time, and the industry was particularly active from 1916 into the 1920s (Rearden and Fienup-Riordan 2013, xxxvii). In 1929, the mission decided to divest itself of the herd, which had become too costly to manage, selling the rights to the

animals to the Kuskokwim Reindeer Company in which Native owners could pool their resources for better herd management (Rearden and Fienup-Riordan 2013, xxxvii). By the 1940s, however, local attitudes about the herding lifestyle were changing, and the industry soon died out in the region.

A gold rush further accelerated settler colonialism, bringing prospectors into the area in the late 19th century (Rearden and Fienup-Riordan 2013, xxxviii). At the end of the 1800s, the promise of gold around Nome resulted in prospecting around Kotzebue Sound and further south along the Yukon and Kuskokwim rivers (Frink 2016, 23). As settlers moved onto the Yukon-Kuskokwim Delta, Yup'ik communities, which were already struggling from population loss and rapidly consolidating into more permanent villages, became further displaced from their traditional territories. At the same time, mining camps became a focus of a growing trade economy on the Delta (Fienup-Riordan 1994, 33). Commerce was growing especially along the major rivers, provisioning increasing numbers of white settlers and providing job opportunities for Yup'ik men in the process (Oswalt 1990, 97-98). In 1910, gold was discovered on tributaries of the Agalik and Eek rivers, bringing miners close to Quinhagak to “scour those drainages” (Rearden and Fienup-Riordan 2013, xxxviii). Regional mining activity fluctuated thereafter, but miners remained a regular fixture in local villages between the 1920s and 1930s.

With new settlers came new diseases. In 1900, epidemics of influenza and measles again struck the Yup'ik population, resulting in further loss. An epidemic of whooping cough followed later that year, killing many infants and children and further shaking traditional Yup'ik beliefs in shamanic medicine, ultimately to the advantage of missionaries seeking converts (Oswalt 1990, 99). In the early 1900s, these horrendous epidemics led John Henry Kilbuck to observe that “the population now consists of the young generation— like the second growth of timber— with here and there a middle-aged person”¹¹ (Oswalt 1990, 99).

¹¹ This is the devastation and trauma referenced by Harold Napoleon (1995; see Chapter II).

The early decades of the 20th century were a time of rapid change for Yup'ik communities on the Delta. Intensive missionization, the establishment of the first schools, the introduction of wage labor, further consolidation of villages, and the impacts of mass death and disease carried heavy demographic, cultural, economic, social, and political implications for peoples who, just a generation prior, were still living largely as the ancestors had for centuries. Citing John Henry Kilbuck's observations of Delta life in 1916, Fienup-Riordan (1994, 33) wrote that

most Kuskokwim natives lived in log cabins heated with cast-iron stoves, ate homegrown turnips and potatoes from graniteware dishes, possessed at least some Western clothing, which they mended on treadle machines, and received education, health care, and Christian teachings from federal employees and missionaries.

These changes did not reach all communities equally, and those along the rivers were more connected to new lifeways than those along the seacoast (but Quinhagak is a notable exception). Some Yup'ik villagers continued to utilize traditional semi-subterranean architecture even into the 1940s (Shaw 1998, 240). In a local example, Quinhagak elder John Smith, born in Hooper Bay in the 1940s, remembers spending his early childhood in a sod house.

Mid-Century Changes: AD 1940-1990

The mid 20th century Yukon-Kuskokwim Delta looked decidedly different than it had 50 years prior. This was the time when contemporary elders were children, with parents and grandparents who had lived vastly different lives than their own. Because colonial transformations happened relatively late in this region, some of today's elders are able to speak about the more traditional Yup'ik past experienced by their own elders, which they learned through stories heard in their youth.

Epidemics continued to affect the Delta population up until mid-century. Tuberculosis ravaged already ailing communities, and was a major cause of death in many communities. During the latter half of the 20th century, however, the Native population began to rebound, with families consolidating into villages that provided easy

access to church, school, health services, and a burgeoning market economy. In 1965, an influx of Great Society federal assistance programs provided housing and sanitation upgrades to the villages, further incentivizing growth (Oswalt 1990, 124). As one of the earliest Yup'ik villages to be missionized, Quinhagak's consolidation happened earlier than most other Delta villages, and it continues to be one of the largest in the region. Though the prevalence of disease kept Quinhagak's population around a steady 200 people for the first half of the 20th century, it began to climb in the 1960s, reaching 427 by the 1980s (Rearden and Fienup-Riordan 2013, xxxix). In the 1990s the overall Yup'ik population on the Yukon-Kuskokwim Delta reached over 20,000, finally surpassing pre-contact numbers (Fienup-Riordan 1994, 38).

Frink (2016, 100) described the mid-century era as one of intensifying colonial engagement for many Yup'ik communities based on the example of Old Chevak, a transitional village inhabited briefly from 1947 to 1950. When Kashunak villagers relocated here in 1947, many decided to build their homes differently than the ubiquitous semi-subterranean sod houses of centuries prior; instead, the majority of homes were built directly on the ground, or raised with stilts using Western methods. Evidence from Old Chevak (and other villages) suggests this is when the *qasgi* fell out of use in the region, with families beginning to live in integrated male-female households— a portent of change for Yup'ik social relations (Frink 2016, 106). At Old Chevak, the church became the ceremonial center of the village, replacing the *qasgi*. Economic development was intensifying at this time, with families relying more on a wage economy (particularly the fishing industry) beyond the traditional seasonal round.

Frink (2016, 74) identified a “triad of colonial siege,” that characterized 20th century Yup'ik life: “the trade post, the religious mission, and colonial education.” Education was the last of these to come to the Yukon-Kuskokwim Delta, with schools formalizing throughout the mid-1900s. The Bureau of Education established schools in the region starting in the early 1900s, and in 1905 opened the new Territorial Department of Education, with separate schools meant primarily for white children (Oswalt 1990, 137). Throughout the early century, the primary mission of village schools was the

Americanization and “civilization” of Native children (Oswalt 1990, 137). As villages continued to consolidate, schools became a major draw for families to settle permanently, although not every Yup’ik family valued English-language education. Joshua Cleveland, a Quinhagak elder educated in the 1940s, explained that his parents “didn’t consider education, learning in the English language, to be important... That’s why when our parents wanted to bring us places, they’d bring us, disregarding our duty to attend school. Evidently, they did that so that they could live, so that we wouldn’t starve and lack clothing” (in Rearden and Fienup-Riordan 2013, xxxix). In the 1950s, primary school attendance was made mandatory by the Bureau of Indian Affairs. The nature of education in Yup’ik communities changed in later decades, with a growing understanding of culturally-appropriate curriculum and Yup’ik language learning. In 1976, the Molly Hooch decision¹² mandated that every village have a secondary school (Fienup-Riordan 1994, 39; Oswalt 1990, 142). Previously, students wanting to attend high school were sent away to boarding schools, with Mount Edgecumbe High School in Sitka and the Chemawa Indian School in Oregon hosting the majority of students from the Delta. Most elders in Quinhagak remember attending these boarding schools, and numerous students are still sent away for education— doing so is considered a marker of privilege and academic excellence.

A major shift in relations between Alaska Natives and the United States government occurred with the passage of the Alaska Native Claims Settlement Act (ANCSA) in 1971. As a means of opening up Alaska to economic development, ANCSA did away with aboriginal land claims in exchange for establishing fee-simple Native title to 44 million acres of land and a payout of over 1 billion dollars (Oswalt 1990, 172). Twelve regional and one non-regional corporation were set up to administer the act and its provisions, and smaller village corporations were established for more local management. The Calista Corporation is the regional corporate body for the Yukon-Kuskokwim Delta; Quinhagak’s own village corporation is Qanirtuuq, Inc. Although the

¹² The “Molly Hooch case,” a landmark for Alaska Native education, was a suit brought against the state of Alaska in 1972 alleging that the Native American boarding school system was inequitable. In 1976, the state of Alaska agreed to build secondary schools in all communities requesting them (Oswalt 1990, 142).

corporate structure of Alaska Native villages might be read as the pinnacle of Westernization, many villages (including Quinhagak) take pride in pursuing economic development within a framework of Native values. For example, Qanirtuuq's mission statement states that it is "an Alaska Native Corporation that is sustainable, culturally focused, profitable, and benefits our shareholders," and the Nunalleq excavations have been driven by the corporation's desire for cultural preservation (Qanirtuuq 2017).

The commercial fishing industry expanded following Alaska statehood in 1959 (Rearden and Fienup-Riordan 2013, xlii). Commercial fishing became a viable career for many seeking opportunities to earn money in the wage economy. Beginning in the 1960s, a different kind of fishing economy gained traction on the Yukon-Kuskokwim Delta: sports fishing tourism. Outsiders took notice of the excellent fishing available on the abundant rivers of the Delta, and recreational fishing ventures aimed at white tourists exploded in the 1980s (Rearden and Fienup-Riordan 2013, xlii). The sports fishing industry has been especially lucrative in Quinhagak, where a confluence of good rivers provides ample fishing opportunities.¹³ As tourism grew, so did local concerns about the availability of fish for subsistence and commercial purposes. Sport fishing methods of catch-and-release go against traditional Yup'ik beliefs about respectful treatment of animals (Rearden and Fienup-Riordan 2013, xlii-xliii). In Quinhagak, tensions between residents and the sports fishing community reached a head in 1987. The year prior, fishing guides reported that 2,544 visitors cycled through the recreational fishing camps, a number slightly less than twice the combined population of all regional Yup'ik villages at the time (Rearden and Fienup-Riordan 2013, xlii-xliii). Extremely low fish runs in 1987 resulted in the shutdown of the subsistence and commercial fisheries that Quinhagak families count on for food and money, but the recreational fishery was allowed to remain open. After a series of confrontations, frustrated Quinhagak residents approached the Alaska Board of Fisheries to ask for a ban on catch-and-release fishing

¹³ On my first 6-seater plane ride from Bethel airport to Quinhagak (see Chapter I), though I expected to be amongst Yup'ik people, I ended up traveling with a plane-full of white people from Kansas who were visiting the Arolik River on their family summer vacation. Our paths diverged after we landed in Quinhagak, when they were whisked away in a fancy fishing outfitter van. Fishing tourists are rarely seen in the village proper: they fly in and fly out.

methods, which was refused due to lack of quantitative evidence proving such methods as detrimental (Rearden and Fienup-Riordan 2013, xliii-xlv). While tensions have subsided, the sports fishing industry continues to impact life and subsistence in Quinhagak. The authority of state agencies in determining outcomes of subsistence resources points to a drastic transformation in Alaska Native sovereignty in the 20th century.

Resiliency and Change in Contemporary Yup'ik Life

In the 21st century, Yup'ik villages have continued to consolidate, modernize, and connect to the global economy. Villages such as Quinhagak enjoy amenities like satellite television, cellular phone service, internet access, deliveries from Amazon.com (though the delivery timeline can be lengthy), and general access to the global digital world comparable to most other Westernized places. At the same time, village life is vastly different from that of larger, more integrated communities. Travel in and out is logistically difficult and expensive, access to groceries and medicine is limited, jobs outside of village bureaucracy are few, and water and sewer connections have only just become commonplace in the past decade. Many aspects of traditional Yup'ik subsistence are integrated into contemporary life, and most families continue to participate in the seasonal round, even as the availability of industrialized foods grows (Sloan 2020b). The changes brought about by disease, trade, contact, and missionization have not been without consequence, and many Yup'ik villages suffer from rampant poverty and violence (Napoleon 1995). Both suicide and accidental death are endemic on the Yukon-Kuskokwim Delta, and have major impacts in these small communities.

The history described in this chapter points to the resiliency and spirit of the Yup'ik people. Through periods of intensive change, Yup'ik culture has remained vital to the people of the Yukon-Kuskokwim Delta, even as it has been challenged and transformed. For example, many devout Moravians in Quinhagak find overlap between Yup'ik and Moravian ideals, forging a hybrid form of religious culture that expresses their Indigeneity (Rearden and Fienup-Riordan 2013, xxxvi). The historic trajectory of the Delta provides context for Nunalleq's occupation period (AD 1570-1630) and for my

methodological focus on memories of the past as embedded in contemporary Quinhagak culture.

CHAPTER IV: BACKGROUND TO THE NUNALLEQ ARCHAEOLOGY PROJECT

The field season morning routine: Wake up either to your own alarm, or your roommates.' Roll out of sleeping bag and into pitch darkness— not because the sun isn't up yet (it is), but because you sleep in the part of the Quonset hut that has no windows. Make your way to the restroom before the others, happy to see that the water tank is full. Return to room, and do a first layer gear-up: long-johns, thermal shirt, wool socks, beanie hat. Your boots have been left by the front door heater to dry out— put them on and zip up your backpack. Stroll across the street for a hot breakfast with the team in the Red Building. Once tummy is full and caffeine is consumed, it is time to make lunch: a turkey sandwich with a miniature Hershey bar on the side. Hop into your waterproofs, grab your backpack, and jump into the van. Enjoy the blissful 12 minute drive through town and tundra before the day's work begins.

Drive complete, we field crew empty from the Qanirtuuq, Inc., van, parked at the end of the gravel road adjacent the village dump, full of rusting metal appliances and various detritus of village life, the road outlet closest to the ancient village. A scenic 20-minute hike-- either across the mossy, fragrant tussocks that comprise the tundra, or, more easily, following the well-worn but sometimes soggy path that emerges at the beach— takes us to our worksite for the day (Figure 6). The surrounding grasses are long and billowy, and the scent of Labrador tea, crushed underfoot by boot after boot, is in the air. A team leader sets up the total station while we grab trowels, dustpans, buckets, and a fistful of plastic bags. It's time to dig.

* * * * *

The Nunalleq site is located on a stunning stretch of Bering Sea coast a few miles outside of Quinhagak proper. To the west, the Bering Sea offers open vistas that on clear days provide views of Goodnews Bay to the south. When the tide is in, the wind and the waves are palpable; at low tide, the cracked surface of the mud flats stretches out for miles, and moose are sometimes spotted in the distance, carefully navigating a surface

slightly sinking beneath their feet. The open tundra surrounds Nunalleq to the north, east, and south, teeming with flora and fauna (Labrador tea, berries, birds) in colors that change with the seasons. Quinhagak residents know this landscape well, frequently traveling south of the village on four-wheelers following the beach path to collect wood, hunt, fish, and gather berries, passing Nunalleq on the way. Though it feels remote, Nunalleq is constantly connected to the modern village through these subsistence seekers who pass by on a daily basis in summer, and frequently in spring and fall too. Much of village life in Quinhagak is lived out on the tundra and the sea.



Figure 6. The morning hike out to Nunalleq, on a sunny day.

The landscape surrounding Nunalleq is classified as Bering Taiga and includes subarctic, boreal, and tundra ecosystems (McManus-Fry 2015, 7). Local vegetation consists of areas of wet and dry herbaceous tundra; alder/willow scrub; wet cotton grass tundra; moist, dry, and elevated polar grasslands; beach edge communities; and sand. The

local flora is diverse, heterogeneous, and interspersed with large areas of open water, which are particularly visible when flying overhead. This is a treeless landscape, but in the past, driftwood would be sourced from the beach. Due to the wet and uneven nature of the summer tundra, travel during this season is safest when limited to known pathways. Winter provides more reliable frozen surfaces on which locals travel to nearby villages on snowmobile, though climate change is changing this, as demonstrated by recent snowmobile accidents caused by thinning ice. Quinhagak residents are intimately knowledgeable about the land and water bodies surrounding their village that they rely upon for subsistence.

Recent climate change is having drastic impacts on this subarctic landscape. During a trip to Quinhagak in winter 2019, I was shocked to see minimal ice and snow cover on the tundra and to witness the mouth of the Kanektok River almost entirely open, usually it would be frozen where it meets the Bering Sea. This, even though break-up historically happens in April (Sloan 2020a). While climatic fluctuations have long been a part of life on the Yukon-Kuskokwim Delta, the rate and intensity of those occurring in recent decades has had a staggering effect on local lifeways, impacting subsistence harvests (both positively and negatively), accelerating coastal and riverine erosion, and contributing to more rapid disintegration of village infrastructure (e.g., water pipes snapping off of houses, foundations sinking into the tundra due to melting permafrost; Jones 2017). Climate change is responsible for the marginal state of the Nunalleq site today, and plays a central role in the story of the Quinhagak Archaeological Project.

The Nunalleq Archaeology Project

From the outset, the Nunalleq Archaeology Project has been a partnership between the University of Aberdeen and Qanirtuuq, Inc. Archaeologists were invited by the Quinhagak community to investigate Nunalleq, rather than just showing up and assuming consent for research. In asserting autonomy and sovereignty from the start, the Quinhagak community has ensured that all stages of this research comply with local needs and desires.

The story of collaboration begins in 2007, when Quinhagak residents noticed an increasing number of artifacts eroding from the coastal bank abutting Nunalleq, known locally as the “old village” (Knecht and Jones 2020, 26). Qanirtuuq, Inc., contacted archaeologist Rick Knecht to investigate. At the time, Dr. Knecht taught at the University of Alaska Fairbanks, Department of Alaska Native and Rural Development, but soon moved to the University of Aberdeen in Scotland. A few small test pits indicated abundant cultural materials and the potential for a larger site, and an initial season of field work was planned for summer 2009.

The imminent threat that coastal erosion, rising sea levels, reductions in ice cover, and melting permafrost posed to the integrity of Nunalleq’s archaeology have been apparent from the start of excavations (Knecht and Jones 2020, 30). During the 2009 and 2010 field seasons, archaeologists focused nearly exclusively on salvage and rescue of the most endangered portion of the site (Knecht and Jones 2020, 30). Harsh storms in November 2011 exacerbated destruction of this area, which has since completely eroded away, a loss of about 6 meters of coastal bank (Knecht and Jones 2020, 30).

Excavations paused in 2011 for post-excavation and sample processing (Knecht and Jones 2020, 30), and 2012 served as a transition year between salvage excavations and a more research-centered model. This was also the first year of operation for the Nunalleq field school, which would welcome dozens of undergraduate students from various universities over the coming years. In 2013, the UK funding agency Arts and Humanities Research Council (AHRC) awarded funds to Principal Investigators Rick Knecht, Kate Britton, and Charlotta Hillerdal for the ELLA – or “Ecological Knowledge, Lifeways, Learning and Archaeology” – grant, significantly expanding the research potential of the Quinhagak Archaeology Project and making it “possible to implement excavation and recording methods best suited to allow a fine-grained understanding of the complex stratigraphy at Nunalleq and to undertake systematic environmental sampling” (Masson-MacLean et al. 2019, 3). The following six field seasons focused on “a largely contiguous block of just over 500 m²” yielding site deposits over 750 m³ in volume, which Knecht and Jones (2020, 30) suggested “may well be the largest hand-

excavated block ever installed in an Alaska archaeological site.” Nearly 15% of this excavated area has since been lost to ongoing coastal erosion (Knecht and Jones 2020, 30).

As the nature of the Nunalleq Archaeology Project shifted, so too did the archaeological methods employed. Salvage excavations in 2009 and 2010 were carried out using the Wheeler-box grid or planum method, where each unit square of a gridded site is excavated separately by stratigraphic level, and relationships between levels are determined post-excavation (Masson-MacLean et al. 2019, 13). In 2012, with a better understanding of the complex nature of sod house stratigraphy and with the resources afforded by the ELLA grant, methods shifted to a single-context excavation style, wherein the entirety of a context, or a single depositional event, is exposed across grid squares before digging proceeds (Masson-MacLean et al. 2019, 13). Such methods allow excavators to view and map the full spread of each context in a site, making it easier to identify and understand the relationships between features such as house floors, sod walls, tunnels, and boardwalks. A single day excavating at Nunalleq makes clear the utility of such an approach, as the stratigraphy here is clearly complex, with house floor layers often interspersed with layers of debris or collapse representing remodeling episodes. Because of these changes, the best temporal and spatial control for Nunalleq can be obtained from materials excavated from 2013 onwards (Masson-MacLean et al. 2019, 16).

Over 100,000 artifacts were recovered from Nunalleq over the life of the project (Knecht and Jones 2020, 36). Most abundant are wood (comprising 80% of the collection, Knecht and Jones 2020, 37), lithic artifacts, ceramics, bone, ivory, and antler, but the remarkable preservation in Arctic permafrost has also allowed for the recovery of highly sensitive materials, including grass basketry and cordage (see J. Masson-MacLean et al. 2020), baleen, fur, hide, and non-mortuary human hair. Intact artifacts found in situ were given unique identification numbers and mapped with three-point provenience using a Leica total station. Bulk finds (typically lithic artifacts, ceramics, worked wood, and faunal materials) are screened on-site through ½ inch mesh and collected by grid square

and context. Beginning in 2012, several other types of samples have been collected from the site, including spot samples (e.g., concentrations of non-mortuary human hair, animal fur, seeds, fish bones, etc.), bulk samples (e.g., sediments collected from various points across each context to check for plant and invertebrate remains), and samples for general bioarchaeological analyses (Knecht and Jones 2020, 41-44).

The research team behind the Nunalleq Archaeology Project is made up of multiple specialists from various institutions, but with a majority from the University of Aberdeen. As Principal Investigators, Rick Knecht and Charlotta Hillerdal are the lead archaeologists in the field, while Kate Britton leads the laboratory-based isotopic analyses on non-mortuary human hair and animal remains. Specialty analyses for the project include isotopic analysis by Kate Britton (Britton et al. 2018, Britton 2020), paleoentomology by Veronique Forbes (Forbes et al. 2015, 2020); faunal analysis by Edouard Masson-MacLean (Masson-MacLean et al. 2019, 2020) and Ellen McManus-Fry (McManus-Fry 2015; McManus Fry et al. 2018); pottery analysis by Ana Jorge and colleagues (Farrell et al. 2014); paleoenvironmental analysis by Paul Ledger (Ledger et al. 2018); and grass basketry analysis by Julie Masson-MacLean (J. Masson-MacLean 2020) and Tricia Gillam. Numerous graduate and undergraduate students have also participated in and published research related to Nunalleq (e.g., Gigneux 2017; Mossolova et al. 2019, 2020; Redgate 2015). As a graduate student at the University of Oregon, I became involved in the project as a field worker in the summer of 2014 upon the suggestion of my doctoral advisor, Dr. Madonna Moss. I subsequently received permission from Knecht and Warren Jones of Qanirtuuq, Inc., to pursue dissertation research on gender and social life in Quinhagak and Nunalleq in 2015, 2017, and 2019. The Nunalleq Archaeological Project is a collaborative effort, not only in terms of power-sharing with the village of Quinhagak, but also regarding teamwork amongst researchers.

Partnerships with the local community were some of the most important to arise out of the Nunalleq Archaeological Project. Qanirtuuq, Inc., often represented by president Warren Jones, has been a central decision-maker regarding project means and goals from the outset. During field seasons, project staff made frequent presentations to

Qanirtuuq, Inc., Board of Directors, and all major decisions related to the project were and are made with the corporation's consent. Qanirtuuq, Inc., supplied much of the infrastructure that made archaeological fieldwork possible on the Alaskan tundra: the Quonset hut where research staff and field students lived; kitchen and recreational spaces in the "Red Building;" on-site tents for processing artifacts and providing shelter during lunch breaks and storms; transportation to and from the site via the corporation's large van. A few village residents were regularly employed as camp managers or manual laborers helping with the project. Quinhagak residents also participated by lending a hand with screening or excavation when passing by the site for a few hours on summer afternoons, or by stopping by the village lab to examine artifacts, help with cleaning and preservation tasks, or recounting stories about the site that assist with interpretations. A few village elders became beloved fixtures. John Smith, for example, stopped by the project kitchen nearly every evening of the field season to hear about the day's finds, teach the archaeologists about his ancestors' artifacts, and share his latest masterpieces of carved ivory, often replicas of Nunalleq's artifacts. Mike Smith, grandson to John Smith and son to Warren Jones, has grown up around the project, first working on-site as a teenager, and then employed as camp manager for the 2017 field season. Mike has also participated in my ethnographic interviews, both as a subject and an organizer. On a larger scale, the entire village of Quinhagak was invited at the end of each field season to a Community Archaeology Day, where the most well-preserved finds of the season were laid out for everyone to observe, touch, and discuss.

While housing the Nunalleq collection locally in Quinhagak was a goal of the project from the start, conservation and analysis were initially conducted at the University of Aberdeen while local facilities were constructed (Knecht and Jones 2020, 36). In 2017, a small lab and curatorial space became available in the village, allowing for an initial group of artifacts to remain here for conservation and analysis. The majority of artifacts were shipped back to Quinhagak between 2017 and 2018, and the new Nunalleq Culture and Archaeology Center officially opened in August 2018 (see Chapter

III). Newly excavated artifacts now remain in the village and are processed and preserved at the Center.

Concurrent with planning the Nunalleq Culture and Archaeology Center opening, Knecht and Hillerdal worked with Alice Watterson, an archaeologist specializing in digital illustration, to develop an interactive education pack about Nunalleq that serves as a learning tool for the Quinhagak community and the region more broadly (Watterson and Hillerdal 2020). The education pack includes digital reconstructions of Nunalleq's sod house complex, visualizations of the site's seasonal cycle, high resolution scans of select artifacts, and cartoon characters based on both village elders and archaeologists who provide different interpretive narratives for the site. Yup'ik language learning, a key concern of Qanirtuuq's board, is also a central component of the software. As a concrete product tailored to locally-specific educational goals, the creation of the education pack represents an important next phase of the Nunalleq Archaeology Project: increasing community engagement with Nunalleq's heritage and ensuring that the knowledge gained from the project is shared with and useful to the local community.

Looking further towards the future, Quinhagak is currently considering an "eco-tourism" model for continuing phases of Nunalleq excavation and research. In 2017 and 2018, Knecht and Hillerdal piloted a program in which untrained volunteers could pay a fee to come and learn about Nunalleq's archaeology and participate in the excavation. This program had the benefit of growing public awareness about Nunalleq's unique archaeology while also raising funds to support continued artifact preservation. Such a program would allow for the archaeology project to become self-sustaining and viable for the village in the long-run. When I visited Quinhagak in winter 2019, construction was underway for new housing and bathroom facilities that could accommodate the hopefully growing number of outside visitors who will be coming to view the Nunalleq collection.¹⁴ As a small village with a sputtering economy, Quinhagak would benefit from an influx of tourist dollars and the creation of new jobs related to a heritage tourism industry. The

¹⁴ I am uncertain about how the COVID-19 pandemic has affected these plans.

drive for such changes is coming from the village, rather than from outside interests, and values of sustainability, cultural preservation, and local benefit remain central.

My dissertation research grows out of the already collaborative model set forth by the Nunalleq Archaeology Project. By looking at gender and social identity at Nunalleq, my hope is to complement and build upon the robust and ongoing research programs of my colleagues. While excavation and conservation were largely the focus of research team efforts during the beginning years of the project, analyses of the Nunalleq data are now underway, with many more publications forthcoming. The current state of knowledge on Nunalleq is summarized below.

The Nunalleq Site

Recent Bayesian analysis of radiocarbon dates suggests that people were living at Nunalleq¹⁵ some time between cal AD 1570 and 1675 (Ledger et al. 2018, 6). The site is comprised of “at least two semi-subterranean sod and timber multi-roomed dwellings” occupied in various phases and exhibiting abandonment and rebuilding episodes over time (Knecht and Jones 2020, 31). Thule-era sod houses were often altered in this way, with various rooms, walls, and features dismantled, moved and renovated— part of what makes the stratigraphy so complex to interpret. Nunalleq’s oldest occupation, Phase IV, likely dates between 1570 and 1630 AD and features a conventional Thule-style house with large central room, smaller side rooms, and a planked walkway exhibiting at least five re-flooring episodes, suggesting use over generations (Knecht and Jones 2020, 35; Ledger et al. 2018). Phase III, which spanned about 35 years and began somewhere between AD 1620 and 1650, consists of a sod house complex with a large central room and side rooms (Knecht and Jones 2020, 35; see their Figure 3 on p. 34; Ledger et al. 2018, 15). Phase II, the most recent occupation, began between about AD 1640 and 1660 and terminated with the lethal destruction of the village between about AD 1645 and

¹⁵ Note that the current Nunalleq site represents only part of what would have likely been a much larger village. Given site erosion and knowledge about the changing coastline, it is likely that a significant portion of the site had already washed away by the time excavations began, just as Area C did over the course of the past decade. The dates described here are derived only from Area A.

1675, evidenced by the thick burned layer of collapsed building materials that covers the top of the site (Knecht and Jones 2020, 33-35; Ledger et al. 2018, 15). The Phase II house is similar in form to that of Phase III, but with smaller, more differentiated internal spaces, six side rooms, and a complex of board-lined entry tunnels and hallways (Knecht and Jones 2020, 33; see their Figure 2 on p. 32). The distinctive architecture of Phases II and III may have been an adaptation to ongoing Bow and Arrow warfare, which would have necessitated defensive housing strategies within the village (Knecht and Jones 2020, 35).

Faunal materials and isotopic studies on non-mortuary human hair provide evidence of a tripartite diet for Nunalleq's residents, consisting primarily of fish (27.9% NISP, predominantly salmonids, comprising about 50% of dietary protein consumed at the site) and marine mammals (27% NISP, 41.4% of dietary protein), with smaller contributions from terrestrial mammals such as caribou (17.2% NISP; Britton et al. 2018; Masson-MacLean et al. 2019, 5). The salmonid focus suggests that people fished in shallow waters of the bay, rather than going out deeper to sea (Masson-MacLean et al. 2019, 7). Along with fish storage features and ethnographic evidence, abundant fish vertebrae in the faunal assemblage suggest the importance of storing and preserving fish, still a feature of village life today. Marine mammal remains are predominantly phocids such as bearded and ringed seals, but low numbers of larger taxa such as walrus and beluga may reveal a butchery or transport bias in the data (Masson-MacLean et al. 2019, 5). Cut-marks are found frequently on seal bones, with beheading as a common butchery strategy (McManus-Fry 2015, 153). Lipid-residue analyses on Nunalleq pottery found marine mammal biomarkers on all analyzed specimens (and a conspicuous absence of terrestrial biomarkers), suggesting the near exclusive use of these for processing or storing foods such as seal oil (Farrell et al. 2014). While fish and marine mammals were important components of the diet at Nunalleq, the role of caribou is less clear. Caribou scapulae and metapodials are overrepresented in the assemblage, as is caribou antler, and all of these elements are frequently found worked (Masson-MacLean et al. 2019, 8). Isotopic analyses indicate that caribou only comprised about 9% of total dietary protein

consumed by Nunalleq residents (Britton et al. 2018, 955), suggesting that these animals may have been provisioned more for raw materials used in tool manufacture and hide processing rather than for dietary needs. Hide processing at Nunalleq is evidenced by concentrations of fleas and lice from wild fauna identified on house floors and outdoor living surfaces, suggesting the locations where these activities occurred (Forbes et al. 2015, 164). Birds were not a major food resource, but may have been important for raw materials like bones and skins (Masson-MacLean et al. 2020) while also holding symbolic importance to village residents (see Chapters VI and VIII).

Nunalleq's faunal data indicate year-round occupation (McManus-Fry 2015). Phases III and II correspond to the Maunder Minimum, one of the coldest periods of the Little Ice Age (Masson-MacLean et al. 2019, 2). Despite the cold and likely changing climate, Nunalleq's prime location at the confluence of two rivers and the sea would have allowed residents to regularly exploit salmon runs, harvest coastal resources such as marine mammals and collect driftwood from the shore, and opportunistically hunt caribou, access that likely played a role in residents' ability to thrive in spite of environmental changes (Masson-MacLean et al. 2019, 9). Elemental representations in the faunal assemblage suggest that most major taxa were likely hunted close to the site, further emphasizing the Nunalleq area's abundance of resources (Masson-MacLean et al. 2019, 8). Biological diversity is demonstrated by the identification of at least 25 distinct taxa at the site. Even so, access to dietary resources may not have been distributed equally amongst Nunalleq's residents. Isotopic data from non-mortuary human hair suggest diet varied between individuals— while some people ate at consistent trophic levels regardless of season, others had diets that varied greatly over short periods of time (Britton et al. 2018, 960). These patterns may indicate greater mobility on the part of some, but may also have to do with social status and differential access to food.

At 16.9% NISP, dog remains comprise a significant portion of Nunalleq's faunal assemblage (Masson-MacLean et al. 2019, 6). Dogs were kept for traction, and bone sled shoes and potential grass cordage harnesses have been identified in the collection, in alignment with ethnographic evidence (McManus-Fry et al. 2018, 964, 969). Dogs were

provisioned by humans and consumed a diet very similar to the individuals that ate at low trophic levels-- predominantly salmon, but with small amounts of terrestrial and marine mammals as well (McManus-Fry et al. 2018, 964, 969). As McManus-Fry et al. (2018, 971) explained, “the fate of dogs was probably a delicate balance between their usefulness for transportation and hunting and the nutritional demands they put on the community,” and their population was likely under careful control. This may explain the significant number of butchery marks found on dog bones, indicating that these animals were used for food as well as labor (McManus-Fry et al. 2018, 970). While the location of cut-marks suggests disarticulation for consumption, especially the removal of the head, isotopic data on human diets suggests that any consumption of dogs was infrequent (Britton et al. 2018). Dogs may have served as supplemental dietary resources used only in times of scarcity.

Many analyses of Nunalleq’s material culture have focused on the local environment and how people used plant and animal resources, but recently published research is expanding our understanding of the site’s inhabitants. Anna Mossolova’s work on Nunalleq masks representing spirits, humans, and animals has revealed that the ancestors maintained an active ceremonial life (Mossolova and Knecht 2019; Mossolova et al. 2020). Mask use differs between occupational phases, with earlier inhabitants using masks to “protect important architectural structures of the house,” while in later times, masks were discarded outdoors following their use-lives (Mossolova et al. 2020, 116-117; Mossolova and Knecht 2019, 35). The frequency of taxonomic representations on zoomorphic masks differs from faunal frequencies at the site, with walrus, wolf, caribou, and owl all vibrantly represented on masks, but dietarily insignificant¹⁶ (Mossolova et al. 2020, 132). Nunalleq was clearly home to a rich symbolic and ceremonial culture, likely centered around the subsistence traditions that have nurtured Yup’ik communities for millennia, but perhaps in more complex ways than we have imagined.

¹⁶ But as Madonna Moss (2021, personal communication) suggested, these symbolically potent species may have been important for others aspects of subsistence, providing skins for boat-making, fur for garments, and bones and feathers for a variety of uses.

In complement to such approaches, my dissertation research presents a novel focus on questions of social identity and gender in the ancient village, and brings in new ethnographic and oral historical data that grow current understandings of the site. My hope is that this work will help to populate our imaginings of Nunalleq with living, breathing people existing in relationship to one another, adding an expressly humanistic dimension to site interpretations.

CHAPTER V. ANTHROPOLOGICAL AND ARCHAEOLOGICAL METHODS

The experience of visiting Quinhagak in February and March 2019 was vastly different from the summer weeks I had spent as part of the archaeological research team in 2014, 2015, 2017, and 2018. Most obvious was the environment: stark, cold, and dark most hours of the day. I could still see people out and about in the village from my upstairs bedroom window in the Red Building, but certainly not as many as during the summer, when long days, verdant tundra, and ample subsistence opportunities make it difficult for anyone to stay home. Though I've always been a bit of a loner, I hadn't realized how comforting it was to hear the sound of fellow archaeologists around the Red Building tables, or to come back from a long day of ethnographic interviews to a meal of American style turkey and stuffing and an episode of "The Great British Bakeoff," even when shared in silence. In winter 2019, I was out of my comfort zone in a way I hadn't experienced in Quinhagak before. It was very good for my anthropological perspective.

A highlight of this time was growing my friendship with Amy,¹⁷ who had been a friend of the project for years, but not someone I knew very well. When Amy found out that I was in town, she began inviting me to her home for food every day. I was always relieved for a bit of tea and conversation after spending hours alone in the Nunalleq Culture and Archaeology Center. During our visits, we talked about her family and her life, and I told her about my project and the photos I was taking at the Center. She mentioned that her relative, Grace Anaver, had a great interest in ancient artifacts—in fact, she had her own collection she had amassed over the years from explorations on the tundra and shoreline. Grace was like a local iteration of an archaeologist, and someone I should definitely talk to. Amy called to arrange it.

The next night, Grace joined us for our chat, and brought along her artifact collection to show me. Grace remembered where and how many of the objects had been

¹⁷ I've anonymized this person in this account, because I did not complete a consent procedure with them.

found, and discussed the stories she recalled best. She carefully pulled out one of the slate points in her collection featuring a marking at its base— in many ways similar to the bentwood objects I was looking at in my research. Grace had knowledge to share about these, and I would later interview her at the Nunalleq Culture and Archaeology Center, showing some of the marked implements found at the site. But on this night, Grace was the heritage steward guiding me through the collection that she had curated. This reciprocal dynamic offered an opportunity for me to consider my positionality regarding knowledge, expertise, and interpretive authority, and I learned immensely from it.

* * * * *

This project is ultimately about who speaks and who listens, and why, and how. This chapter addresses the “how.” Because this project has multiple components, the methods utilized have been diverse. My initial goal of understanding how Yup’ik people in Quinhagak conceptualize gender and social relationality necessitated an ethnographic approach rooted in cultural anthropology. Reciprocity of knowledge and engaged listening were important components of this interview-based work. After collecting interview data, I shifted my focus to archaeological analysis, assessing artifacts related to three thematic categories determined through listening to Quinhagak voices (Figure 7). Each analytical chapter that follows presents the relevant archaeological analyses in more detail, so my focus here is primarily on ethnographic methods.

Ethnographic Interviews

I conducted three phases of semi-structured ethnographic research in Quinhagak (2015, 2017, 2019) to learn about Yup’ik conceptions of gender, identity, and belonging. While each phase of research took slightly different forms, several overarching consistencies were relevant throughout. All interviews followed a semi-structured framework (Schensul et al. 1999, 149) where predetermined questions served as a general guide, but participants were allowed to lead the discussion towards whatever content seemed relevant to them— these were more conversations than formal interviews. I found these semi-structured methods particularly appropriate for learning a nuanced Quinhagak

perspective on gender and social identity because oftentimes my pre-determined questions would be the wrong ones, or would lead to confusion and miscommunication. For example, when I began research in 2015, my questions included phrasing like “gender roles” and “gender philosophy.” After talking one morning with visiting Alutiq anthropologist Sven Haakenson, I realized that these were the wrong questions to ask. Haakenson encouraged me to begin by asking who people’s families were, and to use familiar terms and roles to access gender conceptions: e.g., woman and man; mother and father. Although this shift precluded some of the more theoretical feminist questions that I wanted to explicitly ask participants (e.g., what is gender in Yup’ik society? how are gender categories defined?), it was the more culturally-situated way of accessing notions of gender and identity. My interviews improved as a result, because people better understood what I was asking them. By letting interview participants lead and guide our conversations, I learned far more than I could have with prescribed queries.



Figure 7. Engaging in different types of anthropological fieldwork. a) With a large uluaq blade that I had just excavated from Nunalleq. b) Speaking with Quinhagak residents George Pleasant and Mary Church about some of the Nunalleq artifacts.

In addition to keeping a similar interview format throughout the research, every interviewee engaged in an IRB-approved consent process prior to their interview as a condition of their participation. I compensated each interview participant for sharing their

time and knowledge, with amounts based on local precedent as determined through communications with colleagues, but which changed slightly between seasons as funding permitted. In sum, I collected 45 interviews with 34 Quinhagak residents over the age of 18 throughout the three research seasons (Appendix). All interview data will be provided to Qanirtuuq, Inc., in the form of audio files and a detailed interview inventory, which will be stored on an external hard drive in the Nunalleq Culture and Archaeology Center in the hopes that all community members will be able to access and benefit from this content in years to come.

2015 Pilot Interviews

During summer 2015, I spent two and a half weeks in Quinhagak holding an initial round of interviews with village residents. I received a grant for this research from the University of Oregon's Center for the Study of Women in Society (CSWS). Pilot interviews allowed me to test my methods and collect some baseline data to inform the next steps of the research process. To prepare, I came up with a set of interview questions pertaining to gender in Yup'ik lifeways, which I then revised based on Haakenson's recommendations, as described above. With the intent of democratizing participation, I advertised the interviews broadly through word-of-mouth and with a flyer posted to the bulletin board in the Qanirtuuq general store. Warren Jones and Louis Johnson of Qanirtuuq, Inc., assisted me in setting up an interview schedule with interested participants. The only criterion for participation in 2015 was identifying as a Yup'ik resident of Quinhagak, resulting in recruitment of people from many different age and socio-economic groups, and providing a diverse sample of information about gender. Such recruitment practice was not consistent with traditional Yup'ik notions of expertise that elders and known culture-bearers should be those consulted about Yup'ik lifeways. Recognizing this, I ensured that interviews conducted later in the research process (2017, 2019) adhered more closely to culturally appropriate recruitment practice. Even so, I was grateful to speak with a wide range of people in 2015, as I was trying to gain a baseline

understanding of community perceptions across identity categories in this early research stage.

I conducted pilot interviews with 15 Quinhagak residents, six of whom were men, and nine of whom were women. Of this group, six were elders, six were adults, and three were young adults. The majority of these were one-on-one interviews, with two exceptions: in one instance, elder George W. Pleasant was interviewed in Yugtun with Mary Church translating; in another instance, a fellow student sat in to observe the interview process with participant consent. I began each interview by introducing myself and my project, then initiated the consent process outlined in my IRB documentation: providing a copy of the consent form, discussing its main points, allowing the participant to read through the consent form in their own time, then securing both verbal and written consent. Most participants agreed to have their interviews audio-recorded, which prompted me to turn on the recorder and begin our conversation. For those who expressed discomfort with being audio-recorded, I instead took detailed notes during our conversations. While most interviews began with me following the questions laid out in my research plan, conversations frequently and quickly evolved in different directions. As much as possible and appropriate, I would try to circle back to my original set of questions, especially if there was a lull in the conversation. When sensitive topics arose, I offered to turn off the recording device, or to cease taking notes. Most interviews lasted between 45 and 120 minutes. At the conclusion of each interview, I thanked the participant, compensated them in cash based on interview duration, and provided a copy of their receipt and consent form for their retention.

2017 Field Season

The 2015 pilot interviews provided knowledge and experience that helped me engage in a more intensive interview process in 2017. This time, I spent five weeks in Quinhagak concurrent with the archaeological field season. This phase of research was supported by a National Science Foundation Doctoral Dissertation Improvement Grant (#2006F0).

In this phase of research, I aimed to clarify information about gender and social roles; address unanswered and new questions that arose from the pilot project; introduce new inquiries about teaching, learning, and materiality into dialogues; and generally grow the pool of participants whose voices were contributing to the research. I expanded my research plan to include three interview forms:

1. Personal experiences of teaching and learning¹⁸
2. On-site spatial analysis interviews
3. Object-centered interviews

Some participants engaged in multiple interview types over the course of the season. While recruitment for 2017 interviews was still generally open to all, this time I relied more on recommendations from trusted Quinhagak collaborators, and focused my recruitment on elders and known culture-bearers in the community. Mike Smith, longtime friend and participant in the Quinhagak Archaeological Project (and then its camp manager), was instrumental in helping me plan and schedule interviews.

Interviews about personal experiences of teaching and learning were the most general of the three types and touched on a variety of topics: how subsistence practice is taught and learned, family memories, Yup'ik rules for living, social roles within the community, feelings about the archaeology project, and hopes for the future. All but one of these personal experience interviews were one-on-one, and all followed a format similar to that of the 2015 pilot interviews; after a consent procedure, I initiated discussion with the participant, gently following a set of questions but generally letting the interviewee guide the conversation. For this category, I interviewed 16 people in 15 distinct interview events (one interview was with a husband-and-wife pair). Interview participants included three young adults, seven adults, and six elders; ten of these were men, and six were women. One interview participant (Barthelman) was not Yup'ik, but a

¹⁸ I originally envisioned this interview category as “object life histories,” but found that speaking about objects outside the context of teaching and learning did not make much sense in Quinhagak cultural context. Rather than begin by centering the objects themselves, I needed to center questions about when, how, and with whom someone had learned a certain skill or practice. These interviews frequently turned to discussions about teaching and learning, memories of beloved elders and educators, and Yup'ik rules for living, and did not end up being specifically about objects, even those involved in such processes.

local teacher who was suggested to me by Yup'ik collaborators. All other interviewees were Yup'ik. I was happy to have multiple members of a single nuclear family volunteer for interviews: Willard and Mary Church (parents who were interviewed together) and their children Lynn and Wade Church, who were interviewed individually. Most interviews lasted between 45 and 120 minutes.

On-site spatial analysis interviews took a different form. The goal with these interviews was to bring Quinhagak community members to the Nunalleq site to interact directly with the archaeology and archaeologists, with a particular focus on interpretations of architectural and landscape features. Along with discussing the archaeology visible at Nunalleq, I brought along images of Yup'ik houses, qasgit, and villages to spur conversations about community use of space. The on-site spatial analysis interviews proved to be the most logistically complex of all the types, given Nunalleq's somewhat remote location on the coastal tundra and the limited mobility of some elders. In some cases, we were able to access the site by riding together on four-wheelers, while in other cases, a larger van was required to transport elders using a less direct route across the beach. These difficulties meant that this interview type had the lowest number of participants overall.

I engaged in five on-site spatial analysis interviews with five elders. Most of these interviews were one-on-one, but one was with a pair of sisters-in-law together (Grace and Julia Hill), one of whom had previously been interviewed individually (Grace Hill). Three of the elders interviewed were women, and two were men. On-site spatial analysis interviews lasted between 60 and 120 minutes. Though not their central purpose, a benefit of this type of interview was introducing some Quinhagak elders to the daily excavation process at Nunalleq and creating the conditions for interaction between community members and archaeologists in real time, as artifacts were being excavated.¹⁹

Though the spatial analysis interviews were rich in content, I have not drawn upon them much in the research presented in the dissertation, due to shifts in analytic

¹⁹ One favorite memory from spatial analysis interviews was when Grace Hill and Julia Hill asked the archaeology team if they could sing a song at the site. They chose a favorite hymn, which they sang at the edge of the trench—a prayer and offer of good-will for ancestors and archaeologists alike.

focus and data availability. However, detailed spatial analysis of the artifact categories discussed herein is a potent future research direction, and I hope that these interviews will be useful to that end. Furthermore, spatial analysis interviews seemed some of the most enjoyable for interview participants, and resulted in increased communication and interaction between archaeologists and Quinhagak residents. Though not contributing directly to current research, the spatial analysis interviews held a net benefit for the project as a whole.

The object-centered interviews were probably the most fruitful from the 2017 research. For these interviews, participants were asked to directly comment on and interact with specific Nunalleq artifacts from different object categories that had been clustered together and laid out on different trays in the lab. Goals with these interviews were twofold: 1. to gain specific knowledge about the usage, manufacture, or meaning of different objects in Yup'ik lifeways of the past and present, while 2. having the artifacts serve as a starting point for larger conversations about materiality, teaching and learning, and social identity in Yup'ik society.

The artifact categories chosen for these interviews were uluat; sewing tools; fishing implements; toys/miniatures; dolls and human figurines; labrets; tattoo needles; earrings, beads and pendants; and objects with ownership marks. Each object category was presented on a different tray, and each tray was presented to interview participants one at a time. Categories and artifacts were selected based on a number of factors: their availability in the lab, their level of preservation, their connection to research questions surrounding gender and social identity, and interest expressed by Quinhagak residents in prior interactions. The specific artifacts chosen and their groupings on the trays remained static for all interviews. I also included images of Yup'ik houses, qasgit, and villages in the object-centered interviews to encourage discussion of spatial arrangements alongside the artifacts.

I completed seven object-centered interviews in 2017, with 14 people. The majority of object-centered interviews were done in groups of two or three people in social relationship (some friends, some family), but two were done with individuals. I

found the small group interview format to be very productive for object-centered interviews, as participants built upon each other's knowledge and memories of the objects in question. Choosing groups of people who were already comfortable with one another through their relationships as family or friends was also a successful strategy, as participants felt open with one another and seemed to enjoy the interview process. Eleven of the people interviewed in this category were elders, and three were adults; nine were women, and five were men.

2019 Follow-Up Interviews

Though my return trip to Quinhagak in winter 2019 was primarily to collect data on the Nunalleq artifacts (newly housed at the Nunalleq Culture and Archaeology Center), I also took the opportunity to engage in select follow-up interviews with Quinhagak residents. The 2017 interviews and other ethnographic research had suggested the social potency of three artifact categories, so these became the focus of 2019 research: objects of personal adornment (including labrets, beads, and artifacts related to tattooing); uluat; and objects with ownership marks (primarily bentwood vessels). To better understand these specific artifact categories, I pursued three interviews with four local knowledge-bearers: 1. John Smith and his grandson Mike Smith, both ivory carvers with knowledge of beads and earrings; 2. Willard Church, uluaq-maker; and 3. Grace A. Anaver, avocational collector and someone with an interest in local family affiliation symbols. I interviewed John Smith and Mike Smith together, while the other two participants were interviewed individually. All three interviews were carried out in the Culture Center, amongst trays of the artifacts in question. Although I followed the same semi-structured interview format as in previous field seasons, the nature of these interviews was more specific, with questions often pertaining to unique artifact specimens. The duration of each of these interviews was between 60 and 120 minutes, and participants were compensated for their time.

Interview Analysis

Determining how best to analyze interview content was a process that unfolded across research phases. Initially, my plan was to transcribe each interview audio file verbatim and code the transcripts by theme. After completing a few transcriptions in this way, I found the method not to be conducive to providing a dynamic, in-depth understanding of what was being said. The memories, knowledge, and information expressed by Quinhagak residents are not easily encompassed in text, and tone and inflection are important parts of meaning. It was difficult to record all of this accurately on paper. Even when a written transcription was available, I found myself listening back directly to an interview recording in order to capture the meaning of what people were telling me.

I shifted my interview analysis methods accordingly. Rather than transcribe into text, I listened to the interviews and consulted my hand-written notes to create an inventory of themes and subjects discussed in each session and their approximate location in the audio file. Then, I used this inventory as a guide as I pursued archaeological analysis. For example, when it came time to analyze uluaq size and shape, I knew based on my inventory that I should listen back to the entirety of Emily Friendly's (2017) interview, the beginning of Lynn Church's (2017) interview, and the middle of Grace Hill, Julia Hill, and Pauline Matthew's (2017) group object-centered interview in order to understand how uluat relate to subsistence practice.

As a result of this method, I ended up listening back to my interview audio files many times, each listen revealing nuances that I hadn't previously recognized. The amalgam of this repeated listening provided an overall sense of how people in Quinhagak think about gender, social relationships, kinship, and identity; what interests them in daily life and in terms of Nunalleq's archaeology; and how they express themselves. When I interpreted each speaker's words, it was only within the context of the original conversation where I could hear their voice, tone, and emphasis— all crucial to determining meaning. I could also hear my own voice and better understand the relational dynamic of the conversation and my manner in asking the questions, which affects

content. This listening was an important way to remember the people at the center of this analysis: the residents of Quinhagak who came to be my friends over this multiyear project. While an imperfect method, this kept community and empathy at the forefront of my mind as I pursued archaeological analysis.

These impressions gained from listening, in combination with knowing which types of artifacts were abundant and available, led me to choose three areas of focus for a community-centered archaeology of social life at Nunalleq:

1. facial adornment as an embodied expression of identity,
2. intergenerational modes of teaching and learning gendered subsistence practices, and
3. incised markings as potential expressions of social affinity and kinship.

Archaeological Analysis

In February and March 2019, I visited Quinhagak for three weeks to work with the artifacts at the Nunalleq Culture and Archaeology Center. The summer 2018 transition of the artifacts into the new space meant that fully preserved specimens from 2009-2017 field seasons were mostly unpacked and available in storage drawers and cabinets, but materials from summer 2018 were still being sorted, preserved and cataloged.

My goals during this short visit were to 1. locate as many artifacts as possible related to my three analytical categories, including those found in 2018, and 2. record detailed catalog and photographic data for each relevant specimen so that I could assess object size, shape, and design when not in the presence of the objects. After locating the relevant artifacts, I recorded information about each onto a spreadsheet, including catalog number (if available), material, provenance (if available), and any notes on design, style, or identification. I then photographed each specimen with a 10 cm scale from multiple angles, focusing on any detailed design elements. I hired Meta Williams, a local friend and frequent Quinhagak Archaeology Project participant, to help measure the subset of wooden labrets, because I suspected that size and shape would be an important aspect of their analysis.

When I returned home, I had a detailed photographic record of the artifact categories related to my three areas of focus. I organized the photographic data and made prints of the objects with scale, which I used in my analyses. Chapters VI, VII, and VIII each detail the specific forms of size, shape, and design analysis utilized for each object category.

Interview data served as a touchstone throughout the archaeological analyses. When I recognized new patterns in the artifacts, I turned first to interviews to see if Quinhagak interpretations could explain what I was seeing. Ethnographic data from various sources were also instrumental in forming my interpretations, but whenever possible, I chose to rely foremost on Quinhagak voices. The research process was a dynamic feedback loop, with different types of data overlapping, intersecting, and sometimes existing in tension. The results of these multi-vocal analyses are presented in the three chapters that follow.

CHAPTER VI: FACIAL ADORNMENT AND EMBODIED IDENTITIES AT NUNALLEQ

During my first summer in Quinhagak, I was invited by some local acquaintances, along with several other archaeology field crew members, to participate in a women's steam bath, called *maqii* (Figure 8). This group of local women would routinely get together on summer evenings after supper to wash and gossip in the *maqii*, usually a small elevated wooden shed consisting of two rooms: a small entry with benches against the right and left walls, and a steam room, accessed via a small door at the far end of the entry. Traditionally, *maqii* were how Yup'ik people bathed in communities without access to plumbing. Today, even with running water in most Quinhagak homes, the *maqii* is often considered the preferable way to get clean and catch up with friends. I had heard tell of the joys of a hot wash in the *maqii* after a long day of excavation, and was thrilled to have the opportunity to partake in the practice.



Figure 8. Nunalleq Archaeology Project colleagues after our first *maqii* in Quinhagak.

Our field crew group packed up our towels and bath products and took the short walk to the maqii we'd be using that night, which was owned by the in-laws of one of our hosts (not every home has a maqii, so people often take turns in gendered groups using those of close friends or relatives). Upon arrival, we were given our instructions: we were to enter the first room and undress, then in small groups of two or three, we would rotate in and out of the very hot steam room. With about eight of us total in the maqii, we were packed humorously tightly into the entry room, but swiftly began taking turns accessing the steam room in the back. When it was finally my time to enter, I took a deep breath, not knowing what to expect from the experience. Upon opening the small door, one is hit by the double-punch of dry, choking heat and the sweet smell of hot, crackling wood — almost too much to bear, but simultaneously deeply therapeutic. After finding a seat on the hot wooden floor planks and covering our faces, our host used a dipper to pour water over the hot coals at the back of the maqii, creating a cloud of scalding steam. There is always a bit of competition in the maqii to see which woman can stay in this intense heat the longest, but when one finally finds it unbearable, they will run out the door quickly into the cool, crammed space of the entry, where breezes waft in from the outside. After each group of a few women had entered and exited the steam room two or three times, it was time to wash. Our host cooled the steam room down, and we were instructed to bring our soaps and shampoos in with us, along with a large aluminum bowl to hold water for a sponge bath.

Initially, it was fascinating to witness the different bodily perspectives apparent in our white Euro-American group versus those of our Yup'ik hosts. My colleagues and I were self-conscious undressing, in contrast to the Yup'ik women who seemed to have a level of comfort with one another and with their bodies. I soon realized that the maqii was somewhat of a sacred space for female congeniality, companionship, and knowledge-sharing; as Jamie Small (2015) explained, “there's no hidden feelings in the maqii.” As groups of us waited in the entry, we would talk, laugh, and ask questions, and nothing seemed to be off-limits. Much of this was talk about bodies, and the space of the maqii is where I first learned about many of the Yup'ik bodily proscriptions that women follow in

times of menstruation and pregnancy. Subsequent invitations to the maqii resulted in some of my favorite friendships from Quinhagak, for which I remain grateful.

* * * * *

Yup'ik communities of the past were very much structured by bodily rules and regulations dictating who could interact with who, and how, and when (Fienup-Riordan 1994, 2005). Although today's communities do not adhere as strictly to these prohibitions, "the body" remains an important nexus of power and attention in Yup'ik ways of knowing (Morrow 2002, 335). During 2015 pilot interviews, discussions of gender frequently elicited participants' recollections of the traditional rules for bodies, some (but not all) of which are tied to gender identities. In general, Quinhagak residents demonstrated interest in "the body" as a point of inquiry.

Since the 1990s, "the body" has also been a productive place for analysis in anthropology and gender archaeology. Theories of embodiment (following Butler 1990, 1993) posit that the lived experience of being in a gendered body (the body being a potent locus for defining gender in different cultural contexts) helps to produce the gendered self through the performance and routinization of corporeal social norms. Joyce (2005, 141) explained that gender has been a primary lens for addressing the body in archaeology, noting that "archaeological interest in the surface of the body was closely linked to the rise of archaeologies of sex and gender, seen as inscribed in dress, ornamentation, and body modification." Such archaeologies have tended to interpret the body as a "surface of inscription" upon which material signifiers of identity (which can be visible in the archaeological record) can be layered (Joyce 2005, 140, 147). Contemporary social archaeology thus views the body as a canvas for social meaning, a significant locality for how people of the past made, enacted, and displayed their identities, both gendered and otherwise.

To this end, Nunalleq presents a unique opportunity to explore the embodied identities of the ancestors of the old village. The site is brimming with primary artifacts and representations suggesting various forms of facial adornment: labretifry, facial tattooing, and septum piercing. The ethnographic record for western Alaska also speaks

to these forms of adornment, providing important clues regarding how they may have once been practiced. While Quinhagak residents had few memories of these practices from their own lifetimes, their interest in and knowledge about Yup'ik bodily rules and regulations can add an important perspective to analyses of bodily adornment at Nunalleq, and the confluence of these factors sets the stage for a productive exploration of embodied identity expressions at the site.

But the body has also been a site of colonization for Indigenous peoples, whose bodies were (and still are) judged, policed, abused, and mistreated by settler culture in a multitude of ways. From enforcing Westernized notions of heredity through blood quantum laws (Simpson 2014), to the denigration and destruction of traditional forms of embodied gender and sexuality expressions (Finley 2011; Morgensen 2011), to the physical violence that was regularly wrought against Native women and children in boarding schools and other contexts (Smith 2005), the shaming, regulation, and disempowerment of the Indigenous body has been a longstanding and fundamental strategy of colonialism. As a white researcher approaching questions of Yup'ik embodiment in the archaeological record, I must remain cognizant of this legacy and use care not to project my own assumptions about the Yup'ik body onto the ancestors at Nunalleq. Attention to Yup'ik-authored perspectives on the body, shared with me without shame and with great openness during interviews, will prove a critical resource in this analysis.

I start this chapter by presenting the archaeological evidence for facial adornment at Nunalleq, beginning with labrets and labret representations on human likenesses (e.g. dolls, effigies, and masks). I then explore the ethnographic and oral historical information relating to historic-era Yup'ik labretifry as a point of comparison with the archaeological record. Next, I integrate archaeological and ethnographic evidence for tattooing and nose piercing, creating an overall picture of potential facial adornment practice at Nunalleq. Finally, I turn to Yup'ik conceptions of the body as relayed through interviews with Quinhagak residents and through the anthropological literature, which provide a new dimension to interpretations of the identity meanings behind these adornments.

The Archaeology of Facial Adornment

Several artifact categories from Nunalleq speak to past practices of facial modification and adornment, including labrets, tattoo needles, and beads. Human likenesses in the form of dolls, effigies, and masks are also found at Nunalleq, providing precious information about how such items were displayed on the faces of ancestors. Nunalleq's substantial labret collection is the focus of this analysis, though I also later incorporate the more limited archaeological evidence for tattooing and nose-bead-wearing.

Labrets are facial adornments that are worn through holes pierced through the lower lip or cheeks. In western Alaska, labrets emerged around 1000 BC with the Choris culture, thought to be ancestral to Yup'ik-speaking peoples (Dumond 2009, 130; Mason and Friesen 2018). After about 500 BC, labrets appear consistently in Choris and Norton assemblages, but later Old Bering Sea, Birnirk, Punuk, and Thule peoples did not use labrets (Dumond 2009, 124, 130; Mason and Friesen 2018). In northwest Alaska, labret use dwindled between about AD 800 and 1400, but these ornaments were more consistently used south to the Alaska Peninsula until about AD 1400. After this time (and with the Thule exit from the western Arctic), labretifry practices picked up again across the expanse of the western Bering Sea coast until the time of colonial contact, albeit in different localized forms (Dumond 2009, 125; see also Fitzhugh and Kaplan 1982, Giddings 1967, Nelson 1899).

There are two main portions to a labret: 1) the body, which extends through the lip, and 2) the flange, which rests against the gums or teeth in the interior of the mouth and holds the body in place (Figure 9). Sometimes beads or ornaments are attached to the body. Labrets can be positioned either laterally under the bottom corners of the mouth (Figure 9a), or medially underneath the center of the lip (Figure 9b). Multi-medial placement, wherein several labrets are worn medially, is also possible (Keddie 1981, 60).

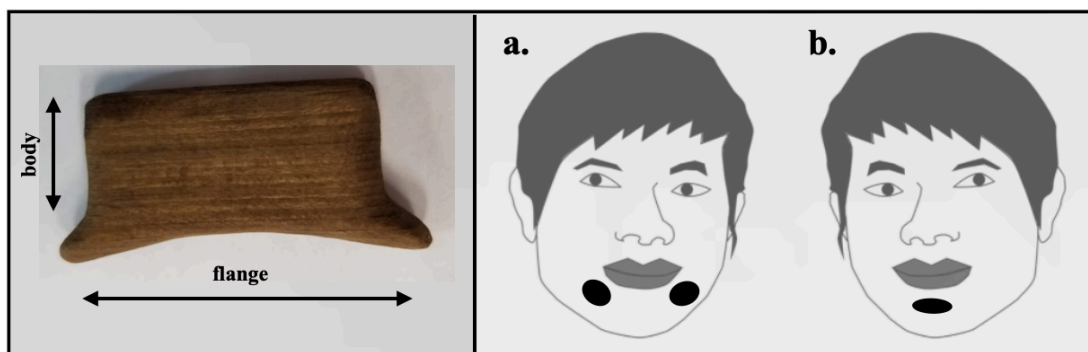


Figure 9. Basic labret terminology and placement. Left: the labret consists of the body, which is pushed through the lip and visible on the face, and the flange, which rests against the gums or cheek on the interior of the mouth. Right: Labrets are often placed either laterally (a.) or medially (b.)

For this analysis, I first located all of the cleaned and cataloged labrets housed at the Nunalleq Culture and Archaeology Center, then took several scale photographs of each specimen and recorded basic identifying information, such as material and decorative features. My research assistant Meta Williams used calipers to measure the length, width, and depth of a sub-set of wooden labrets. Later, I used the photographs, measurements, and identifying data to assess the sample for patterns in labret material, size and shape, sidedness, and decoration. A total of 331 labret specimens are included in this analysis, but it is likely that additional labrets have been excavated or cataloged in the time since my data were collected.

Labret Material

Labrets from Nunalleq are made from four different materials: wood, calcite, serpentine, and ivory (Figure 10). Labrets made of the same material tend to have similar size and design features, so I consider each material category separately here.

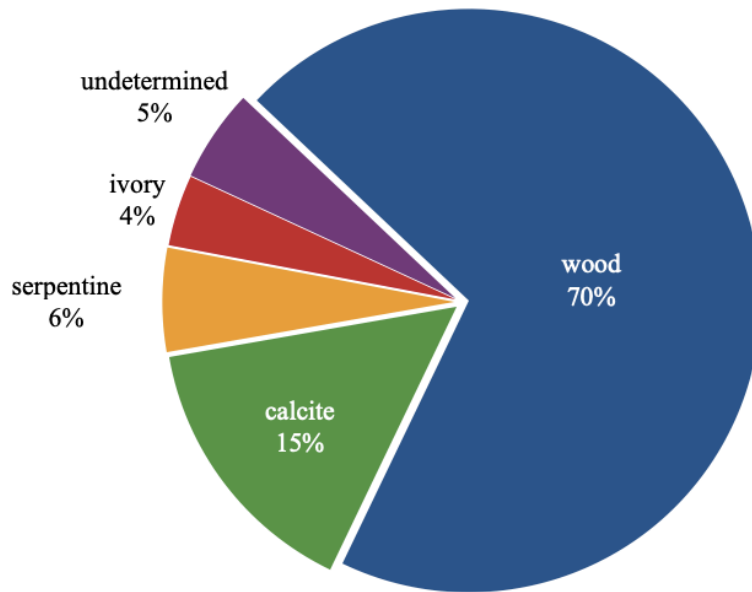


Figure 10. Frequency distribution of Nunalleq labret materials.

Wooden labrets comprise 70% of the sample (n=232) and come in the widest variety of shapes, making these both the most common and most diverse category of labrets at Nunalleq. As such, wooden labrets can be assessed in the greatest detail of all material types (see subsequent sections for this analysis).

Calcite labrets (n=50), made of a white, chalky mineral, make up 15% of the sample. These labrets tend to be small (most are under 2 cm in length) and are found in three shapes: knob, flat rectangle, and flat square (Figure 11). None of the calcite labrets are decorated.

Serpentine labrets (n=19) are made of a distinctive, mottled green and grey stone and comprise 6% of the sample. These labrets tend to be large (longer than 4 cm) and oval in shape, but a few smaller specimens are also present, including one knob-shaped and two flat rectangle-shaped labrets similar to calcite forms (Figure 12). About 37% of

serpentine labrets feature an incised horizontal line decoration down the middle of the body (Figure 12a). The nearest serpentine stone sources to Nunalleq are inland, adjacent to what is currently Denali National Park and Preserve (about 425 miles away), the southern coast of Kotzebue Sound (about 440 miles away), and the inland portions of the Kobuk River valley (about 488 miles away; U.S. Geological Survey 2021), suggesting that this material was traded into the community rather than acquired locally.

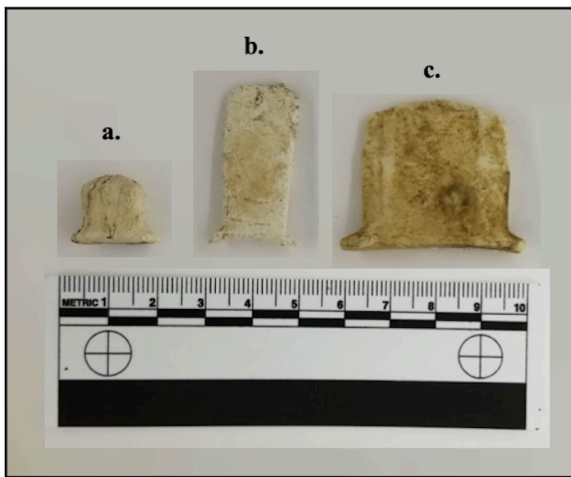


Figure 11. Examples of Nunalleq calcite labrets: a. knob, b. flat rectangle, c. flat square.



Figure 12. Examples of Nunalleq serpentine labrets: a. large oval, b. knob, c. flat rectangle. Note the overlaid horizontal line incised design on the top large oval labret.

Ivory is the least common material for labrets at Nunalleq (n=13, 4%). Ivory labrets come in a variety of forms: medium and oblong ovals over 4 cm long, as well as smaller knob-shaped and nail-shaped varieties (Figure 13). A few ivory labrets feature incised decorations such as carved circles, horizontal lines, and x motifs.

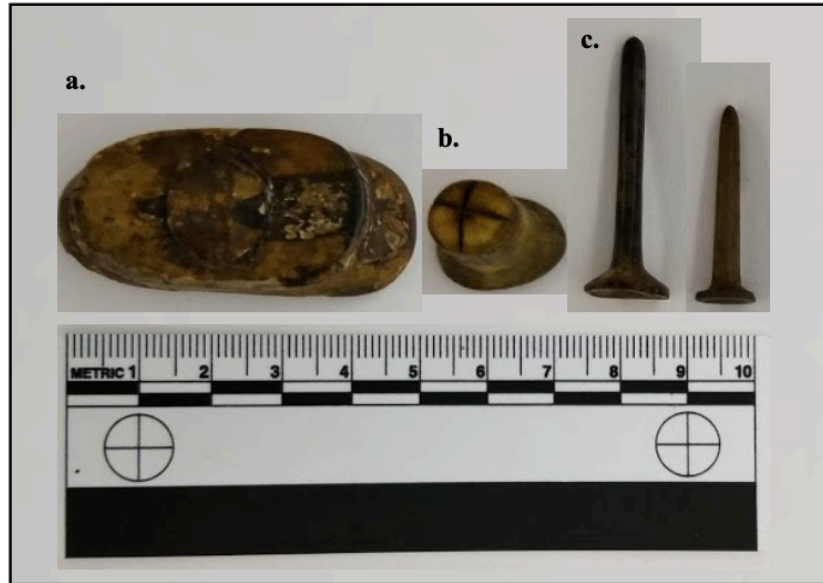


Figure 13. Examples of Nunalleq ivory labrets: a. large oval, b. knob, c. nail-shaped. Note the x-motif incised design on the knob labret.

Wooden Labret Sizes and Shapes

The large size of the wooden labret sample¹ (n=232) allows for a more detailed typological analysis. I used the dimensions of length, width, and depth to sort the wooden labrets into three types based on their body size and shape: 1) relatively round, 2) medium oval, and 3) oblong oval, each of which is further divided into sub-types (Figure 14). The divisions between types and sub-types are somewhat arbitrary, since they are based on dimensional criteria that may or may not have been meaningful to the people who originally created and used these objects (e.g., in my typology, “large” is defined as “greater than 4 cm,” though it could also have been defined elsewhere along the spectrum; see also LaSalle 2013). Even so, such categorization allows for the

¹ Note that Knecht (1995, 641) identified wooden objects “resembl(ing) grooved labrets but...only flanged, or grooved on one end” as labret stretchers, which were “worn temporarily in labret holes when a larger sized labret was desired.” Given this criteria, there are several wooden labrets from Nunalleq that could also be identified as labret stretchers. Here, I decided to identify these as labrets *proper* for two reasons: 1) this is how the objects are currently identified by Nunalleq archaeologists, including Knecht, and 2) some labrets fitting the stretcher criteria have incised designs, suggesting similar identity signification despite potentially having a slightly different use context.

identification of patterns in the sample that prove important for interpretation. This analysis also assumes that a labret’s body — the surface that is outwardly displayed on the face — will be the primary locus of social signification on the object, because this is the part that is visible to the public.

At the type level, the oblong oval category is most common, comprising 58% of the wooden labret sample (Figure 15). At the sub-type level, three categories emerge as most prominent: 1) large/medium labrets in the medium oval type (26%), 2) mid-length, mid-width, mid-depth labrets in the oblong oval type (19%), and 3) mid-length, thin, deep labrets in the oblong oval type (18%). These three styles were the most common types of labrets worn at Nunalleq (Figure 16).

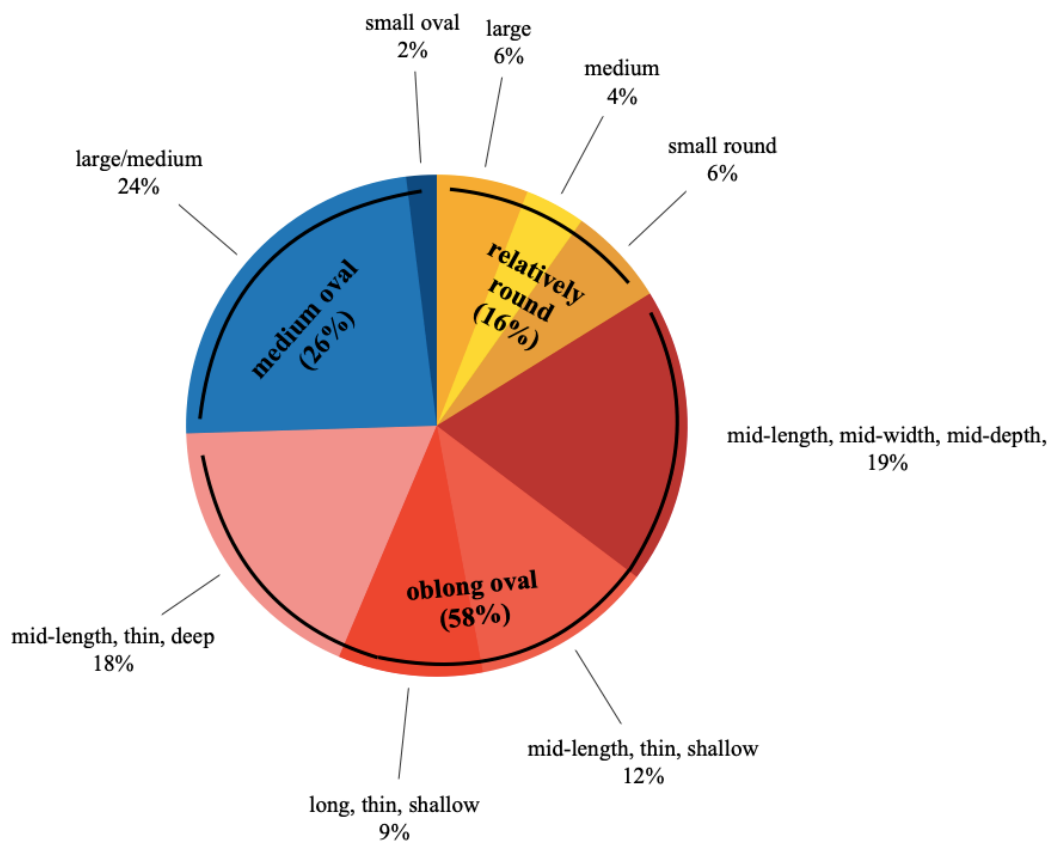


Figure 15. Frequency distribution of identified wooden labrets from Nunalleq, by style and sub-style.

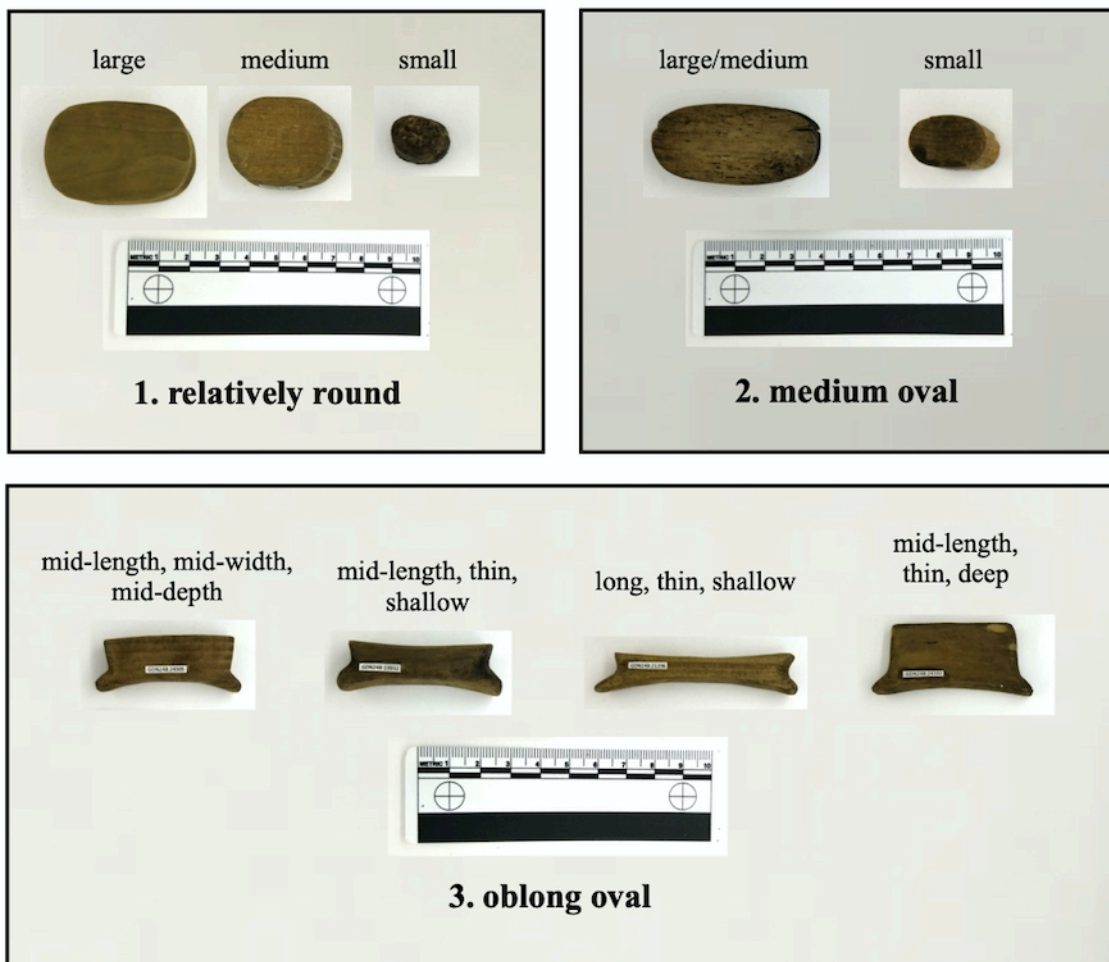


Figure 14. Wooden labret types from Nunalleq:

- 1) **Relatively round**, which are circular or slightly oval in shape (n=33)
 - large*: the body is longer than 4 cm (n=12)
 - medium*: the body is between 2-4 cm in length (n=8)
 - small*: the body is less than 2 cm in length (n=13)
- 2) **Medium oval**, which are oval in shape, and longer than they are wide (n=52)
 - large/medium*: the body is longer than 4 cm, and wider than 2 cm (n=48)
 - small*: the body is under 3 cm long (n=4)
- 3) **Oblong oval**, shaped like elongated ovals or rectangles with rounded edges (n=119)
 - mid-length, mid-width, mid-depth*: greater than 4 cm long, approximately 2 cm wide, and neither deep nor shallow in protrusion from the flange (n=39)
 - mid-length, thin, shallow*: between 4-5 cm long, under 2 cm wide, with only a shallow protrusion from the flange (n=24)
 - long, thin, shallow*: 5-7 cm in length, and under 2 cm wide, with only a shallow protrusion from the flange; overall thin and long (n=19)
 - mid-length, thin, deep*: 4-5 cm long and under 2 cm in width, but protrude significantly from the flange (n=3)



Figure 16. The three most common wooden labret styles in the sample from Nunalleq: a) large/medium labrets in the medium oval type; b) mid-length, mid-width, mid-depth labrets in the oblong oval type; c) mid-length, thin, deep labrets in the oblong oval type.

Wooden Labret Sidedness

Various elements of a wooden labret's shape indicate whether it was likely worn in medial or lateral position (Figure 9). Symmetrical, evenly-shaped designs of uniform thickness and with consistently curved flanges suggest medial placement below the center of the lip (Figure 17a). Alternatively, if the distal surface of the labret has an asymmetrical design, we expect it to be part of a pair that was worn laterally (Figure 17b). The depth of the labret body can also indicate sidedness, with uneven depth suggesting lateral placement on the curved surface of a cheek (Figure 17c). Flange size and shape can also help determine where on the face the labret was meant to rest, with uneven length and curvature suggesting lateral orientation (Figure 17d).

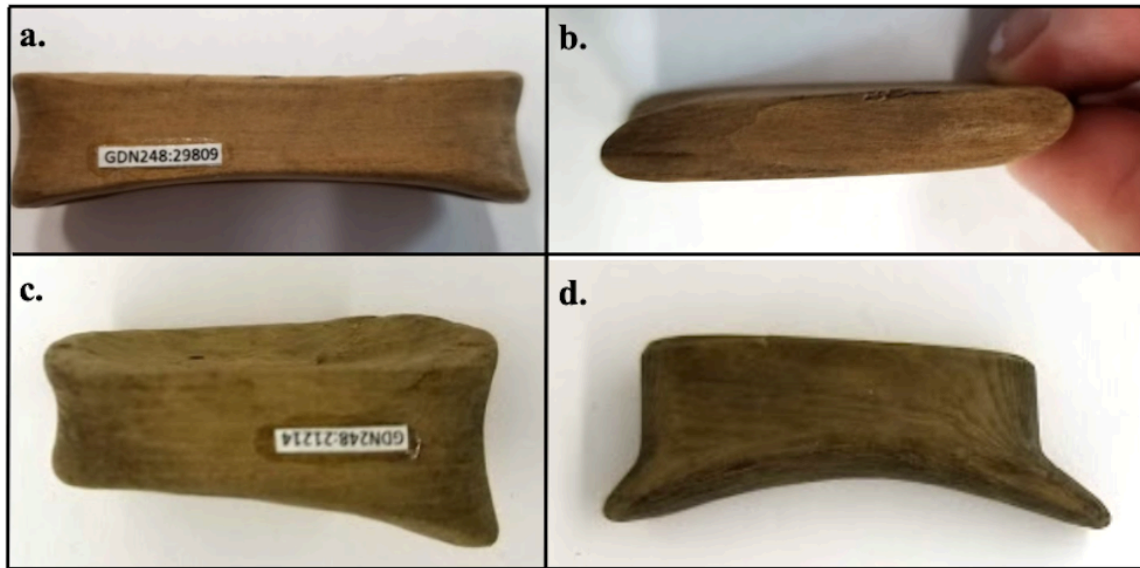


Figure 17. Demonstrating sidedness on Nunalleq wooden labrets. a) No sidedness, as evidenced by the equal concavity on both sides of the object. This labret was likely worn medially. b) The two sides of the labret curve in opposite directions, an asymmetrical design that favors lateral placement. c) One side of the body is deeper than the other, suggesting lateral placement on a slanting part of the face. d) The flanges are curved to different degrees, and one flange is longer than the other. This labret was likely worn laterally.

Table 1 presents the sidedness data for wooden labrets. In total, about 49% of the wooden labret sample is sided. Within each type, there are both sided and non-sided specimens, indicating that no type was worn exclusively in a lateral or medial position.² Of the types, medium oval has the least number of sided specimens, suggesting that the majority of these labrets were worn medially. About 45% of relatively round labrets are sided, suggesting that these were worn both in medial and lateral placement. The oblong oval category has the most robust evidence for sidedness — about 55% — but the numbers vary significantly between sub-types. In particular, the “mid-length, thin, shallow” (79%) and “mid-length, thin, deep” (68%) sub-types seem to have been designed predominantly for lateral placement.

² Note, however, that non-sided labrets might also be successfully worn in lateral position, but it is less likely that sided labrets could be comfortably worn in medial position. As such, it is possible that more labrets were worn laterally than medially, despite the sidedness data.

STYLE		TOTAL	# SIDED	% SIDED
relatively round		20	9	45%
medium oval		48	17	35%
oblong oval	mid-length, mid-width, mid-depth	39	11	28%
	mid-length, thin, shallow	24	19	79%
	long, thin, shallow	19	10	53%
	mid-length, thin, deep	37	25	68%

Table 1. Sidedness data for wooden labrets from Nunalleq.

Decorations on Wooden Labrets

About 16% of wooden labrets are decorated with incised designs (n=37). The designs can be broken into nine categories: 1) pinniped face, 2) x-motif, 3) horizontal line, 4) vertical lines, 5) diagonal lines, 6) chevron, 7) diagonal notches, 8) hashmarks, and 9) track lines (Figure 18). These design categories vary significantly in frequency on wooden labrets, with pinniped face as the most common (Figure 19). Several designs (chevron, diagonal notch, hashmarks, track lines) are only represented by one specimen. Note that pinniped face, x-motif, diagonal lines, and chevron designs are also found on other artifacts at Nunalleq (see Chapter VIII).



Figure 18. Incised decorations on wooden labrets from Nunalleq: 1) pinniped face (n=13); 2) x motif (n=3); 3) horizontal lines (n=11); 4) vertical lines (n=1); 5) diagonal lines (n=3); 6) chevron (n=1); 7) diagonal notches (n=1); 8) hashmarks (n=1); 9) track lines (n=1).

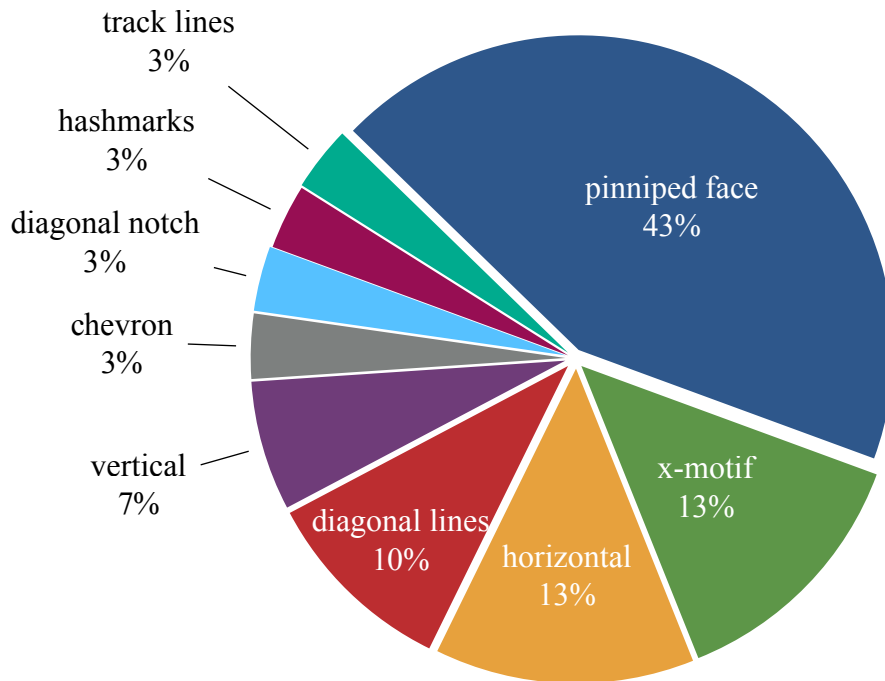


Figure 19. Frequency distribution of incised decorations on Nunalleq wooden labrets.

Human Likenesses from Nunalleq

We are fortunate that the ancestors from Nunalleq depicted human faces on dolls (identified at Nunalleq as small wooden figurines), effigies, masks, maskettes, and other objects, providing archaeologists with invaluable information about the types of facial ornamentation worn in the old village. Figure 20 depicts some of the human likenesses from Nunalleq that wear labrets. Four patterns of facial modification are visible: 1) large round or oval labrets worn laterally; 2) small round labrets worn laterally; 3) small round labrets worn in triple medial placement; and 4) oblong labrets worn medially.



Figure 20. Dolls and human likenesses from Nunalleq displaying different labret styles.

Labret-Wearing in Yup'ik Context

Interpreting the patterns of facial adornment evident at Nunalleq requires an understanding of how Yup'ik people used labrets, tattoos, and nose beads, and how these forms of bodily modification worked as symbols and signifiers in the larger social landscape. Unfortunately, because facial adornments had been phased out of the majority of Yup'ik villages by the late 19th century, few Quinhagak elders had actually seen labrets, tattoos, and nose beads used in their youth (labrets were never seen, while tattoo and nose beads were occasionally seen). Compared to other topics explored in my community interviews, knowledge about these forms of facial adornment was minimal. As such, ethnographic observations collected from before the time of major settler contact prove an important source of information, though they must be considered critically, particularly given the propensity of early ethnographers to interpret facial modifications through a sensationalist Western lens. Comparisons of the Nunalleq data to ethnographically documented forms proves useful in understanding some of the potential social signification of these forms, especially labrets.

Regional Gender Distinctions in Labrets

While gender attribution in archaeology is complex and problematic (see Chapter VII for a longer discussion), there is ample ethnographic evidence to suggest that gender was a central factor in labret-wearing practices of coastal western Alaska in both the historic past (e.g., the accounts of Nelson and Jacobsen, and later Curtis and Lantis) and in more contemporary times (e.g., Fienup-Riordan). Gendered labretifry patterns varied considerably by region, so labrets were not only signifiers of a person's gender, but also of their homeland (Dumond 2009; Keddie 1981). Looking at the different regional gendered labret styles from various historic-era western Alaskan Indigenous communities can help us better understand the patterns apparent at Nunalleq.

Table 2 shows ethnographic information on gendered labret styles by region, which we can compare to the data from Nunalleq. Some trends are made apparent from

Region	Location	Date	Observer	Observations about Labrets
Northwest Alaska	Diomedede Island	1648	Deshnev	Some Bering Strait peoples wore labrets of "artificial teeth thrust through their under lips" (Giddings 1967: 46-47)
	Outside Shishmaref	1816	Otto von Kotzebue	Saw two skin boats piloted by men wearing laterally-placed ivory labrets (Giddings 1967: 27)
	Kowak and Noatak	late 1870s	Edward Nelson	Reported people wearing large labrets along the Kowak and Noatak rivers; these measured 1-2 inches in diameter and were made of various materials (Nelson 1899: 49)
	North of the Yukon	late 1870s	Edward Nelson	The "hat-shaped" form of labret was most common here (Nelson 1899: 46)
Yukon-Kuskokwim Delta	Point Hope/ Point Barrow	unknown	unknown	Historical use of large white disc-shaped labrets made of quartz (Fitzhugh and Kaplan 1982:147)
	Area between Yukon and Kuskokwim Rivers	late 1870s	Edward Nelson	"The labrets of the women are of a curious sickle shape, but vary in detail of arrangement...Most of them are made with holes in the lower border for the attachment of short strings of beads. The women who wore labrets has the under lip pierced with one or two holes just over the middle of the chin. The use of these labrets, in the country visited by me, seemed to be limited to the district lying between Yukon and Kuskokwim rivers and Nunivak Island. Elsewhere I did not see labrets of any kind used by women" (Nelson 1899: 45)
	Askimuk (likely close to Scammon Bay), Kushunuk (likely close to the Kuskokwim River mouth)	late 1870s	Edward Nelson	"The common form was a small, flattened, sickle-shape piece of ivory, with a broad, flattened base for resting against the teeth, and the outer tip brought down to a thin, flat point. Of this style there are some variations, the most common of which is to have the two ordinary sickle-shaped labrets joined by a crosspiece of ivory cut from the same piece and uniting the two sickle-shape parts just on the outside of the lip. Another form was to join the inner ends of the labrets so that the portion resting against the teeth united the bases of the two sickle-shape points" (Nelson 1899: 45)
	Between the Yukon and Kuskokwim Rivers	late 1870s	Edward Nelson	"The labrets worn by men in the district between the Yukon and the Kuskokwim are rather small and are commonly formed of a long, thin, curved ivory flange for resting against the teeth, with a hat-shape projection for extension through the lip to the surface. The hat shape projection is provided with a central hole, through which extends a wooden pin. This pin reaches beyond the outer border of the ivory and has fitted upon it some kind of bead, a round piece of stone, or, as in one specimen from Nunivak Island, a truncated cone of lead" (Nelson 1899: 46)
	North shore of the Kuskokwim, near Bethel	1882	Jacobsen	"young girls make three holes into the lower lip — in the middle and to the right and left. Into these small holes are placed nails of bone so that the nail head touches the gums. The bone nails that extend outward from the right and left holes are usually curved, whereas the center plug is straight. The labrets extend out a few millimeters; one or more strings of beads, reaching to the chin, are hung thereon" (in Fienup-Riordan 2005: 186)
	Pingokpagemut (Kipnuk)	1882	Jacobsen	"The women here are decorated with beads very much from their hair around the neck, and the lower lip has three holes through which beads are hanging" (in Fienup-Riordan 2005: 18)

Table 2. Ethnographic observations about historic-era labret use in western Alaska.

the ethnographic data. In historic-era northwestern Alaskan communities, only men were observed wearing labrets, and usually only laterally (Fitzhugh and Kaplan 1982; Giddings 1967; Keddie 1981; Nelson 1899; Figure 21a, b). The literature suggests that such a pattern of male-only lateral labret wear is distinctly northern (Keddie 1981, 70; Nelson 1899, 45). Keddie (1981, 69) identified the boundary of this pattern of large lateral labrets for men as Unaligmiut, which is also the dividing line between Yup'ik and Iñupiaq speakers (Keddie 1981, 69).



Figure 21. Ethnographic photographs demonstrating 19th and 20th century labret use in western Alaska. From Nelson (1899): a. Men wearing lateral labrets at Icy Cape, near Wainwright, and b. Men with lateral labrets at Kotzebue Sound. From Edward Curtis's 1928-1929 photographs from Nunivak Island: c., d. Two views of Jukuk (Lena Wesley) wearing sickle-shaped labrets in medial orientation; e. Kenowun wearing medial sickle-shaped labrets with beads attached, and nose beads; and f. Dahchihtok (Margaret Roger) wearing double-sickle shaped labrets in medial orientation, also with nose beads.

On the Yukon-Kuskokwim Delta, patterns of labret wear differ from more northerly groups. In historic times, women of this region were observed wearing labrets in a distinctive sickle-shaped form, called *caqiqsiik* in Yup'ik³ (Figure 21c, d). The area closest to Quinhagak with ethnographic and oral historical information about labrets is the region surrounding the mouth of the Kuskokwim River (contemporary Eek, Kongiginak, and Kwigillingok; historically, the villages of Kushunuk, Konigunugumut, and Kulwoguwigumut), about 40 miles northwest of Quinhagak as the crow flies. Here, we know that Nelson (1899) witnessed women wearing small sickle-shaped labrets, some in double-sickle shape, in the 1870s (Fienup-Riordan 2005), and that Jacobsen saw young girls wearing sickle-shaped labrets in a triple medial pattern in the 1880s. In the Kipnuk area, Jacobsen also noted women's use of beaded labrets hanging in the triple medial pattern under the lip (e.g., Figure 21e). This is also the area where Quinhagak elder Jimmy Anaver grew up, and he remembers his grandmother, likely a girl in the late 1800s, having two medial labret holes. A multi-medial pattern, often housing sickle-shaped *caqiqsiik* labrets, seems to have been the norm in the Kuskokwim region at contact.

Historically, men of the Yukon-Kuskokwim Delta wore a different style of labret, called *cungarpiit wall' Mengkuut* in Yup'ik (Fienup-Riordan 2005, 183). These would have been worn laterally, "in the right and left corners of a man's lower lip" (Fienup-Riordan 2005, 183). Nelson (1899, 46) described these as "rather small and...commonly formed of a long, thin, curved ivory flange for resting against the teeth, with a hat-shape projection for extension through the lip to the surface." The body of these labrets included a hole for the insertion of a wooden pin that held a bead or a piece of stone. Another form of men's labret that Nelson collected along the lower Yukon was a "large, flat labret...having a rectangular outline with the sides slightly rounded" (Nelson 1899, 46). It seems the frequency with which men wore labrets in the Yukon-Kuskokwim region was different from more northerly communities, for as Nelson (1899, 45)

³ Jacobsen also recorded the name "Sakeksek" for the sickle-shaped side pieces, and "Okkalekak" for the middle plug (Fienup-Riordan 2005, 304).

remarked, “in the district southward from the Yukon mouth labrets were not universally worn among the men,” and “in every village some of the men and many women were found without them.”

How does the Nunalleq evidence compare to these observations? First, it is curious that no sickle-shaped labrets, the type traditionally associated with women across the Yukon-Kuskokwim Delta, have thus far been discovered at Nunalleq. In fact, *none* of the Nunalleq labrets (with the possible exception of one bent calcite flat-rectangle specimen, cat no 25436) mirror the historically documented women’s forms from elsewhere on the Yukon-Kuskokwim Delta. This would lead us to believe that Nunalleq women did not wear labrets, or the forms that they wore were markedly different from those of their neighbors to the north on the Delta, or, for whatever reason, we just haven’t identified these forms at Nunalleq yet.⁴

What we do see at Nunalleq are a few representations of human faces featuring the triple medial labret design (Figure 20), confirming that site occupants either practiced or witnessed this form of labretifry, which we know was associated with women and existed locally into the late 19th century. Here, it is important to note a convention of Yup’ik gender iconography and design: frowning faces typically depict females, while smiling faces are meant to depict men⁵ (Fienup-Riordan 2005; Fitzhugh and Kaplan 1982, 63; John Smith personal communication). One of the more remarkable finds at the end of the 2017 Nunalleq field season was a set of small baleen dolls, one with male anatomy and

⁴ Though it is possible that sickle-shaped forms have been found at the site but have not been cataloged as labrets, I find this unlikely — the archaeologists who have been working on the site for over a decade are extremely well-versed in the material ethnographic record of the Yukon-Kuskokwim Delta. Even so, more research is needed to confirm that no sickle-shaped forms exist in the assemblage.

⁵ In some cases, however, such gender representations are not so easily assigned. For example, in considering a wooden container from the Jacobsen collection with a human face carved on the lid, Yup’ik elders Wassilie Berlin (Kasigluk) and Annie Blue (Togiak) could not agree on a gender affiliation: the smiling mouth with lateral labrets seemed to indicate a male, while facial adornments like nose beads and a medial tattoo suggest femininity (Fienup-Riordan 2005, 123-124). In another example, Fitzhugh and Kaplan (1982, 82) describe a float plug with a human face displaying a “bisexual visage with female chin tattoos, male labret incisions, and a tattoo or mustache on its upper lip.” Often, individuals displaying such dual gender adornment markers are interpreted as shamans, “many of whom acquired special powers from their social and behavioral peculiarities” (Fitzhugh and Kaplan 1982, 82; see also Moss 1999, 44-56). Note, too, how the type and position of facial adornments have been used as gender indicators in all of these examples.

smiling, the other with female anatomy and frowning, suggesting that this visual convention existed at the time Nunalleq was occupied (Figure 22).



Figure 22. A pair of small baleen figurines (about 6-7 cm tall) found at Nunalleq. On the left, the figure with male anatomy displays a smile; on the right, the figure with female anatomy wears a frown. Image courtesy of nunalleq.wordpress.com.

Can we determine the gender iconography of the two dolls from Nunalleq wearing multi-medial labrets? One such doll is smiling — ostensibly a male face — but with a prominent ridge carved above its eyes. Could this be a hood, a hat, or the etched eyebrows that Nelson (1899, 344) claimed were often associated with female representations? The other doll with multi-medial labrets wears a neutral expression. It is difficult to tell if these dolls are meant to depict people of a certain gender. It is also

difficult to determine an exact correlate for the tiny ivory pins that these dolls wear as labrets; they could represent anything from the small “relatively round” or “medium oval” sub-types (Figure 14), or the calcite or ivory labrets (Figures 11 and 13).

Turning to the ethnographic evidence for male styles, we would expect men on the Yukon-Kuskokwim Delta to wear labrets that were “rather small” with “hat-shaped projections)” (Nelson 1899, 46). The small, laterally-placed labrets found on four of Nunalleq’s dolls seem to mimic this style (Figure 20). Three of these dolls are smiling, suggesting male attribution, while one wears a neutral expression. It is possible that some of Nunalleq’s men wore a labret style similar to other neighbors around the Kuskokwim River mouth. Alternatively, these dolls may depict young men in the process of stretching their labret holes to accommodate bigger ornaments.

The majority of labrets found at Nunalleq (large/medium ovals, oblong ovals; Figure 15) are most similar to those worn by the dolls with large labrets in lateral placement (Figure 20). The labrets depicted on these dolls are either large and oval or large and long, and seem to correlate well with the “large/medium - medium oval” sub-style, and any of the “oblong oval” sub-styles. Although the “medium oval” style has only some evidence for sidedness (and thus lateral placement), recall that the “oblong oval” category, and particularly the “mid-length, thin, shallow” and “mid-length, thin, deep” sub-styles, were most likely worn laterally (Table 1). In this case, the archaeology dovetails well with the human representations from the site, suggesting that faces wearing large, laterally placed labrets were a common sight in the old village.

Exactly who wore this style is less easy to determine. The dolls wearing these labrets have their mouths obscured by the large objects, confounding any attempts to assign gender based on smile or frown. Ethnographic evidence suggests, however, that men were most often wearing labrets in lateral placement. Ethnographic records demonstrate that such large lateral labrets were *not* a hallmark of Kuskokwim-area labretify; rather, this was considered a more northern pattern. Is it possible that the people wearing large lateral labrets at Nunalleq, of which there seem to have been many, were men affiliated with more northerly groups?

The single medial labret pattern, demonstrated on two human likenesses from the site (Figure 20), is difficult to interpret. The labrets worn on these faces are most similar to the oblong oval category, of which the “mid-length, mid-width, mid-depth” and “long, thin, shallow” sub-styles had significant numbers that were not sided, suggesting medial placement. These may be the types of labrets depicted on these faces. Expressions on both faces are solemn, though only one bears a distinctive frown, suggesting female association. The ethnographic record provides many possibilities for who wore long, medial labrets in western Alaska. Perhaps these are similar to the “large, flat labret” with “a rectangular outline with the sides slightly rounded” that Nelson (1899, 46) observed a man wearing on the lower Yukon. Other possibilities are that they resemble the nearly-touching laterally-worn bars worn by some Nunivak men (Curtis 1930, 11-12), or the “single large slit” that Keddie (1981, 67) noted for Gulf of Alaska males. Lantis (1946, 226) observed that some Nunivak men whose chins were tattooed “just like a woman’s” would wear “one median labret” as part of this dual-gender adornment. That the frowning face is painted with ochre suggests that this may be a representation of a powerful person or spirit, and a dual-gender identity would align with this interpretation. It is equally possible that the long holes depicted on these Nunalleq faces reference the absence of a labret. Interpretation here remains ambiguous.

Overall, the combination of ethnographic and archaeological data suggest that both women and men at Nunalleq were adorning themselves differently from their neighbors on the Yukon-Kuskokwim Delta (or at least, how these neighbors adorned themselves in historic times). The sickle-shaped women’s labrets common on the Delta in the 19th and early 20th centuries are not found at Nunalleq, though their multi-medial placement is evident on Nunalleq facial representations. If women at Nunalleq were wearing labrets, it was likely in multi-medial form, though it is equally possible that they did not wear labrets at all. For Nunalleq’s men, an abundance of evidence suggests lateral placement for labrets. In small form, these would have mirrored patterns common to the area, but in large form (i.e., the majority of labrets from Nunalleq), these suggest a more northerly pattern.

Age

In addition to differences related to gender and regional affiliation, labret use would have differed across a person's lifespan, and may have been a marker of age, accomplishment, or maturity. It was typical for children in western Alaskan labret-wearing communities to first receive labrets around the time of puberty or adolescence (Fitzhugh and Kaplan 1982, 146; Lantis 1946; Nelson 1899). On Nunivak, the process of piercing usually involved making an incision in a child's lip using something sharp, then immediately inserting caribou hairs into the hole to keep it open; later, a small piece of ivory replaced the hairs (Curtis 1930, 11; Lantis 1946, 224-226). Larger plugs would be inserted gradually over time to grow the hole to its desired size (Curtis 1930, 11, Nelson 1899, 48). Those in the community wearing large labrets were likely to be older, their lip holes a sign of bodily attention and care over time.

Several labrets from Nunalleq speak to this process of gradual hole stretching. Describing the process of incision, Nelson (1899, 48) explained that "a long, thin, nail-like plug of ivory, about an inch in length, having a slight enlargement at the inner end, is thrust through the opening and left for some time," a description which closely matches the ivory nail-shaped labrets found at the site (n=29, Figure 13). Nelson (1899, 48) also noted that a series of small "training" labrets, numbering about 6-10 per person, would thereafter be used by boys to grow their labret holes over time. Years later, when the stretching process was completed, young men would pierce these training labrets and string them on a sinew cord to give to their wives, who would hang the memorabilia on their belts or needle cases (Nelson 1899, 48). Nelson's images of such training labrets (Figure 23) are strikingly similar to the calcite labrets from Nunalleq, particularly the flat rectangle type (Figure 11). The majority of calcite labrets in the sample (n=42) are either "flat rectangle" or "flat square" types, notable for their thin or narrow shapes. If these are training labrets, perhaps they were for the more elongated hole types that would hold the oblong/long oval labrets? It seems possible that training labret types are not so intentionally shaped; rather, the straight and flat nature of the calcite specimens might

simply mirror the cut from a scalpel, or be well-suited to more generalized hole-stretching.

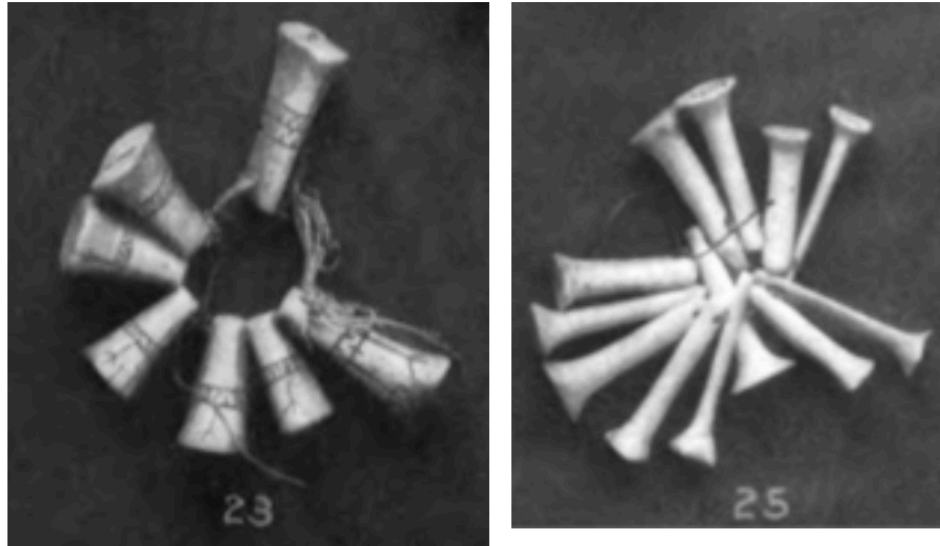


Figure 23. Examples of training labrets documented by Nelson (1899). Note the similarities to the nail-shaped and flat rectangle labret types from Nunalleq.

Labret style might continue to evolve across a person's lifetime, even after training labrets had helped the wearer achieve their desired hole size. Fitzhugh and Kaplan (1982, 145) explained that as Iñupiat and Yup'ik men got older, they would “wear bigger and fancier labrets, stretching (their) cheek holes to accommodate the larger pieces” (see also Keddie 1981, 67). At Nunalleq, we see human likenesses wearing both large and small lateral labrets (Figure 20). Such human likenesses might depict men at different life stages with accordingly-sized labret holes.⁶ Alternatively, different groups of adult men at Nunalleq may have worn different styles of lateral labrets. Functional limitations would seem to dictate that once a labret hole had been stretched to accommodate a labret of ~4 cm in diameter, it would no longer hold a smaller plug, as the small plug would fall out of the stretched hole. Thus, in either case, the people portrayed

⁶ Thank you to Madonna Moss for suggesting this interpretation.

wearing large lateral labrets are likely different people from those wearing the small laterals.

Status

Social status is often correlated with labret-wearing practices in Alaska, for, in the words of the late Stephan Jones of Quinhagak, labrets were “like a cufflink for your face.”⁷ Looking broadly at the ethnographic record, we know that labrets were often used to signify wealth or social status (Giddings 1967, 190; Keddie 1981, 77). For example, Nelson (1899, 329) observed that warriors often took the labrets of their dead enemies to wear themselves, presumably as a sign of pride in their victory. In other cases, such as the upturned boat-shaped labrets found on Cape Vancouver, labrets signified that the wearer was a boat owner, a sign of wealth (Fienup-Riordan 2005, 183). Many of Nunalleq’s labrets are striking in their size, material, and decoration, such as the abundance of large serpentine labrets (Figure 12), the numerous decorated specimens (Figure 18), and the visibly distinctive large wooden sub-types (Figure 14). Isotopic evidence from non-mortuary human hair at Nunalleq suggests that different individuals living in the village had remarkably different diets at similar times of the year, with some consistently eating low trophic-level foods, and others regularly accessing high trophic-level foods (Britton et al. 2018). Although this may be explained by differences in seasonal mobility patterns, it is also possible that food access was a function of social status in the village. Labretifry adds another dimension to considerations of social status at Nunalleq (Knecht and Jones 2020, 39).

Perhaps more-so than all others, Nunalleq’s serpentine labrets portray a sense of visible grandiosity (Figure 12). Recall that serpentine was rare and would have been imported from outside the region. In his records, Nelson (1899, 48) mentioned that the “finest” labret he found was made of nephrite from Kotzebue Sound, pointing to the specialty inherent in precious stones. Most of the Nunalleq serpentine labrets are substantial in size, and given the stone material, they would have been heavy and clumsy

⁷ From the Nunalleq blog: <https://nunalleq.wordpress.com/2015/07/14/artefact-of-the-day-107/>.

to wear — not especially utilitarian. Nelson (1899, 49) explained that the large stone labrets he observed men wearing during his travels were sufficiently heavy to drag down the wearer's lips "so that the lower teeth and gums are exposed," and that such labrets would need to be removed from the wearer's mouth when traveling in the cold to prevent freezing. The labrets were always replaced upon approaching a village so "that the wearer might present a proper appearance before the people," suggesting their significance in marking identity and status through this form of adornment (Nelson 1899, 50). A number of the Nunalleq serpentine labrets are decorated with a horizontal line motif (Figure 5), further elaborating their style. Whatever their meaning, decorated serpentine labrets certainly would have made a statement about the wearer, and would have been a rather extraordinary sight compared to the more common wooden and calcite types.

A few of the Nunalleq serpentine labrets are in the "knob" and "flat rectangle" shapes predominantly associated with calcite training labrets (Figure 11, Figure 12). If wearing serpentine was a status marker, these specimens would seem to indicate a young person of considerable standing. This suggests that, at Nunalleq, a young person's status may have had more to do with their family or clan affiliation rather than with their life achievements; that is, whatever serpentine signaled in terms of status was ascribed.

The frequency with which labrets were worn at Nunalleq could also indicate their status signification. If men south of the Yukon did not universally wear labrets (Nelson 1899, 45), and if we take labrets to mark social status, then we might infer that communities with selective labret use were more socially stratified. While it is impossible to know how many of Nunalleq's residents were wearing labrets regularly, we do know that not all human representations from the site wear labrets, implying that not everyone in the village practiced consistent labretify. Ethnographic evidence suggests that age was a factor in the frequency of labret use, and while it is possible that those portrayed without labrets are young people, I find it more likely that only some adults at Nunalleq were wearing labrets. If status was being communicated at Nunalleq through labrets, it was done with relative complexity, given the array of styles and design motifs found at the site.

Symbolism and Affiliation

In addition to these other forms of identity signification, the form and design of labrets likely also referenced Yup'ik symbology and belief systems. For example, walruses were an immediate association for John Fox (2017) when viewing the Nunalleq labrets during our object-centered interview (Figure 24). Observing the labrets on the tray, Fox (2017) was inspired to tell a story that his late father had told to him many times:

Men used to wear them over here, under the lips... Those [labrets] represent the extraordinary people of the walrus people, that's what it is... [Labrets] represent the walrus people... I'm going to tell you something about that. There was a guy who drifted out in the ocean, on a kayak... He was out in the ocean for a long time, seeing these different kind of animals, out hunting. That person was very young. And one of those days while he was paddling, he noticed people, men on the ice. Men walking around by their kayaks, kayaks with grass-braided wind-breakers... and men would be walking around, around their kayaks, here and there. That person was looking at them with his own eyes. And then that person said, probably they're from Quinhagak area. Then he decided to go to them because he hadn't seen any person out there on the ocean. He was glad that he came upon those people, seeing kayaks on the ice with grass-braided wind-breakers, men walking around by their kayaks, here and there. Paddling toward them, and getting closer I guess. Then he turned away for a second, a minute or two. Instead of looking at them, turned away from them for a minute or two. Looked back at those people that he saw with kayaks and grass-braided wind-breakers, and there they were: walrus. Going back into the water backwards. Those were the spirits of the walrus people. And then my late father used to say: if he didn't look back, or turn back for a couple of minutes or so... he would have never reached land. He would have become one of them.

Following this, Fox recalled the origin story for labrets, which he relayed as follows:

Those guys that were out in the ocean, they came upon people. And those people, had [labrets] at the end of their lips. And then they were eating like salmonberries upon some ground, and then that person told them not to eat what they're eating. And then they go on a low site, and then they were starting to eat blackberries, but they again, they told them not to eat what they're eating. Because the ones that they were eating were out on

the bottom of the ocean. And those two guys noticed those other men had labrets at the end of their lips. And after that incident when they went inland on the land, they started making holes at the end of their lips to represent those people that they saw. So from then on these things start showing up. And they were called, all of them, [labrets].



Figure 24. A tray of Nunalleq labrets shown to interview participants during 2017 object-centered interviews.

Fox (2017) continued, “so up to here in Quinhagak area, they start. Even these faces, they have holes on the side, and we recognize them right away, because we know what they are, and how they became to be.” When asked about whether Quinhagak residents of the past would have worn labrets, Fox replied, “Not Quinhagak, way up north in Nelson Island area.” Considering the Nunalleq labrets, Fox was not surprised to see what he deemed as more northerly objects in the village context; after all, he knew that people of the past were avid travelers, and would go up to the Nelson Island area for celebrations and dances.

An allusion to walrus tusks is inherent in laterally-placed labrets (Fitzhugh and Kaplan 1982, 146). Given this association, it is intriguing that the majority of Nunalleq's wooden decorated labrets feature a pinniped face (Figure 18, Figure 19). The pinniped design is found predominantly on labrets of large diameter and medium-deep size, the types portrayed on the dolls demonstrating lateral forms of labretifry, suggesting that the pinniped face labrets may have been meant to be worn in the position of tusks, creating a dual form of symbolism. Fox (2017) referenced human-animal transformation in his story, and Keddie (1981, 60) suggested that an important factor in Point Barrow labretifry was acquiring "a state of appeasement between man and walrus" (see also Murdoch 1892, 145), a spiritual goal that would also have been relevant to Yup'ik pinniped hunters. Themes of transformation may have been symbolically potent along multiple dimensions. In addition to ingesting the bodies of walrus and other pinnipeds as food,⁸ successful walrus hunters from Nunalleq may have "gain(ed) the privilege of wearing lateral labrets," simultaneously allowing them to be recognized by other people as skilled hunters, and by walrus themselves as kin or related beings (Madonna Moss, 2021, personal communication).

The pinniped face design is also found on other artifact types at Nunalleq, including uluaq handles, bentwood vessels, spoons, float plugs, and masks. Archaeologists currently interpret this motif as an ownership mark, or a symbol of affiliation for a specific social group or family (see Chapter VIII for a detailed discussion). If Keddie (1981, 76) is correct in suggesting that "clan or phratry" may be determinable from "zoomorphic labrets or incised drawings," is it possible that the walrus people were a family at Nunalleq, adorning their labrets with sea mammal faces to mark this identity? Given the regional patterning for large lateral labrets and John Fox's (2017) assertion that labrets were associated with "way up north in Nelson Island area," is it possible that this family or group had northern origins?

Walrus may not be the only animal signaled in Nunalleq's labrets. One object in

⁸ Note, however, that walrus account for only about 1% of Nunalleq faunal remains, though Masson-MacLean et al. (2019, 5) suggest that this may be due to butchery happening at the kill site rather than in the village.

particular, the “Raven-man effigy” (Figure 20, upper right corner) suggests that birds may also be referenced in labret symbolism. Nunalleq archaeologists described this object as an “ivory pendant depicting a man-bird....He’s wearing large labrets, (and) labrets like these are thought to resemble bird beaks when worn (sic.)...in this piece you can really see the likeness to birds in the iconography.”⁹ Knecht (1995, 622) discussed the potency of bird-human relationships for Alutiiq people, which has been similarly documented for Yupiit (Fienup-Riordan 1990) and Iñupiaq (Sloan 2014). Several oblong-shaped lateral labrets were found at the Karluk site, which would have “forced the mouth into a v-shape not unlike that of a bird” (Knecht 1995, 623; see also Knecht and Davis 2008, 75). Based on such beak-like adornments, Knecht (1995, 623) suggested that “labrets may have been part of a complex of ritual and material culture that symbolized the relationships between humans and birds.” Knecht (1995, 623-624, Table 9:1) also noted numerous similarities in Yup’ik words for birds and labrets, strengthening these associations. In Yup’ik cosmology, sea mammal hunting and human-bird relationships are closely related; through ritual, ceremony, and dress, hunters sought to imitate the stealth and good eyesight of diving sea birds when pursuing pinnipeds (Fienup-Riordan 1990; Sloan 2014). The abundant oblong oval shaped labrets found at Nunalleq, which are the type most frequently decorated with the pinniped face design, might reference this bird-pinniped-human relationality (and see Chapter VIII for more bird symbolism at Nunalleq).

Other Facial Adornments: Tattoos and Nose Beads

While the data for women’s labret use at Nunalleq is limited and somewhat ambiguous, it is likely that women at Nunalleq adorned their faces in other ways. Some female-affiliated human likenesses at Nunalleq display facial tattoos and nose beads, forms of adornment that Quinhagak elders recall women wearing.

⁹ From the Nunalleq blog: <https://nunalleq.wordpress.com/2013/08/26/follow-that-house-floor/>.

Tattoos

Compared to labretifry, which is a practice with direct material correlates that preserve in the archaeological record (i.e. labrets), tattooing solely involves ink and skin, and thus leaves only ephemeral and secondary evidence. Without preserved human remains bearing tattoos, it is difficult to know with certainty whether or not this was a form of facial modification practiced at Nunalleq. However, evidence for tattooing exists in the form of tattooed human representations, as well as a few objects that may have been tattoo needles. Five dolls display tattoos on their faces, in three patterns (Figure 25): 1) a single line under the lip (n=2), 2) multiple lines under the lip (n=2), and 3) dots above the eyes (n=1). Four potential tattoo needles have been found at the site, identified as such by their delicate pointed tips and elaborately decorated handles (Figure 26).

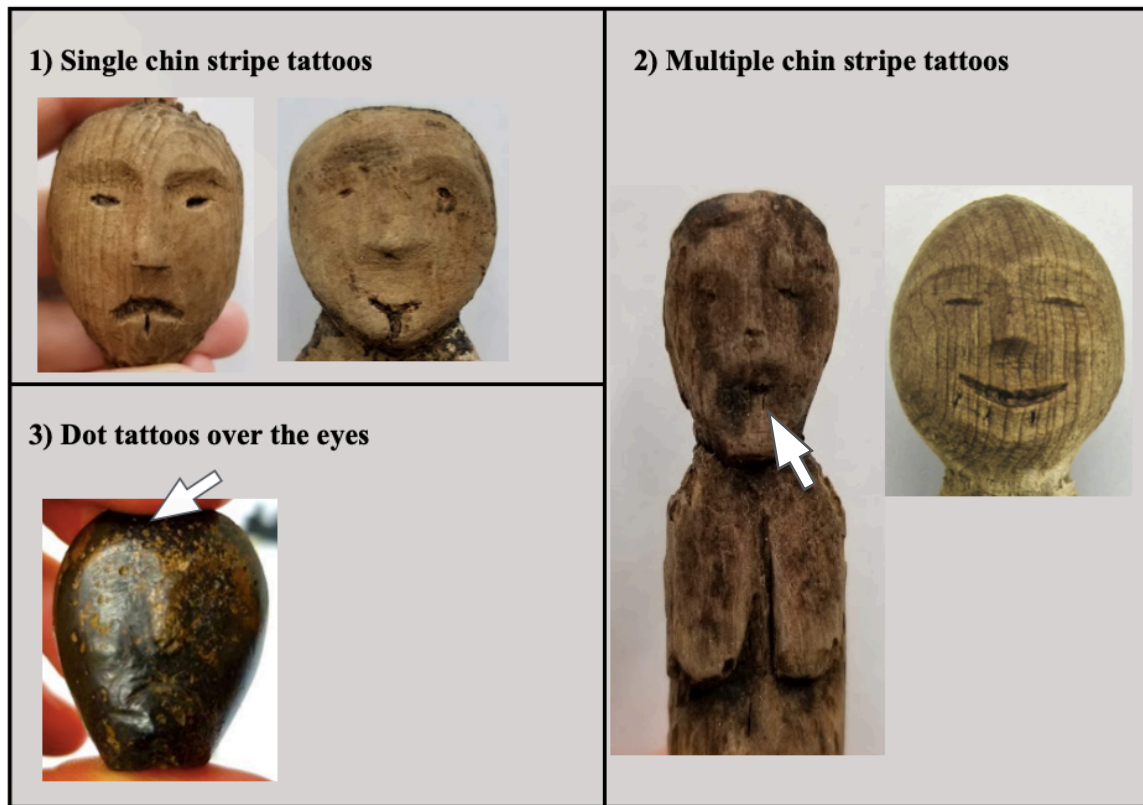


Figure 25. Dolls from Nunalleq displaying different tattoo designs.



Figure 26. Potential tattoo needles found at Nunalleq.

Three of the tattooed dolls have bodily features associated with women in Yup'ik culture. Two dolls — one with a single lip line, one with dots above the eye — are frowning, an indication of female gender in Yup'ik iconography (Fienup-Riordan 2005; Fitzhugh and Kaplan 1982, 63; John Smith personal communication). A third doll with multiple chin lines bears a neutral expression, but has pendulous breasts (Figure 25). The remaining two dolls — one with single chin stripe, and one with multiple stripes — are smiling, the traditional Yup'ik indicator of male gender. The doll with multiple chin stripes, however, was identified by Quinhagak elder Nick Mark as “probably a pretend old woman,” confounding gender assumptions based on facial expression alone (Fienup-Riordan, Rearden, and Knecht 2015, 53).

Despite the archaeological ambiguity, it is likely that these dolls represent female faces, particularly in light of ethnographic and oral historical evidence. Quinhagak

memories of traditional tattooing are strong, with several contemporary elders remembering that old women with chin tattoos, or *tamlurutet* (Joshua Phillip, Tuluksak, in Rearden and Fienup-Riordan 2016, 366), lived in their communities when they were children. In Quinhagak, Annie Cleveland (2017) and Frank and Martha Mark (2017) recalled an old woman named Anna, the grandmother of Paul Beebe, with a chin tattoo. Jimmy Anaver (2017), Pauline Beebe (2017), Joshua Cleveland (in Fienup-Riordan et al. 2015, 53), Pauline Matthew (2017), Julia Hill (2017), and Grace Hill (2017) all also remember seeing elderly women with facial tattoos. These nine elders grew up during the middle of the 20th century, and the old people they saw would have been born between the late 1800s and early 1900s, likely the last generation of Yup'ik people to be tattooed in this way (that is, until modern revitalization movements).

This ethnographic evidence from Quinhagak is consistent with other sources (e.g., Nelson 1899), which suggest that facial tattooing was a relatively regular practice amongst women of western Alaska around the turn of the 20th century (Figure 27). Like labretifry, tattoo style differed between regions (Nelson 1899, 50-52). Multiple linear tattoos running from the bottom of the lip to the chin was a common pattern amongst Iñupiat and some Yup'ik women (Carrillo 2014, 18, Fitzhugh and Kaplan 1982, 144), with examples documented in Kotzebue Sound (Nelson 1899, 50-52), Shishmaref (Giddings 1967, 26), and St. Michael (Edmonds 1966, 25). The specific number of chin lines tended to vary between communities. In the mid-nineteenth century, Beechey described the three chin lines as the “universal” pattern amongst Yup'ik women along the Bering Sea coast (in Carrillo 2014, 28); more recently, St. Lawrence Island elder Estelle Oozevaseuk identified this triple line pattern as generally associated with mainland Alaska¹⁰ (Smithsonian Arctic Studies Center 2001). Discussing the St. Michael area in the 1890s, Edmonds (1966, 25) noted that between one and five chin lines was typical. Most of the communities where multiple chin line tattoos were documented are in the

¹⁰ “Mainland Alaska” is, of course, a massive area. I suspect that Oozevaseuk is referring to the mainland adjacent St. Lawrence Island, which correlates to the Norton Sound and northern Yukon-Kuskokwim Delta areas.

northern part of the Yukon-Kuskokwim Delta or around Norton Sound, suggesting that this may have been a somewhat northerly pattern.



Figure 27. Ethnographic photographs demonstrating 19th and 20th century women's tattooing styles of western Alaska. From Nelson (1899), two Kinugumut women with multiple chin stripe tattoos: a. Unger-Kee-Kluk and b. Kok-Suk. c. From George A. Morlander Photographs, UAF-1997-108-570, Archives, University of Alaska Fairbanks: Merumalria (Nangteqelria), Akwhallaq and Tuqiiq from Kipnuk with double lines at the corners of their mouths, about 1950. From Nelson (1899): d. Illustrations of different tattoo styles.

Historic-era tattooing patterns look quite different for Yup'ik people living adjacent the Kuskokwim River. Describing this region, Nelson (1899, 50) explained that not all women were tattooed, and those that were had “a pair of lines across the chin from each corner of the mouth,” a practice that was “comparatively recent among them” (Figure 27). In the 1870s, Jacobsen documented a similar pattern in the Kipnuk area, explaining that the people of Pingokpagemut (close to contemporary Kipnuk) “do not tattoo the chin, as the Malemut, but when they have a line then it is away from the mouth and downward” (in Fienup-Riordan 2005, 18). This double-line pattern on each side of the mouth was also standard on Nunivak Island from the early-mid 1900s onward (Curtis 1930, 12; Lantis 1946, 225). Interestingly, Nelson (1899, 50) noted that Yupiit south of the Yukon mouth “claim to have adopted [tattooing practices] from the women of Nunivak island, who had straight lines on their cheeks.” It is possible that this pattern of two double-lines originated on Nunivak and spread to the adjacent mainland and beyond.

Ethnographic sources documenting historic Yup'ik tattoo patterns south of the Kuskokwim River (in the vicinity of Quinhagak) are scarce, so elder interviews and other local documentation prove particularly helpful. The tattoo patterns that Quinhagak elders remember from their youth vary. John Fox (2017) recalled that his late great-grandmother, Helena Oldfriend,¹¹ had “tattoos running down under these lips; not just one, lines going down like that.” Pauline Beebe (2017) remembered that her late husband Paul Beebe’s grandmother named “Anna” had “two of them [tattoos]”; she also noted that Anna was from “up North.” The women that Pauline had seen with tattoos had them “right on their chin” (Pauline Beebe 2017). Julia Hill’s (2017) grandmother, born in Eek, also had tattoo lines, and with the help of Pauline Matthew and Grace Hill, these women together recalled seeing women with tattoo lines from Kwethluk. Historic photos from Quinhagak show “Grandma Nickoli Fox” with the double-lines motif at each corner of her mouth (Rearden and Fienup-Riordan 2013, Figure 3.5). Nick Mark remembered seeing an elderly woman with multiple chin stripe tattoos similar to the pattern in Figure

¹¹ Images of Helena Oldfriend from the 1940s, however, do not show this ancestor with facial tattoos. John Fox may have confused Helena Oldfriend for Grandma Nickoli Fox, who did have facial tattoos.

25 (Fienup-Riordan et al. 2015, 53). Clearly, tattooing was practiced in this most southerly extent of the Yukon-Kuskokwim Delta, but the patterns here were diverse, possibly attributable to population movement between villages that was not uncommon by the mid-1900s, when most of these observations were made.

Most of the chin tattoos on Nunalleq dolls (Figure 25) are similar to the more northerly motifs diagnostic of the Yukon area and Norton Sound in the late 19th and early 20th centuries (Figure 27a, b). It is curious that no representations of the “double line at each corner of the mouth” motif are evident at Nunalleq, given that this was the predominant regional pattern by the late 19th century. A more northerly origin for Nunalleq’s inhabitants is also suggested by the labret patterns, and is consistent with the Aglurmiut origin story. Even so, the evidence for tattooing at Nunalleq is fairly limited, and it is hard to draw strong conclusions with such a small sample size of tattooed specimens.

Another possibility is that tattooing was not a common form of modification at Nunalleq, given the relative paucity of tattooed representations at the site. As Nelson (1899, 50) suggested, tattooing practices were “comparatively recent” in this area relative to those of more northern peoples. With an approximately 200-year gap between Nunalleq’s destruction (c. AD 1675) and Nelson’s observations of the Yukon-Kuskokwim Delta (AD 1867), tattooing may only have been beginning when Nunalleq was occupied during the 17th century. Nunalleq’s dolls might also represent people who were visitors or strangers, or women who had married into the community from other villages.

Ethnographic records document that tattoos were applied by literally sewing the skin with a small, sharp needle and sinew or thread that had been tinted with ash or soot (Lantis 1946, 225; Rearden and Fienup-Riordan 2016, 55-56). Women were the expert seamstresses in these communities, and were thought to be the most skilled at applying tattoos in this way (Carrillo 2014). As contemporary Siberian Yup’ik tattoo artist Yaari Kingeekuk explained in a news article, “tattoo artists were only women...because they took the precise time and they were very graceful with their hands. That’s why they didn’t allow men to do tattoos” (Dunham 2011). Such tattooing methods of the ancestors are of

interest to Quinhagak locals. John Fox (2017), for example, wondered “how they used to make lines like that that don’t disappear,” while Pauline Matthew, Grace Hill, and Julia Hill (2017) expressed curiosity about the types of pigment that might have been used in the past.

The potential tattoo needles from Nunalleq (Figure 26) are not of the size and shape appropriate for the tattooing methods described above. Instead, these needles with sharp tips and intricate handles would have been used for hand-poking methods wherein pigment could be applied to the sharp tip and then inserted into the skin. Quinhagak elders Martha and Frank Matthew (2017) were familiar with this method of tattoo application, explaining that “they cut [the skin], and then they fill it with...ash.” The dots above the eyes of one of the Nunalleq dolls (Figure 25, bottom left) are a type of tattoo that could be made with poking methods. Both skin-sewing and hand-poking methods may have been utilized at Nunalleq for tattoo application, but we only see primary evidence for the latter.

Nose Beads

Nose beads, consisting of a short string of beads hung from a hole in the septum (see Figure 21e, f), could have been worn as facial adornment at Nunalleq. Two dolls have linear scratch-marks underneath their noses, seeming to portray nasal elaboration or ornament (Figure 28). While a number of beads of different sizes have been recovered from Nunalleq, there is no way of knowing if these would have been used as nasal ornamentation, though it is possible.

Like tattoos, nose beads are associated with females in Yup’ik culture, but ethnographic evidence suggests that they were only worn by young girls. In Pingokpagemut (close to Kipnuk) in the 1870s, Jacobsen observed that “under the nose (hang) up to 6 big blue beads among some girls” (Fienup-Riordan 2005, 18). In the late 19th century, Nelson (1899, 52) explained that “the practice of piercing the septum of little girls is still common among the Eskimo of the Alaskan mainland. While the children are small they wear one or more beads about the size of buckshot pendant from this hole

so that they rest upon the upper lip.” Similar patterns were observed on Nunivak in the mid-20th century (Curtis 1930, 11), though Lantis (1946, 246) noted that here boys would sometimes wear these ornaments too. Wassilie Berlin (Kasigluk) explained that “men didn’t pierce their nose septums and wear *cigviit* [nose beads],” implying that the pattern for the mainland was different (Fienup-Riordan 2005, 183).



Figure 28. Dolls from Nunalleq with nose ornamentation.

Later in life, a woman who had worn nose beads in her youth could still put her septum hole to good use. Quinhagak elder John Smith (2017), who grew up in Hooper Bay, recalled that his grandmother had a pierced septum, though she never wore beads in the hole; rather, she would use it as a storage spot for her needles while sewing, which John thought a remarkable sight. Such facial modifications made a similar impression on Martina John (Toksook Bay):

I envied those who had holes in their noses when they had an *uqiquq* [seal party distribution]. Back when they weren’t wealthy and when they gave

each woman a needle, those who had pierced noses would put them through their holes and they would be sticking out. They did not have beaded adornments in their noses, but they had holes, and they would just stick the needles there, and they were so desirable when those needles were poking out (in Fienup-Riordan 2007, 309).

This seems to have been a relatively long-standing practice, as Nelson (1899, 52) observed that “when the girl reaches maturity, the nose beads are not worn, and I never observed any use made by women of the hole in the septum except for carrying small objects like needles, which are frequently thrust through the opening and held in place by the pressure of the wings of the nose on either side.” The nose ornamentations on the Nunalleq dolls do *not* appear to be bead-like; rather, they are thin, linear scratches resembling long objects (Figure 28). It is possible that these dolls are representations of older women with needles or similar objects held in their noses.

Embodiment and Identity

The confluence of archaeological, ethnographic, and oral historical evidence suggests that various forms of facial modification were practiced at Nunalleq, and that these likely signified a number of intersecting identity categories, including regional homeland, gender, status, and age, amongst other forms of affiliation. Because facial modifications like lip stretching, piercing, and tattooing are irreversible modifications to the face (Joyce 2005, 145; La Salle 2013, 144), these aspects of identity become part and parcel of the corporeal person — “both a decoration and a part of the self” (La Salle 2008, 9; 2013, 128). If facial modifications were identity performances that contributed to a body’s intelligibility (Butler 1990; Joyce 1998, 147), they were permanent ones, even when they were meant to mark temporary states, like age. As such, we must consider how their meanings transformed over time and within different social contexts (for example, the difference between a young woman wearing nose beads versus an older women using her septum hole as a needle holder).

Exploring Yup’ik theories of the body can expand our understanding of facial adornment practices at Nunalleq. Since the meaning of “the body” (and its attendant

modifications) is always refracted through the lens of culture, we cannot expect to know the significance of intentionally produced bodily alterations without a firm grounding in local cultural context. In Quinhagak, although interview participants had little to say about the labrets and the facially modified dolls (likely due to the demonization of these practices by early settler cultures, and the reverberations of these judgements through time), they did share a significant amount of information about Yup'ik bodily proscriptions and the ways that men and women were expected to attend to their embodied selves. In particular, Emily Friendly (2017), Jamie Small (2015), and Pauline Matthew (2015) spoke confidently and openly about bodily rules and regulations that they learned in their youth, some of which are still part of Quinhagak lifeways today. Incorporating their knowledge into interpretations of facial modifications adds complexity to the analysis.

Yup'ik Philosophies of the Body

In Yup'ik ways of knowing, the body is a locus of both extreme power and extreme danger. People can incite or prevent certain actions in the human, animal, natural, and spiritual worlds through regulating their bodily substances and functions (Fienup-Riordan 1994, 189; Morrow 2002, 338). As such, traditional Yup'ik lifeways include abundant rules governing bodies, which are seen as particularly vulnerable to inciting disaster when they are in certain states: during life crises like menarche or childbirth, during annual ceremonies, or when a person was alone in the wilderness (Fienup-Riordan 1994, 195). Recall that the Yup'ik individual is viewed as a powerful but autonomous agent, so such rules and prohibitions are meant to guide this power in a direction that benefits the larger community and complements the universe (Morrow 2002, 337). Bodily proscriptions are typically enforced at a personal level, with “a strong emphasis on voluntary action and self-regulation, and a corresponding de-emphasis on compulsion and regulating others” (Morrow 2002, 340). When bodily regulations were followed, they “created a barrier to misfortune and opened a passageway to success in the future” (Fienup-Riordan 1994, 158). In cases of illness or accident, the moral state of the

individual was called into question, because the “failure of the body resulted from thoughtless living” (Fienup-Riordan 1994, 189).

Although bodily proscriptions can be tied to a person’s gender, they are not dependent on lifelong biological qualities (i.e., their sex); rather, body regulations apply to a person’s *temporary state of being* (e.g., sickness, pregnancy, mourning; Morrow 2002,336). In the past, prohibitions were meant to restrict the behaviors of people in liminal states in order to protect both themselves and the people around them from falling into chaos. For example, a Yup’ik girl’s first menstruation was seen as an extremely sensitive time for her community (Jamie Small 2015; Pauline Matthew 2015). Menstruating girls and women were thought of as “medicine women” (Jamie Small 2015) who were powerful enough to affect the game prospects of men and to change the weather. For example, Jamie Small (2015) recounted a story of having been asked by an elder to dance to start the rain when she began her period, efforts that were successful (see also Emily Friendly 2017; Fienup-Riordan 1994, 163). Menstrual blood is potent substance in Yup’ik cosmology, with the power to both scare off valuable prey animals and heal certain illnesses (Fienup-Riordan 1994, 165-166; Jamie Small 2015). To control for this, girls at menarche would be secluded from their communities for five to ten days in an isolated hut or in a corner of their home partitioned off with grass mats (Morrow 2002, 339). A girl’s movements and activities would be restricted for the duration of bleeding, and she was prohibited from working raw skins, eating raw foods, and drinking fresh water during this time (Fienup-Riordan 1994, 160). Menstrual urine was seen as too powerful to keep inside a bucket in the home, so girls were required to urinate outdoors, and only on a refuse pile.

This sense of liminality extended into the year following menarche, and many food and activity restrictions continued into future menstrual cycles throughout a woman’s life (Emily Friendly 2017; Fienup-Riordan 1994, 164; Jamie Small 2015; Morrow 2002, 336). As Jamie Small (2015) explained:

when a young lady reaches puberty, there’s one whole year she can’t do anything... never go down to the river, they couldn’t look up to the sky, they

had to wear a hat over their head to cover their hair, and if they didn't follow these rules of being a woman...the elders would say they'd get sick (see also Pauline Matthew 2015).

Emily Friendly (2017) similarly recalled that:

girls were restricted in their first year of...menses, they were restricted to either the home or the village life. They couldn't go to certain areas...they couldn't go to the beach, they couldn't run. They were supposed to wear a headdress all the time, for a whole year...Weather depended on those restrictions...If weather was strange...a certain authority in the community (would say) it was because a young lady did what she was not supposed to do.

Many of these proscriptions are still followed in Quinhagak today; for example, Jamie Small taught these rules to her own teenage daughters, and young women covering their heads with hooded sweatshirts is a common sight in the village.

Pregnancy is another state of being that required great bodily care and restriction on the part of Yup'ik women. Actions taken during pregnancy could affect the future life of a child, including encouraging certain personality qualities and subsistence successes through use or avoidance of specific substances. For example, if a mother desired her child to be a fast runner, she must not eat seal oil and drink little water (Fienup-Riordan 1994, 178; see also Jamie Small 2015). A mother's actions, like assuming certain sitting positions and locations, could affect her child's gender (Fienup-Riordan 1994, 179). Pregnant women were admonished not to eat leftovers (Emily Friendly 2017; Fienup-Riordan 1994, 180; Morrow 2002, 338), and were encouraged to exit their homes swiftly every morning in order to ensure an easy labor (Emily Friendly 2017; Fienup-Riordan 1994, 180). Emily Friendly (2017) recalled how difficult it was for her to follow this latter rule during her first pregnancy, which occurred during the cold winter months. Following pregnancy, the postpartum period was marked by restrictions similar to those observed during menstruation (Fienup-Riordan 1994, 182).

Though women's bodies were seen as particularly powerful, the responsibilities surrounding bodily restrictions also extended to men (Morrow 2002, 341). Men were

cautioned not to come into contact with menstruating females, lest the vapors surrounding them “render him visible to every animal he might hunt, so that his success as a hunter would be gone” (Nelson 1899, 291). Emily Friendly (2017) put this differently: “if he smells you, he’d go nuts.” To further avoid these bodily vapors, men were instructed to always walk downwind of women, because even the wind emanating off them had power (Fienup-Riordan 1994, 166; Morrow 2002, 342). Upon marriage, men shared in their wives’ menstrual proscriptions (Fienup-Riordan 1994, 169), and the couple together were responsible for ensuring successful subsistence through their attentive behaviors. Indeed, some Yup’ik bodily proscriptions applied to all people regardless of gender. For example, the intake of food and water and processes of urination and defecation were all heavily regulated (Fienup-Riordan 1994, 156; Morrow 2002, 341), and times of mourning came with prohibitions for all members of the deceased’s family (Emily Friendly 2017; Pauline Matthew 2015). Morrow (2002, 335) concluded that Yup’ik bodily restrictions on women were not meant to be a “repressive ideology;” rather, they indicated the immense power that women’s bodies held in Yup’ik cosmology.

While the antiquity of such Yup’ik body philosophies is uncertain, some evidence suggests that Nunalleq’s inhabitants held similar beliefs. One of the objects that a Yup’ik woman would use in the historic era to regulate and restrict her body during menstruation was the caribou tooth belt, often made for her by her husband out of hundreds of caribou incisors, and thus also a demonstration of his hunting prowess (Fienup-Riordan 2017, 320; Morrow 2002, 339). As Theresa Moses (Toksook Bay) explained, “women were careful with their bodies and used belts to keep their personal debris, like dust, from falling and spreading out to boys and men. Women never went without belts” (in Fienup-Riordan 2007, 320). Such a caribou tooth belt was found at Nunalleq (Figure 29), demonstrating that the material correlate for this belief was present at the old village. Oral histories speak to the antiquity of women’s bodily proscriptions. For example, Morrow (2002, 344-345) details a Bow and Arrow War-era story wherein a woman helps her husband escape from raiders from a warring village. Fearing that the men will come

back and rape her in retribution for her collusion, she smears fermented salmon roe on her thighs and crotch— a substance that is “sticky, bloody, and foul-smelling”— which subsequently scares the raiders, who leave her alone out of fear (Morrow 2002, 345). In doing this, the woman is seen as a hero who has called upon the implications of her bodily substances to save both herself and her husband. Given the strength and persistence of such Yup’ik beliefs, I find it likely that the ancestors at Nunalleq held similar ideas about the strength and potency of the human body.



Figure 29. Caribou tooth belts. Left, an ethnographic example from the 19th century. Right, from the Nunalleq site. Images courtesy of nunalleq.wordpress.com.

Facial Modification as a Display of Bodily State

How does a Yup’ik philosophy of the body help refine our understanding of facial adornment at Nunalleq? As we’ve seen, Yup’ik people use material objects— like the caribou tooth belt in historic times, or the hooded sweatshirt today— to mediate their bodily processes. Objects assist in providing distance between bodies or coverage of their most potent parts and substances. As Fienup-Riordan (1994, 193) explained, “covering the body with refuse, clothing, paint, or ashes as well as encircling it with a belt or string had protective power both in everyday and transitional contexts.” Objects are also sensitive to bodily substances, which is why women were cautioned against touching or approaching men’s hunting gear when they were in a liminal state, because they may affect the tools’ efficacy (Fienup-Riordan 1994, 167). Physical separation between different people or between people and things is a common strategy for spiritual

wellbeing in Yup'ik lifeways; consider, for instance, how women of the historic era lived separately from men in enet, while men kept to themselves in qasgit (Fienup-Riordan 1994, 169). Boundaries, be they material or spatial, helped to keep Yup'ik communities healthy and safe (Fienup-Riordan 1994; Morrow 2002, 339).

We know that bodily power is tied to states of being, some of which are related (though not necessarily intrinsically) to identity categories such as gender and age.¹² Outward awareness of a person's state was essential in maintaining the community's wellbeing, because this state had repercussions beyond the individual. In order to maintain proper boundaries like spatial avoidance and walking downwind, men needed to know when young women in their communities were of menstruating age (Morrow 2002, 344), and such women were obligated to make their state known to those around them (Fienup-Riordan 1994, 165). Rather than being a form of gender control (Morrow 2002), this was just part and parcel of being a good Yup'ik person, and an active member of one's community.

Identity and “state of being” displays must thus have been significant practices in Yup'ik communities of the past. Knowing the sex and state of a given body was vital to village wellbeing and to the public good.¹³ As such, I find it likely that forms of facial adornment, particularly those bestowed upon young women when they began menstruating, served the purpose of signaling information about their newly powerful bodies. Rather than “marking already-given aspects of social status of the individual person,” such modifications indicated a critical change in a person's status powerful enough to affect the greater social body (Joyce 2005, 142). In displaying their sex and state so prominently on their faces, and tending to their bodies accordingly, young

¹² The idea of “state of being” also points towards another important reality of Yup'ik personhood — that people are transformable. For example, a menstruating woman is not dangerous because she is a woman, but because she is menstruating (Morrow 2002, 346) — a state that will change throughout her lifetime (see also Carrillo 2014).

¹³ Emily Friendly (2017) noted that it was the community's obligation to ensure that everyone knew about the required bodily proscriptions by sharing knowledge with those who may not know. As she explained, “everybody took each other under their wing.”

women were fulfilling their obligation to the social whole while enacting proper Yup'ik personhood.

Tattoos, for example, were a form of “mindful decoration” applied at puberty for women in western Alaska and are often interpreted as marking their reproductive maturity and marriageability (Carrillo 2014, 22, 26; Lantis 1946, 225; Joan Hamilton in Smithsonian Arctic Studies Center 2001). As Carrillo (2014, 1) explained, “among Inuit and Yupik women, tattoos served a transformative purpose, creating from the biological reality of the female body the gendered identity of womanhood.” Reproductive status may also have been a factor in who could perform a tattoo application; Neva Rivers (Hooper Bay) remembered that women with joint or other pain specifically asked young women who had just started their periods to come and apply tattoos as a form of healing (Smithsonian Arctic Studies Center 2001). While the specific age and status demarcations of women's tattoos varied from place to place, the association of women's facial tattoos with reproductive maturity and womanhood seems to have been widespread enough as to warrant consideration at Nunalleq.

Facial adornments may also have signaled significant states of being for men, but perhaps ones that had less to do with their bodies per se and more to do with achieving social and spiritual equilibrium (though note that Yup'ik ways of knowing resist such compartmentalization into separate biological, social, and spiritual spheres). Given the walrus and bird symbolism implicit on many of Nunalleq's labrets, perhaps wearing these signaled a hunter's state of transformation or reciprocity between humans and animals, thus appeasing the animals and leading to a more successful hunt. In other contexts, labrets signaled aspects of status and affiliation that were relevant to maintaining proper human social relations, both within a given village (e.g., relationships between families) and between different regional communities (e.g., wartime alliances). Given the implications of accurately understanding a person's state of being, learning to read such facial signifiers was undoubtedly an important skill for all people in Yup'ik communities of the past.

Although signaling one's state of being was an act of community participation,

Yup'ik facial modification practices ultimately demonstrate balance between altruism and individuality. Different forms of modification reference the larger social whole in a multitude of ways (by fostering public awareness of one's state or through signaling affiliation with certain groups), but the individual wearer of labrets, tattoos, or nose beads may have had considerable autonomy in the form and style of their adornment. Inuk elder Apphia Agalakti Awa explained that, in her community "tattoos could be designed the way a woman wanted" (in Carrillo 2014, 11). At Nunalleq we see a variety of potentially personalized styles of labrets (e.g., singular incised designs) and tattoos (e.g., varying numbers of chin lines on dolls), though these tend to adhere to shared design and style conventions. We must use care not to over-interpret facial modifications at Nunalleq as indicative of specific social categories when in reality there may have been much personal agency involved in choice of design. Most likely, there was a productive tension between personal preference and collective social signification for all of these forms.

Colonialism and the Body

One reason information about historic-era Yup'ik facial modification practices is so limited today is that these traditions were actively eradicated by the settler cultures that began encroaching on western Alaska beginning in the late 18th century. Contact with white settlers and missionaries was a major factor in the cessation of Yup'ik and Iñupiat labretifry by the late 1800s (Keddie 1981), and had a negative (though perhaps less pronounced) effect on tattooing and nose piercing, which continued in some locales into the mid 1900s. Nelson (1899, 45) noted in the 1870s that labret-wearing along the Bering Sea coast was "quickly becoming obsolete; old men still have the holes, but not many new piercings being done at this time." By the 1890s in southwest Alaska, only old men were still found wearing labrets (Keddie 1981, 70), and elders in Quinhagak who grew up in the mid-20th century only remember a handful of very old people with labret holes. Labretifry practices persisted longer on Nunivak Island, where Curtis found several individuals still wearing these into the late 1920s; some of his most famous images of Nunivak feature labret-clad faces (Figure 21). He stated, "at the present time these lip

ornaments are becoming rarer, though they are worn on Nunivak Island to a far greater extent than on the mainland, where contact with whites has made them almost obsolete” (Curtis 1930, 11). Given this, and the fact that contemporary elders rarely if ever saw their own elders with labret holes, labretifry may have dwindled on the Delta south of the Kuskokwim by the late 19th century.

Racism and colonialism both played a role in the demise of traditional Yup’ik facial modification practices. Settlers of the 19th and early 20th centuries expressed horror and disgust at labretifry; for instance, Hrdlicka (1930, 222) referenced Hooper’s (1884) derogatory account of labrets as “hideous-looking things, made of bone, glass, stone, ivory, or in fact anything within the reach of the native which can be worked into the requisite shape.” Many ethnographers’ descriptions are rife with judgement, both overt and subtle, regarding these traditions. Denigrating the body of the “native other” is a strategy of colonialism. As Boddy (2011, 119) explained, under the “corporeal enterprise” of colonialism, “the colonized were frequently admonished to relinquish their customary practices— habits of dress, work, bodily comportment, speech, adornment, cleanliness and domestic order, foods they deemed edible and how they consumed them, how they gave birth, fell sick and were healed, expressed their sexuality— in order to adopt those that colonial authorities endorsed or held to be commonsense.” Scholars of queer Indigenous studies have frequently framed colonial critiques within a Foucaultian framework of biopower and biopolitics (e.g. Finley 2011; Morgensen 2011); that is, colonial powers have made “good” (destructive) use of strategies of shame, discipline, and punishment in regulating Indigenous bodies, a process seen as necessary to the colonial endeavor. Even seemingly “innocent” anthropological interest in facial modification can contribute to this colonial legacy by uncritically “exotifying the other.” As a white researcher, I am absolutely implicated in this.

At the same time, Quinhagak narratives about the body push back against Western notions of bodily shame. As I experienced first-hand in the maqii and learned through interview conversations, there is a sense among Yup’ik people that the body is something to be talked about and experienced frankly and without embarrassment. At the risk of

generalizing (note that influence from the Moravian Church and white settler culture do still affect local notions of the body), I find that many Quinhagak residents are familiar with the traditional rules surrounding bodily regulations, and are comfortable sharing this knowledge, even with outsiders. Thinking towards embodiment as theory in anthropology and gender studies, we must use care to be hyper-specific in interpreting bodily performances and practices, as these are often deeply culturally-situated. Morrow (2002, 336-337) noted that anthropological narratives associating menstruation with pollution, anxiety, and shame are *not* accurate for Yup'ik people, suggesting that “whether people experience prohibitions and prescriptions as oppressive depends in part on how such restrictions are represented in the society in question.” In a different example, La Salle (2013, 147-148) presented contemporary Haida artist Christian White’s interpretation of women’s labrets as symbols of “inner strength that is ‘sounded,’ relating to women and the matriline, both of which are empowered through speaking and being heard,” representing a “total reversal of the interpretations of some early ethnographers, who saw labrets as oppressive and inhibiting.” Such ethnographic interpretations are an extension of colonialism over Native bodies, and point to the importance of localized, culturally-situated analyses of facial adornment practices.

During the summer 2018 celebrations surrounding the opening of the Nunalleq Culture and Archaeology Center (see Chapter III), it was inspiring to learn that renowned Yup'ik dancer Chuna McIntyre, originally from Eek, had explained to Quinhagak’s young dance troupe that labretify and nose piercing practices were once incorporated into ceremonial costumes and songs. As dancers Crystal Carter and Carl Nicolai recounted:

One of the songs Chuna McIntyre shared was a special song passed down to him from his grandmother. He said that when his grandmother was a little girl she lived at the old village of Arolik where she heard a song that stuck with her. The lyrics of the song are, “Thank you for my labrets, thank you for the ones before us, thank you for my septum piercing decorations and my long beautiful necklaces.” The two songs he shared were used in the performance at the opening celebration of the culture center.¹⁴

¹⁴ From the Nunalleq blog: <https://nunalleq.wordpress.com/2018/11/08/yupik-culture-fest-workshops-2018/>.

McIntyre's song recalls the pride and ceremony that once attended these forms of facial modification, pointing to the potentiality for younger generations to again find dignity in such cultural expressions of the ancestors.

Adornment, Identity, and the Body at Nunalleq

Nunalleq's material record suggests that people were adorning their bodies in a number of ways, signaling a complex of identities and states of being. People of all genders may have worn labrets, but probably in different styles: men likely wore them laterally, while others, likely women, wore them in multi-medial position. A number of small calcite and nail-shaped labrets speak to the process of labret hole enlargement and suggest children's adornment. Some people at Nunalleq, likely those of high status, wore fancy labrets made of rare materials (though what accounts for status is more difficult to interpret). Some of these high status individuals were children. Walrus and bird symbolism is evident in labret form and design, signaling potential connections to the Yup'ik spiritual universe. Tattoos may have been worn at Nunalleq, probably by women, and likely in the form of chin lines of varying number. Both sewing and hand-poking methods may have been used to apply tattoos. Women, probably young women, also likely had septum piercings and wore nose beads. Older women about the village may have had empty septum holes, and like their descendants to come, may have occasionally used these to hold needles or other long tools. Looking around the faces of Nunalleq village, an observer would have seen a variety of diverse adornments reflecting a complex embodied signification system. Given the dearth of information on Yup'ik facial adornment practices of the past, Nunalleq's archaeology, which documents many of these since-lost pre-contact forms, provides some particularly important clues for understanding such forms of expression.

The labret and tattoo patterns at Nunalleq resemble those found north of the Yukon River in historic times, and some differ significantly from the forms documented around the mouth of the Kuskokwim, particularly the large oval and oblong labret

specimens and the chin line tattoo patterns seen on dolls. The lack of women's sickle-shaped labrets at Nunalleq is not typical of the Yukon-Kuskokwim region during the historic era. Oral histories explain that the Aglurmiut, who may have lived at Nunalleq, were descended from more northerly peoples and were often at war with their Kuskokwim neighbors. Facial adornment practices at the site seem to bolster this story.

In a Yup'ik context, facial adornments are thought to be expressions of a number of different identity categories, including region, gender, age, status, and other forms of group and spiritual affiliation. These dimensions of identity intersect in complex ways, many of which are not visible to the anthropological analyst. That labrets abound at Nunalleq, and that tattoos and nose beads were likely used as well, suggests that identity signification itself was a significant part of community life. In addition to marking social identities along multiple axes, facial adornments may have served as outward indicators of a person's state of being (e.g., female of menstruating age). In Yup'ik ways of knowing, the body is a powerful and potent thing, and bodily modification was likely a significant aspect of how people controlled and communicated this power. Adornment is a good place to observe the tension between the embodied individual and the larger social landscape, as the practice was likely as much a community obligation as it was a form of personal expression. Such interpretations only become possible when multiple forms of evidence are considered in tandem (following La Salle 2013, 148), and when culturally-situated theories of the body are given precedence.

Epilogue: The Time for Tattooing

It was time for the girl to get her tattoo. Last year, when she had begun menstruating, her mother had gently removed her nose beads, and she has spent the subsequent year curiously nudging the empty hole in her septum— a sign that she was getting older. Now, the time had come to mark her face, an eagerly awaited transition into feminine maturity.

When her bleeding began two moons ago, the girl had received strict instructions from her mother and older sister: contain the blood using dried moss from the tundra;

remain in the menstrual hut for the duration; when outside urinating, avoid looking at the mountains or the sky; when moving about the village, tighten her belt. For the subsequent year, she was not to bring her grandfather food in the qasgi, nor interact with any of the young men in the village—the past spring had been a lean one for hunting, and elders were quick to pass judgement on menstruating girls. She was not fearful of these changes, rather, she felt a tickle of pride knowing that her woman's body could impact her community so deeply.

Grandmother was the one tasked with sewing her skin. She did it by lamplight in the corner of the enet, with the girl's little sisters looking on. The tip of the small, sharp bird bone needle was dipped in seal oil, then in soot, and then slowly, methodically pulled through the skin of her chin. The pain was substantial, but the girl held her tongue—partly from shock, and partly out of pride. At the end of the night, three thin lines emanated from the bottom of her lip to the tip of her chin, now always a part of her face, a permanent manifestation of her body's transition through time and an essential part of her story.

CHAPTER VII. INTERSECTIONS OF GENDER, AGE, AND PERSONHOOD IN YUP'IK SUBSISTENCE

In summer 2014, a few fellow field school students and I were invited on a mid-day excursion to fish on the Kanektok River with local friends. I remember bundling up (even in the height of summer, the weather on the Yukon-Kuskokwim Delta can be cool and breezy), piling into our friend's father's boat, and heading out on the river. This was my first time on the Kanektok, and I was struck by its openness, the remote beauty of the low bushes and grasses lining its shores, and the number of sports fishing boats that we passed as we navigated the water, their white passengers either waving at us enthusiastically, or facing forward, unsmiling.

We finally found a spot on the bank that was unoccupied by parties of fishing tourists, and settled in for the afternoon. Never having fished before, this proved an important educational opportunity, and our Yup'ik friends — a young woman named Lucy¹⁵ and her cousins Larry and Jack — got straight to teaching us kassaqs the basics of rod-and-reel. Several of our party had active lines going, but I was observing from shore when a fish was finally brought in. A bit of hubbub ensued, because Lucy, the best with an *uluqaq*,¹⁶ was busy reeling in her own catch, leaving Larry and I to fillet this first salmon of the day. Lucy indicated to us where we could find her uluaq amongst her things, and told us to get to work.

I had never used an uluaq before. Larry, though not an expert, explained that he was casually familiar with how to cut fish the Yup'ik way, and set about teaching me. We lay the fish down on the rocks of the river bank, and Larry instructed me on the correct slicing motion (Figure 30). My first cuts were ragged and set too far from the bone, but I did eventually produce an (albeit sad-looking) fillet. Larry was encouraging throughout,

¹⁵ I've anonymized the names in this story, because I did not complete a consent procedure with these friends related to recounting this specific instance.

¹⁶ *Uluqaq* is the Yup'ik term for a women's semi-lunar knife; *uluat* is the plural form (following Fienup-Riordan 2007; see Gillam 2009, 1 for regional variations of this terminology).



Figure 30. Anna filleting fish with an uluaq for the first time, summer 2014.

offering advice and demonstrating the correct way to hold the knife to slice. We all joked about the irony of Larry, a young Yup'ik man, instructing an older female kassaq for her first uluaq lesson.

* * * * *

The nature of the joke here is that the way I learned to use an uluaq, that most quintessential of Yup'ik subsistence tools, was a far cry from typical Yup'ik instructional methods. Uluaq are associated with women, and older experts are usually the teachers of fish-cutting tasks, but in my case I was taught by a man who was younger than me, and not an expert. Even so, this was in many ways a *very* Yup'ik method of learning to cut fish. I was given the task because it needed to be done and someone had to do it, so efficiency and timeliness were paramount. I was lightly chastised for doing a bad job, but

lovingly so, and there was humor in the mistakes I made. I learned by watching, and then by doing, and none of it was perfect or taken too seriously. Indeed, the seemingly paradoxical nature of the teaching event and its attendant identity dynamics is very representative of a Yup'ik worldview, which accommodates flexibility, places value in action, and seeks out balance between extremes.

This anecdote also introduces the interconnectedness of several identity categories that play into Yup'ik subsistence, including gender, age, ability, expertise, and adherence to values related to Yup'ik personhood and collective obligation. All of these are themes that ran through interviews with Quinhagak residents, and to an extent are also materially visible in the artifacts from Nunalleq. My goal in this chapter is to assess Nunalleq's uluat with these concepts in mind in order to better understand how subsistence and identity inter-relate in Yup'ik culture today, and may have for the ancestors.

Uluat are an especially good artifact type for such an assessment for several reasons. As “women's knives,” uluat are intrinsically gendered, though upon examination this gender status is flexible and complex. Uluat are ubiquitous in Yup'ik communities today, and are used to cut any number of things in a diversity of subsistence tasks. Emily Friendly (2017) explained that she uses her uluaq for “just about anything opening a box, or cutting a piece of tape, fixing salad, chopping nuts, cutting...a bunch of grass for my dog's house,... scraping slime off of fish, cutting string... You could even butcher anything with it. You could skin with it. You could cut anything with it” (see also Issenman 1997, 61).

Useful as they are, Quinhagak residents have a lot to say about uluat, and feel familiar with the ancient versions used by Nunalleq forebears. The Nunalleq uluat assemblage is extensive, indicating that these tools were a central part of subsistence life there. Despite being extremely commonplace in both contemporary and pre-contact Yup'ik contexts, uluat are generally under-studied (Gillam 2009, 2). For example, the discussion of “women's knives” in Fienup-Riordan's 2005 tome on the Jacobsen Collection takes up only about 1.5 pages amongst a total of 226 (but note that the discussions relayed in this book were led by Yup'ik elders' interests, rather than those of

the author). The Smithsonian Arctic Studies Center’s online collection displays 700 objects from 10 different Alaska Native cultural groups, only three of which are “women’s knives.” The relative dearth of information on uluat may reflect collection bias on the part of the men that acquired these museum specimens in the 19th and 20th centuries. Gillam (2009) attributes this paucity to the uluaq’s dual situatedness as a feminine and Indigenous object, its dismissal a vestige of coloniality. Choosing uluat as the focus of this chapter not only follows the interests expressed by Quinhagak residents in interviews and allows for an examination of subsistence and identity, but also spotlights an artifact category deserving increased attention.

This chapter begins by examining Nunalleq’s uluat from an archaeological perspective, categorizing the objects based on their size and shape. Next, I turn to Quinhagak residents’ knowledge about uluat, focusing on how community members think about these objects and the types of people and activities associated with them in local practice. I then attend to some prominent interview themes regarding subsistence and identity— gender roles and tasks, the collective sociality of subsistence, and intergenerational processes of teaching and learning— and consider their implications for a material analysis of uluat. Apparent in this work is that gender attribution is not a very effective model for understanding uluat in a Yup’ik context; rather, age, related to intergenerational knowledge transfer, might be a better analytic for accessing identity in subsistence. Action, regardless of gender or age, plays a significant role in how Yup’ik identities are structured around subsistence.

An Archaeological Approach to Uluat

The uluat sample analyzed here contains 139 specimens, 19 of which are complete uluat (blade and handle), and 120 of which are handles alone (without matching blades). This is not the entire Nunalleq uluaq assemblage, but the subset sufficiently intact and well-formed as to warrant assignment of individual catalog numbers. Additional intact uluaq handles may be identified in future cataloging, which is ongoing

as of 2021. Uluaq handles from Nunalleq might also be found in level bags, but without three-point provenience data.

To analyze the uluat, I first noted the most prominent differences between the specimens. Handle size and shape were obvious criteria for difference, but I also recorded material type, presence and type of decoration (discussed more in Chapter VIII), presence of a notch along the bottom of the handle, and any physical characteristics related to manufacture. The Nunalleq uluat sample is rich in interpretative features, but by focusing on size— which resonates as an analytic with Quinhagak residents— and shape— a clear way to visually parse the collection— I could organize the data and draw inferences that could then be interlaced with local knowledge.

Despite this attempt to categorize, every uluaq is unique, each defining characteristic exists on a spectrum, and few groupings feel “natural.” Though I explain my reasoning for choosing certain size and shape categories, many of these choices were arbitrary. The variegation within the uluat sample suggests the importance of local perspectives in artifact interpretation; that is, why should an archaeological method of classification be considered more meaningful than one that is locally-situated? Quinhagak residents’ interpretations of the uluat are detailed in the section following, but first I present my initial characterizations of the sample based on size and shape differences.

Size

In winter 2019, I took scale photographs of 107 complete uluaq and uluaq handles at the Nunalleq Culture and Archaeology Center. Later, I measured the lengths and heights of these uluaq and handles to the millimeter based on photographic scale. To do this, I created duplicate photographic prints for each specimen and cut out the scale from one of the prints to use as a ruler on the other. While of course this is not an ideal method of measurement, time constraints during my time in Quinhagak meant that I had to prioritize collecting detailed photographic data for as many specimens as possible rather than perform measurements in-person in the lab. I account for potential inaccuracies in the subsequent analysis.

I determined length¹⁷ measurements for 104 uluaq handles; three handles were too fragmentary to determine length. Of the 104, nine were partial specimens with “likely” measurements based on a half-length (i.e. one side of the handle was missing, but I determined the halfway point and multiplied by two). Height measurements were collected from 102 handles; the remaining five were of undermined height. I also determined the relative lengths and heights for 32 additional uluaq handles that I did not photograph, but which were pictured in a detailed image from the Nunalleq Culture and Archaeology Center showing my measured uluaq handles lined up next to these additional specimens. For these 32 handles, length and height measurements are rounded to the closest 0.5 cm.

Handle lengths range from 4.5 to 24.8 cm — a huge span. Height is more constrained, ranging from one to seven cm. Length is clearly the more variable measurement, which is understandable from a functional standpoint: each uluaq can only be so high as to fit comfortably in one’s palm, but the handle can extend lengthwise considerably from the hand and remain functional.

Because length is so variable, I used this measurement to categorize the handles into different sizes: small (4.5-7.5 cm), medium (7.5-14.5 cm), large (15-18 cm), x-large (19-21 cm), and xx-large (22-25 cm). I used a scatter plot showing the distribution and frequency of the length measurements to determine these size categories (Figure 31). As shown in the plot, the length measurements fall mostly along a consistent spectrum, with little interruption in the series from 5.5 cm up to 18 cm. The delineation of small, medium, and large categories is somewhat arbitrary and based on loosely clustering data, while the x-large and xx-large categories represent more obvious breaks. Based on these data, the majority of handles (68%) are medium-sized, 14% are large, and 9% are small (Figure 32). X-large and xx-large handles are infrequent.

¹⁷ In this analysis, length is the measurement between the two greatest extents of the handle along the x-axis, and height as the measurement from the highest point of the uluaq to the lowest point along the y-axis. In cases where the x-axis was not apparent due to the handle being notched, I drew a straight line between the two edges of the notch on the photograph to approximate the x-axis.

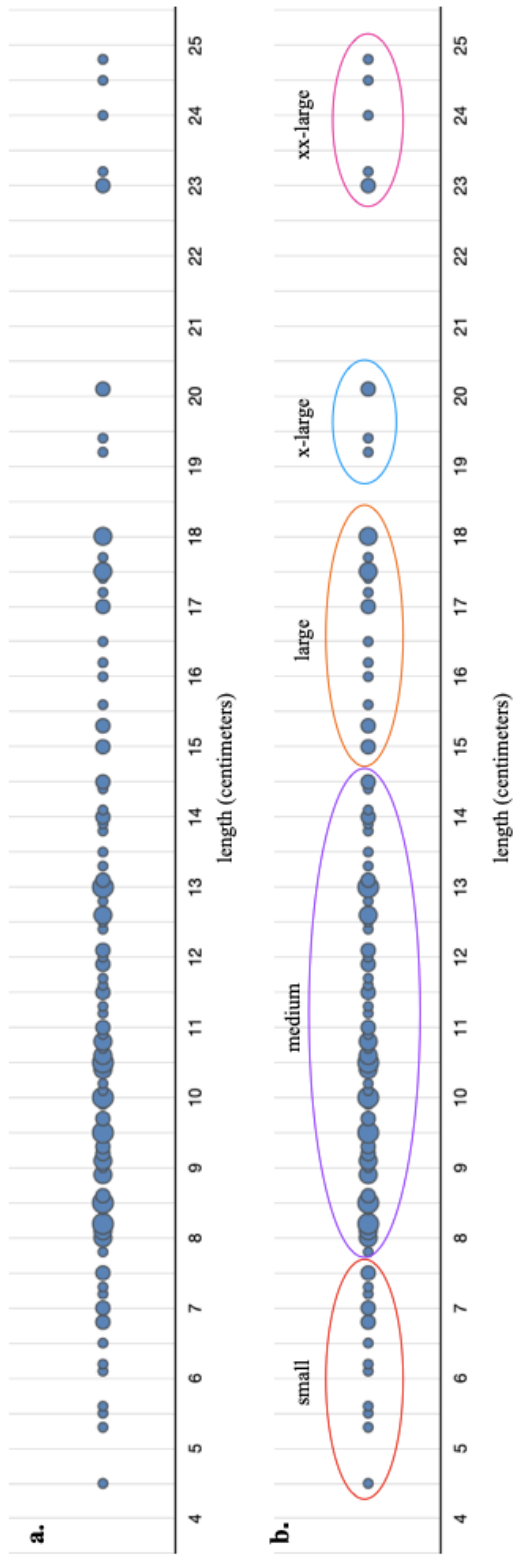


Figure 31. Nunalleq uluat distribution by length. Bubble area correlates to number of uluat of that particular length, to the millimeter (the larger the bubble, the more uluat of that size). Plot a) shows the unaltered distribution of the entire sample, and plot b) shows the same distribution, but with size classifications indicated by colored circles.

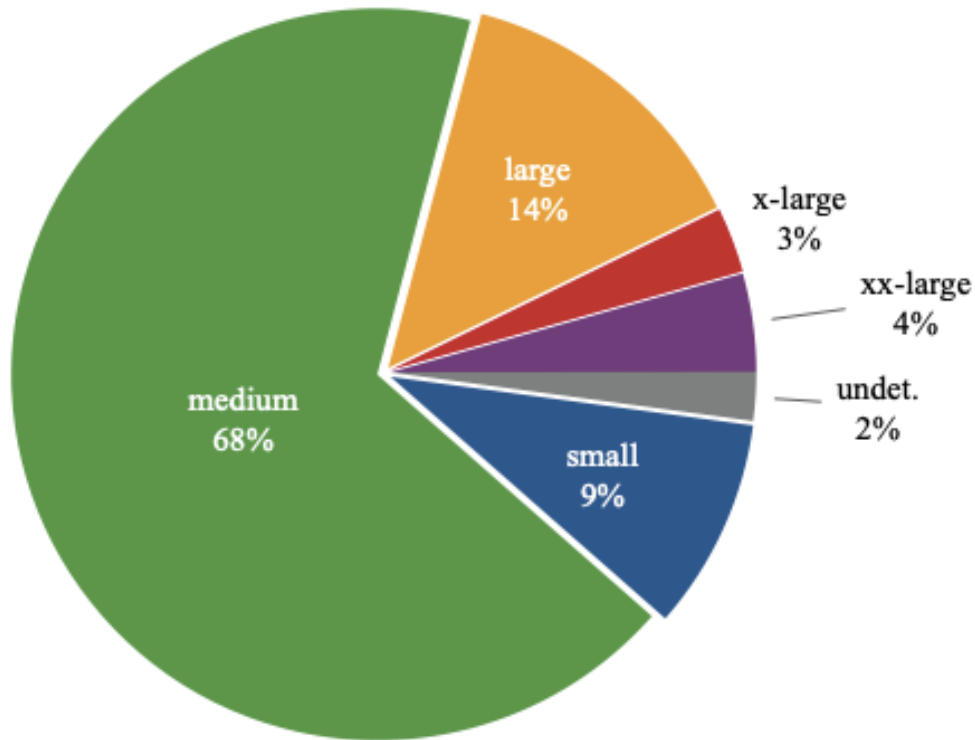


Figure 32. Size category frequency for Nunalleq uluat: small (n=13); medium (n=94); large (n=19); x-large (n=4); xx-large (n=6); and undetermined (n=3).

Shape

I further divided the handles into five shape categories (Figure 33): sloping rectangle (n=93), double-hump (n=16), rounded rectangle (n=14), dome (n=6), and zoomorphic (n=6). The majority of handles are in the sloping rectangle style (Figure 34). Double-hump and rounded rectangle styles comprise similar percentages, as do dome and zoomorphic types. Each type is described below.

Sloping rectangle. These handles are shaped like rectangles whose top left and right sides slope downward (Figure 33a). The majority (82%) of sloping rectangle handles have a U- or V-shaped notch at their center. There is significant diversity within this category, which is divided nearly evenly into concave (n=45) and convex (n=44) forms, and then further into 12 sub-styles within these.
































	style	sub-styles					
a.	sloping rectangle 	<i>concave: regular</i> 	<i>concave: flared</i> 	<i>concave: flat top plain</i> 	<i>concave: flat top inset</i> 	<i>convex: shallow angle</i> 	<i>convex: medium-angle, rounded</i> 
		<i>convex: medium-angle, pointed</i> 	<i>convex: steep angle</i> 	<i>convex: nearly flat</i> 	<i>convex: faceted</i> 	<i>convex: trapezoid</i> 	<i>convex: large curve</i> 
b.	double-hump 	<i>plain</i> 	<i>defined ridge</i> 	<i>flat top</i> 	<i>double-bump</i> 		
c.	rounded rect. 	<i>large and long</i> 	<i>medium stout</i> 	<i>cylinder</i> 			
d.	dome 	<i>notched</i> 	<i>no notch</i> 				
e.	zoomorphic 						

Figure 33. Nunalleq uluat typology by style and sub-style: a) sloping rectangle (n=93); b) double-hump (n=16); c) rounded rectangle (n=14); d) dome (n=6); and e) zoomorphic (n=6). See text4 for numbers of sub-styles. Note that the tapered - convex: large curve category (n=1) has no image available, and that there are no sub-styles for the zoomorphic category, as each of the six specimens is unique.

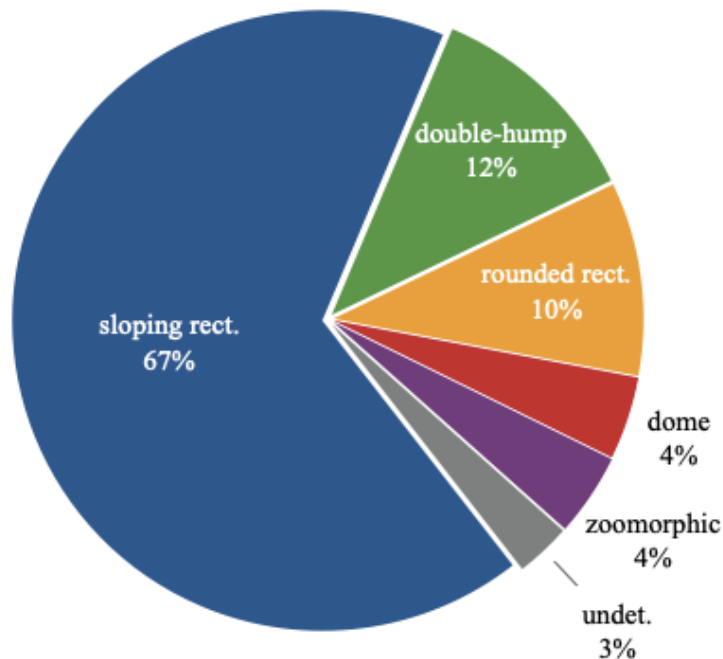


Figure 34. Shape category frequency for Nunalleq uluat: sloping rectangle (n=93); double-hump (n=16); rounded rectangle (n=14); dome (n=6); zoomorphic (n=6); and undetermined (n=4).

Concave sloping rectangle handles have silhouettes that dip beneath a straight line drawn from the edge of the handle to its highest center point, giving the handle a slightly concave shape. There are four sub-styles:

1. *Regular concave*: Each side of the handle is slightly concave in shape (n=8).
2. *Flared*: Each side of the handle flares upward such that one cannot draw a straight line along the entirety of the bottom edge (n=4).
3. *Flat top, plain*: The center top of the handle forms a flat surface (n=21).
4. *Flat top, inset*: The center top of the handle forms a flat surface, and an ivory or calcite inset has been placed in this flat surface. Note that this category is separated from flat top plain because of functionality considerations related to the inset (n=12).

Convex sloping rectangle handles have silhouettes that hit at or above a straight line drawn from the edge of the handle to its highest center point. There are eight sub-styles:

1. *Shallow angle*: The angle created where the two handle sides meet is between 157-167° (n=16). These handles tend to have a gently curving, elongated shape.
2. *Medium-angle, rounded*: The angle created where the two handle sides meet is between 147-157°, and the top of the handle is in a rounded shape (n=12).
3. *Medium-angle, pointed*: The angle created where the two handle sides meet is between 147-157°, and the top of the handle is in a pointed, almost triangular shape (n=5).
4. *Steep angle*: The angle created where the two handle sides meet is under 137° (n=5).
5. *Nearly flat*: The angle created where the two handle sides meet is greater than 167°, making these handles appear nearly flat across the top (n=2). The two specimens in this category are relatively small, under 6.5 cm.
6. *Faceted*: The handle is comprised of at least four surfaces running along the x-axis (n=2).
7. *Trapezoid*: The handle is in an extended trapezoidal shape (n=1).
8. *Large curve*: The handle has an exaggerated curved shape (n=1; note that no image is available for this sub-style).

Double-hump. These handles are characterized by two humps rising upward from a flat base (Figure 33b). The majority of double-hump handles (80%) do not have notches. There are four sub-styles:

1. *Plain*: The handle design is simple, with no elaboration (n=7).
2. *Defined ridge*: Each hump is bisected by a raised ridge running perpendicular to the handle's x-axis (n=4).
3. *Flat top*: Each hump is flattened on the top, rather than rounded (n=3).
4. *Double-notch*: The two-hump design is mirrored by two consecutive notches along the bottom of the handle (n=2).

Rounded rectangle. These handles are simple in shape, comprised of a rectangle of wood with relatively-straight but slightly-rounded edges (Figure 33c). The absence of a notch is characteristic of this group. There are three sub-styles:

1. *Large and long:* The handle is ≥ 11 centimeters in length, with an elongated appearance (n=6).
2. *Medium stout:* The handle is ≤ 11 centimeters in length, with a stout appearance (n=4).
3. *Cylinder:* The handle is a nearly perfect cylindrical shape (n=3).

Dome. Dome-shaped handles are defined by their semi-circular shape, with each side of the handle arching fully downward to meet the x-axis (Figure 33d). This category is divided into notched (n=3) and no-notch (n=3) sub-styles.

Zoomorphic. Each of the six handles in this category is unique (Figure 33e). All are carved in the shape of various animals, including pinnipeds (n=4), whale (n=1, but one pinniped may also be read as a whale), and the mythical *palraiyyuk* sea creature (n=1). None of these handles have notches, and their shapes are reminiscent of the rounded rectangle category. The only two uluaq made of ivory in the sample are zoomorphic, suggesting that these were special objects.

Relationships Between Size and Shape

Exploring the relationship between handle size and shape can help determine if these factors influence each other in handle design and functionality. In general, all handle shapes come in a variety of sizes, and medium-sized handles are most frequent across all possible shapes, mirroring the sample pattern as a whole (Table 3).

The majority of sloping rectangle handles (the most abundant shape) are medium-sized (the most common size), making medium sloping rectangle handles the most frequent of all types from Nunalleq (n=61). In fact, these sub-sets both occur in uncannily similar frequencies at Nunalleq, with medium sizes representing 68% of the assemblage and sloping rectangle shapes representing 67%. Given the frequency of these categories, I

decided to investigate their relationships more closely. Table 4 shows the distribution of sloping rectangle sub-styles across all size categories. To further hone my understanding of the medium size category, I used scatter plot data (Figure 35) to subdivide it into six sub-sizes A through F. Then, I explored how general handle shapes (Table 5) and sloping rectangle sub-styles (Table 6) were distributed across these medium sub-size categories.

	sloping rectangle		double-hump		rounded rectangle		dome		zoomorphic		undet.		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	n
small	9	10%	1	6%	1	7%	1	17%	1	17%	0	0%	13
medium	61	66%	13	81%	8	57%	5	83%	4	67%	3	75%	94
large	13	14%	1	6%	4	29%	0	0%	0	0%	1	25%	19
x-large	2	2%	1	6%	0	0%	0	0%	1	17%	0	0%	4
xx-large	6	6%	0	0%	0	0%	0	0%	0	0%	0	0%	6
undet.	2	2%	0	0%	1	7%	0	0%	0	0%	0	0%	3
TOTAL	93	100%	16	100%	14	100%	6	100%	6	100%	4	100%	139

Table 3. Uluat from Nunalleq by size and shape.

The data indicate that handle sizes are generally distributed evenly across handle shapes, and each handle shape comes in several sizes. There is some limited evidence that certain styles trend towards certain sizes. For instance, all six of the xx-large handles are sloping rectangles. Dome-shaped handles have a fairly limited size distribution within the medium category, only represented in sub-sizes B and C. For the sloping rectangle sub-styles, the two faceted uluaq are nearly identical in size, both falling into sub-size B.¹⁸ Flat top, medium angle pointed, and steep handles are only found in small and medium sizes, and within the medium category, these are skewed towards the smaller end of the

¹⁸ The nearly identical shape and size of these two faceted uluaq suggest to me that the same person made them.

	small		medium		large		x-large		xx-large		undet.		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	
regular	0	—	6	75%	2	25%	0	—	0	—	0	—	8
flared	0	—	2	50%	1	25%	1	25%	0	—	0	—	4
flat top - plain	3	14%	12	57%	3	14%	1	5%	2	10%	0	—	21
flat top - inset	2	17%	7	58%	2	17%	0	—	0	—	1	8%	12
shallow angle	0	—	12	75%	2	13%	0	—	2	13%	0	—	16
medium angle, rounded	0	—	10	83%	2	17%	0	—	0	—	0	—	12
medium angle, pointed	1	20%	4	80%	0	—	0	—	0	—	0	—	5
steep angle	1	20%	4	80%	0	—	0	—	0	—	0	—	5
nearly flat	2	100%	0	—	0	—	0	—	0	—	0	—	2
faceted	0	—	2	100%	0	—	0	—	0	—	0	—	2
trapezoid	0	—	1	100%	0	—	0	—	0	—	0	—	1
large curve	0	—	0	—	0	—	0	—	1	100%	0	—	1
undetermined	0	—	1	25%	1	25%	0	—	1	25%	1	25%	4
TOTAL	9	—	61	—	13	—	2	—	6	—	2	—	93

Table 4. Sloping rectangle uluat from Nunalleq by size and sub-style.

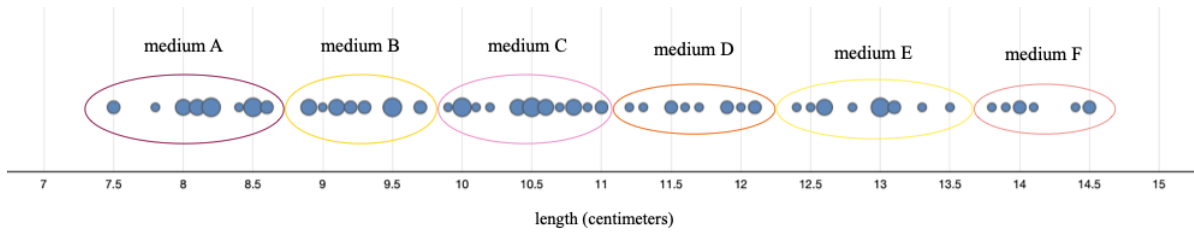


Figure 35. Medium uluat from Nunalleq, categorized into sizes A-F: A (7.5-8.6 cm), B (8.9-9.7 cm), C (9.9-11 cm), D (11.2-12.1 cm), E (12.4-13.5 cm), and F (13.8-14.5 cm).

	sloping rectangle		double-hump		rounded rect.		dome		zoomorphic		undet.		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	n
medium A (7.5 - 8.6 cm)	15	75%	4	20%	0	0%	0	0%	1	5%	0	0%	20
medium B (8.9 - 9.7 cm)	7	41%	4	24%	3	18%	1	6%	1	6%	1	6%	17
medium C (9.9 - 11 cm)	14	58%	1	4%	3	13%	4	17%	1	4%	1	4%	24
medium D (11.2 - 12.1 cm)	8	73%	1	9%	0	0%	0	0%	1	9%	1	9%	11
medium E (12.4 - 13.5 cm)	10	71%	2	14%	2	14%	0	0%	0	0%	0	0%	14
medium F (13.8 - 14.5 cm)	7	88%	1	13%	0	0%	0	0%	0	0%	0	0%	8
TOTAL	61	—	13	—	8	—	5	—	4	—	3	—	94

Table 5. Medium sub-sizes of Nunalleq uluat by shape.

	small		medium		large		x-large		xx-large		undet.		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	
regular	0	—	6	75%	2	25%	0	—	0	—	0	—	8
flared	0	—	2	50%	1	25%	1	25%	0	—	0	—	4
flat top - plain	3	14%	12	57%	3	14%	1	5%	2	10%	0	—	21
flat top - inset	2	17%	7	58%	2	17%	0	—	0	—	1	8%	12
shallow angle	0	—	12	75%	2	13%	0	—	2	13%	0	—	16
medium angle, rounded	0	—	10	83%	2	17%	0	—	0	—	0	—	12
medium angle, pointed	1	20%	4	80%	0	—	0	—	0	—	0	—	5
steep angle	1	20%	4	80%	0	—	0	—	0	—	0	—	5
nearly flat	2	100%	0	—	0	—	0	—	0	—	0	—	2
faceted	0	—	2	100%	0	—	0	—	0	—	0	—	2
trapezoid	0	—	1	100%	0	—	0	—	0	—	0	—	1
large curve	0	—	0	—	0	—	0	—	1	100%	0	—	1
undetermined	0	—	1	25%	1	25%	0	—	1	25%	1	25%	4
TOTAL	9	—	61	—	13	—	2	—	6	—	2	—	93

Table 6. Nunalleq sloping rectangle uluat by sub-style and size.

spectrum (sub-sizes A-C). In general, however, shape does not appear to be a major factor affecting uluaq size, and vice versa.

Blades

Nineteen uluaq specimens from Nunalleq were found with slate blades intact (Figure 36). Blades were categorized independently from their handles using three criteria: 1) blade shape, 2) the presence or absence of a flaring tip on the blade, and 3) whether the blade was inset or extending from the handle. Though a number of unattached uluaq blades have been recovered from Nunalleq, they are not analyzed here, though this is a potent area for future analysis.




shape	<i>semi-circle</i>	<i>rectangle</i>	<i>trapezoid</i>
	<i>long triangular</i>	<i>hexagon</i>	
flaring tip			
inset?	<i>extended</i>	<i>inset</i>	

Figure 36. Nunalleq uluaq blade typology. Note that these categories are overlapping; that is, uluaq blades of any shape can also have a flaring tip, or be either inset or extended.

Intact blades are divided into five shape categories. The majority (n=11, or 58%) are semi-circular, with the blade curved along the bottom. Four blades are rectangular, with a relatively straight bottom edge and sides rising parallel to the y-axis. Two blades are trapezoidal, with a straight bottom edge extending wider than the blade's top edge. Two are long and triangular, in a generally scalene shape with the longest edge oriented along the handle. The final blade is hexagonally-shaped, with five blade edges visible and a presumable sixth obscured by the handle.

Ten intact blades are shaped to have a tip flaring out from one side of the blade. Six of these are pointed tips, three are blunt tips, and one is somewhere in-between the two. The majority of flaring tip blades are semi-circular in shape (n=9, 90%).

Twelve blades extend lengthwise from the handles in which they are set. Most of these extended blades are semi-circular, and the degree of extension is variable between blades. Seven blades are inset into their handles, their edges not extending further than the length of the handle. All rectangular and trapezoidal blades are inset.

Yup'ik Perspectives on Uluaq Use and Functionality

During 2017 object-centered interviews, Quinhagak residents shared information on uluaq use in their community. Interview participants were invited to interact with three uluaq handles and blades of different sizes and shapes, while four others (three complete uluaq and one handle) were displayed as images on my laptop (Figure 37). I chose uluaq specimens for this exercise based on differences in size and shape, the quality of their preservation, and availability in the lab at the time of the interviews. In 2019, I learned more about Nunalleq's uluat from local uluaq expert and maker Willard Church (Figure 38). Willard and I spent about 90 minutes looking through the uluaq drawers in the Nunalleq Culture and Archaeology Center, and I recorded Willard's impressions of what he saw. The variety of uluat discussed and the depth of the dialogue were both greater in this scenario, as uluat were our sole focus. Though I did have specific questions for Willard, his expert eyes really led our conversation.



Figure 37. Nunalleq uluat shown to Quinhagak residents during 2017 interviews. Uluat on tray in image a. (#7258, #7053, #7800) were physically available for interview participants to interact with. Uluat from image b. (#47/17311, #7943, #7877, #7495) are the exact photos that were shown to interview participants on my laptop.

In all of these discussions, Quinhagak residents provided rich information and memories of uluat. It was typically an uluaq's size and/or blade shape that indicated its use to the participant, knowledge that was either based on personal experience or on witnessing others doing subsistence tasks. While handle shape was rarely a source of comment, handle size, particularly as it relates to the size of the intended user's hand, was a common theme. Though size and blade shape seemed natural categories for analysis from a Quinhagak perspective, it is also apparent that Nunalleq's uluat are diverse and speak clearly to innovation, individuality, personal preference, creativity, and mastery in terms of both object use and manufacture. Though some of these tools were likely specialized forms, versatility was more likely the rule, as the uluaq's generally semi-lunar shape lends itself to multi-functionality (Gillam 2009, 39).



Figure 38. Willard Church, Quinhagak resident and uluaq maker, at the 2018 Yup'ik Culture Fest Workshops. Willard holds a walrus skull and an uluaq, explaining some of the decisions that go into uluaq design to a group of local Yup'ik students. Photo by Carl Nicolai and Crystal Carter, from <https://nunalleq.wordpress.com/2018/11/08/yupik-culture-fest-workshops-2018/>.

Expert tasks of skinning animals, cutting sewing patterns, butchering, slicing, and chopping meat, filleting fish, and cutting moss and grass may have been best performed with tools tailored to these jobs. Expert toolkits are to be expected at Nunalleq, given the level of craft apparent in many objects from the site. In interviews, there was consistency in observations about certain uluat, strongly suggesting that these were designed for specific tasks. With the large numbers found at the site, it is likely that at least some people at Nunalleq had an arsenal of different uluaq to choose from for completing daily tasks. The same is true for Quinhagak women today. Julia Hill (2017), for example, explained that she has four uluat that she uses regularly: two that she inherited from her mother, and two that were made for her by her husband David, all of different sizes. Emily Friendly (2017) also has four: one uluaq to eat with, one to skin small things with (e.g., muskrat), one medium-sized one, and one so large that she has never been able to use it. Willard and his wife Mary Church have a total of 27 uluat in their household (Figure 39)—likely due to Willard’s role as an uluaq aficionado, but still an impressive number. Little information exists in the literature on the specific uluaq shapes and sizes used for different subsistence tasks (Gillam 2009, 39), but Quinhagak voices speaking about Nunalleq’s diverse and abundant uluaq assemblage help to fill this gap.



Figure 39. Mary Church and her uluaq collection.

Interpreting Uluqaq Size and Blade Shape

Many participants described the uluqaq presented in interviews in terms of their size, confirming that size is an important differentiating factor between these items. Part-way through our interview, Willard Church (2019) created his own organizational schema for the uluat: “the larger ones for cutting fish, the medium-sized ones for around the camp and in the mud houses where they prepared food, and the smaller ones for skin sewing.” For Willard (and others), size was a primary indicator of functionality. The size, shape, and sharpness of uluqaq blades helped observers narrow down the particular function of these objects. Most often, it was the nexus of uluqaq size and blade shape that indicated a particular subsistence use.

Uluqaq size is primarily determined by the size of the object it is intended to work, or the level of detail required by the work (Kawagley 2006, 65). Multiple sizes of skinning uluat would come in handy in a person’s toolkit, depending on the size of the animal to be skinned. The size of the handle might approximate the size of the blade when the blade is absent— particularly relevant for this sample, where the majority of handles are bladeless. Exceptions include #27926, where the handle is only about two-thirds the size of the blade (Figure 40a), so we must be cautious in extrapolating blade size from handle size. Complete uluat with blades and handles intact inspired the richest descriptions from interview participants, perhaps because it is difficult to assess functionality based on an uluqaq handle alone.

The size categories defined from the scatter plot data (Figure 31) are mostly consistent with how uluqaq size was defined by Quinhagak locals, with some informative differences. The “small” uluat noted by interview participants are very tiny, in the range of about 5-6 cm long; for example, #7877 (Figure 40b), which measures 5.6 cm, was universally referred to as small. This is also the case in the (limited) literature, with Iñupiat elders interviewed by the Smithsonian Arctic Studies Center (SASC) identifying a 5 cm long uluqaq as “small.” The small range for interview participants (5-6 cm) is more limited than my small designation based on the plot (4.5-7.5 cm). I defined the large category as 15-18 cm, with further x-large (19-21 cm) and xx-large (23-25 cm) categories

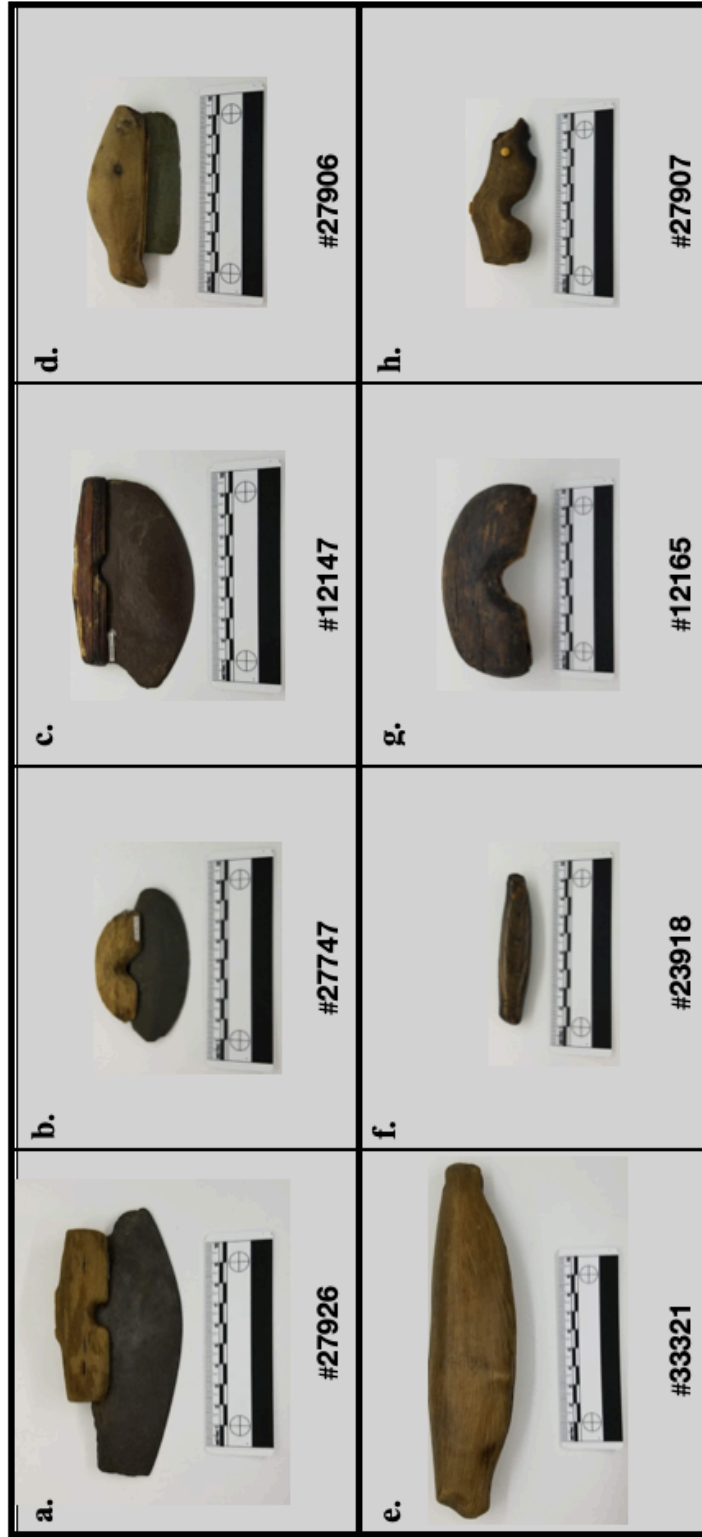


Figure 40. Uluk discussed or identified by Quinhagak residents in 2017 and 2019 interviews. Scale bar is 10 cm long.

beyond this. In interviews, uluat in any of these ranges were only referred to as “large.” For example, blade #7800 (Figure 37a), measuring approximately 21 cm long, is referred to as large, and the SASC identifies a similarly long Iñupiat knife of 25.5 cm in this way. The “medium” category is more difficult to delineate in interview data, but these fall somewhere between the “small” and “large” extremes, anywhere from about 9 to 15 cm. For example, blade #7053 (approximately 10-11 cm), handle #7258 (13 cm), and uluaq #7943 (13.1 cm) were identified as neither small nor large by participants (Figure 37). In the literature, Frink et al. (2003) chose a knife of 10 cm for their experimental work with expert women fish cutters in Chevak,¹⁹ suggesting that this size may be a median. All of this suggests that “medium” is a similarly broad and generalized category across perspectives. The boundaries of all of these size categories are fuzzy and in-absolute (in the vein of Gero 2007). The ranges between localized versions of “small” and “medium” (from about 7 to 9 cm) and between “medium” and “large” (from about 15 to 19 cm) are particularly liminal.

Sewing

Small uluat measuring 5-6 cm were useful as sewing tools for cutting patterns and trimming threads (Emily Friendly 2017, Frank Matthew 2017, Willard Church 2019). Several Quinhagak residents noted this specific size association with sewing, and Yup'ik elders elsewhere have made similar observations. In interviews with Fienup-Riordan (2005,157), Catherine Moore (Yukon area) and Annie Blue (Togiak) confirmed that the smallest of uluat are used “to cut out patterns” and “for making boot soles.” In viewing an Iñupiaq “woman’s small knife” of 5.6 cm in length, Faye Ongtawasruk (Wales) identified the tool for use in sewing, and Oscar Koutchak (Unalakleet) recalled that “you keep this in your *immusrfik* [sewing bag]. My mother has real small ones, about like this [approximately two inches], but real sharp, primarily for sewing” (Smithsonian Arctic Studies Center 2020).

¹⁹ While the people who live in Chevak are culturally Yup'ik, they speak a dialect of Cup'ik, and both “Yup'ik” and “Cup'ik” are used in the literature in reference to this community (e.g., Frink 2003, 2016).

As Koutchak suggested, a sharp blade was necessary for clean sewing cuts. Willard Church (2019) identified uluaq #27747 (Figure 40b) as likely used in sewing not only for its size, but also because “the blade is ground at a higher bevel too — that means they wanted to have a sharper edge on it...They really sharpened this one up. Probably for cutting the patterns out of the skins when they were preparing to make clothing.” Such blades shaped to easily pivot and bevel were important for creating “close-fitting piecework” (Smithsonian Arctic Studies Center 2020).

A number of Quinhagak residents mentioned that small uluat are specifically used for making *mukluks* (skin boots). Mukluk construction involves the detailed work of piecing together small bits of skin that have been precisely cut— a job well-suited for tiny uluat. Martha Matthew (2017) explained that her mother used to use a small uluaq to make boots, and John Fox (2017) recalled seeing his late mother Julia Fox do the same. Based on these recollections, Fox immediately identified #7877 (Figure 37b) as an uluaq used “for putting the soles of mukluks on the bottom,” and also “what they use on the toe area and the heel area.” Jimmy Anaver, Joshua Cleveland, and John Smith (2017) also made this assessment of #7877, noting that the uluaq would be used for cutting the skins, working on the toe-side of the mukluks, and making grooves along the outside sole of the boot. Small uluat were used similarly by Iñupiaq, including cutting beveled edges and creasing the strips used as seams between mukluk uppers and lowers to make them waterproof (Smithsonian Arctic Studies Center 2020). It is highly likely that #7877, and perhaps other uluat of similar size, were used for making mukluks.

Skinning

A number of uluat might have been useful for skinning tasks depending on an animal’s size, but small uluat were particularly so. Several interview participants associated small uluat with skinning; for example, John Fox (2017) explained that “smaller knives” like #7877 can also be “used for skinning animals.” In their interview, Grace Hill, Julia Hill, and Pauline Matthew (2017) observed that “they used to make those smaller ones when they scrape the skin.” Grace Pleasant and Jamie Small (2017)

conferred, finding that “the smaller [uluat] they use, maybe (for) skinning.” Small fur-bearing mammals such as beaver, fox, mink, muskrat, river otter, and squirrel would have been especially good candidates for skinning with small uluat (Willard Church 2019, Martha Matthew 2017).

Larger knives may also have been useful for removing skin and fat from bigger animals, such as seals and walrus. Annie Cleveland (2017) suggested that blade #7800 (Figure 37a) was used “maybe to skin the animal,” because the long blade would have helped someone to “reach inside.” Jimmy Anaver (2017) also described using a larger sized knife for skinning seal, and Frank Matthew (2017) explained that big knives like #7800 are useful for “seal, (for) oil (blubber) they have to scrape off.” Emily Friendly (2017) made a similar association for large knives, but referenced walrus. Kenneth Toovak (Barrow) referred to the “big ulu” in the SASC Iñupiat collection as a “seal fat flenser,” which Ron Brower, Sr. (Barrow) confirmed: “this can be used for many things. It can be used for flensing fat off of seals. It can be used for skinning a variety of animals” (Smithsonian Arctic Studies Center 2020). Faye Ongtawasruk added that such a knife “might be good for *amikrsraq* [skin], you know. *Amiksriuqtuat* [when they make skins (for skin boats)]... Walrus skin, they use big ulus” (Smithsonian Arctic Studies Center 2020). Ongtawasruk is referring to the Iñupiat process of preparing walrus skins for making skin boats, similar to the Yup’ik method of *qayam amiryaraa*, or skinning a kayak, which is usually done with bearded or spotted seal skins (Fienup-Riordan 2007, 97).

Both the size and the blade shape of uluaq #12147 (Figure 40c) indicated to Willard Church (2019) that this was “a skinning and fleshing knife for small land animals.” Willard found the size of this uluaq (9.2 cm) ideal for skinning fox, beaver, mink, or otter. The flaring, “extended tip” of this blade would have allowed the user to “get in (to the animal) and do a little more work; like when you get down to the paws, you've got to do more detailed work, to get them cleaned up and cut off.” This was also true for “the eyes, the nose, right around the mouth, the lip area.” Though #12147 is the only blade in the sample with such a nicely accentuated flaring tip, nine additional blades

have some sort of extended tip that may have been useful for this detailed work of probing the tighter spots of an animal's anatomy (Figure 36).

Quinhagak residents discussed other considerations for skinning blades in interviews. Grace Pleasant and Jamie Small (2017) and Frank Matthew (2017) all found long blades to be best suited for skinning or scraping, because a longer blade gives a person greater access to the inside of the animal. Willard Church (2019) explained that for skinning, you want the blade to be “more rounded, because you can take the fat off” more easily with a blade of this shape. Jimmy Anaver (2017) noted that slate blades may be better than more modern metal ones²⁰ for skinning tasks, because the slate material “won't scratch the skin” or make holes in it— goals that are important, but difficult, to achieve when skinning.

Seal Skin Pokes

Small-sized uluat would have been useful for the specialized task of making seal skin pokes, which require the animal to be skinned whole. Speaking generally of seal-skinning, Willard Church (2019) explained that “from experience, you don't use a big knife for fleshing seals... you want a medium-small size,” which allows you to make shallower cuts and keep the knife clean more easily. Jimmy Anaver (2017) recalled “the traditional way” that his mother used to skin seals, starting to cut at the face and continuing on around the body, and small uluat were especially useful here for skinning around the hands and feet. Once skinning was complete, the poke would be dried inside out, and then inflated with air through the belly button. A similar process was used by Iñupiaq for making seal pokes. According to Estelle Oozevaseuk (Gambell), a “woman's small knife” would be used to “cut around the whole seal... We cut it right around the neck and then split the blubber off [inside] all around” (Smithsonian Arctic Studies Center 2020; see also Frink and Giordano 2015 and Moss 2020).

²⁰ Anaver's (2017) observation is an interesting complement to the findings of Frink et al. (2003) that metal blades are much better suited for fish cutting than those of slate. Although women's fish-cutting work may have thus become easier with the advent of metal knives, the opposite may have been true for skinning tasks.

Cutting Seal Blubber

Willard Church (2019) identified one particular knife— #27906 (Figure 40d)— as a likely “seal blubber knife” due to its design, size, and the shape and sharpness of its blade. As Willard (2019) stated, “I wonder if they used this for cutting the blubber into small strips... You have to cut the seal blubber after you take it off the hide, into long strips, and then cut it and put them into a container to render into oil.” This uluaq is 9.1 cm long, a size well-suited to this cutting task. In addition, the “really thin” blade and the “really flat” cutting edge would have been ideal for cutting blubber. That this uluaq handle is beautifully carved into the shape of a seal further hints at this use, for as Willard (2019) explained, “the animal designs were probably designed for that, to show respect for the animal that the knives are going to be used on.”

Cutting Fish

Fish cutting is likely as ubiquitous an activity in Quinhagak today as it was for the ancestors at Nunalleq. Referring to the entire Nunalleq uluaq assemblage, Willard Church (2019) postulated that “a lot of these uluaqs were probably used for preparing and cutting salmon.” Indeed, uluat all along the medium-to-large size range would have been useful for cutting fish.

On the smaller end, Annie Cleveland (2017) suggested that gently curved blades like #7053 (Figure 37a), measuring approximately 10-11 cm, “were only used by women cutting fish.” This size and style of knife is similar to those chosen by Frink et al. (2003) in their fish cutting experiments with elders in Chevak, which measured about 10 cm and had symmetrical, curved, slightly flaring blades. Considering the utility of the replica knives post-experiment, elder Angelina Ulroan (Chevak) “suggested that this style and size of knife could have been used on smaller fish like the whitefish rather than the larger salmon” (Frink et al. 2003, 119).

Uluat in the 12-15 cm range were also likely used for cutting fish. Willard Church (2019) identified uluaq #7943, which measures 13.1 cm long, as likely used for this

purpose (Figure 37b). As Kawagley (2006, 57) confirmed, the uluaq “for cutting fish is usually five to six inches across the curved blade,” or approximately 12.7-15.2 cm. Kawagley (2006, 57) describes the cutting process with such a medium-sized knife in detail:

For cutting through fish bone, the front end of the blade is placed against the bone: then pressure is applied with the hand and arm. The cutting force can be awesome because the arm, the handle and the blade become aligned when weight is applied. For filleting, the blade and wrist become a smoothly operating machine. If the cut is away from the woman, the filleting is started with the front of the blade, and the wrist is rotated away as the cut is made. The women does the opposite move if she is cutting toward herself. Many women have very smooth, efficient wrist movements, bringing their hands back and forth to make deft, even cuts. The uluaq is truly a marvelous tool, using a minimum of materials and energy and has numerous uses.

Larger knives could aid this sometimes-forceful cutting process. Quinhagak residents most often identified “large” knives of about 17-21 cm for use in fish cutting, with Willard Church (2019), Joshua Cleveland (2017), Frank Matthew (2017), Grace Pleasant (2017), Jamie Small (2017), and John Smith (2017) all explaining that knives like blade #7800 (Figure 37a) were used for cutting fish. Grace Hill, Julia Hill, and Pauline Matthew (2017) agreed that large blades could be used to chop fish heads, and particularly those of large king salmon, although Julia mentioned that she prefers to use a medium-sized uluaq for this task. Both Annie Blue and Catherine Moore agreed that the large uluaq they observed with Fienup-Riordan (2005, 157) was “used on king salmon.” The Iñupiat large knife of 25.5 cm, which Oscar Koutchak referred to as a “real big ulu,” was likely “made for cutting fish,” amongst other tasks (Smithsonian Arctic Studies Center 2020). As with other knives, the size of the large uluat likely corresponded closely to the size of the fish being cut.

Although many modern fish-cutting uluat have curved, bell-shaped blades with flaring sides, Willard (2019) pointed out that uluat with “longer handles” and “longer, flatter, plain blades” would have been good for producing the long cutting strokes necessary to divide fish flesh into slabs, a local cut of fish (Figure 41). Willard had

recently designed an uluaq based off of #7943 (Figure 37b; but his was a bit longer, measuring about 7 inches, or 17.8 cm), and he found this knife to be good for cutting fish in this way. Based on old photos from the early days of Quinhagak, Willard (2019) also observed that

you don't see a lot of strips. They made a lot of dried fish, because in the early days, you know...salt wasn't readily available like it is today, the rock salt used for brining the salmon strips like we do now. So they made a lot of dried fish...And they weren't separated either: they were hinged at the tail, the last joint of the tail.

This is similar to conclusions that Frink et al. (2003) reached regarding the efficacy of cutting fish into strips with slate-bladed knives, which they found to be prohibitively inefficient. The practice of cutting fish into strips may have emerged relatively recently.

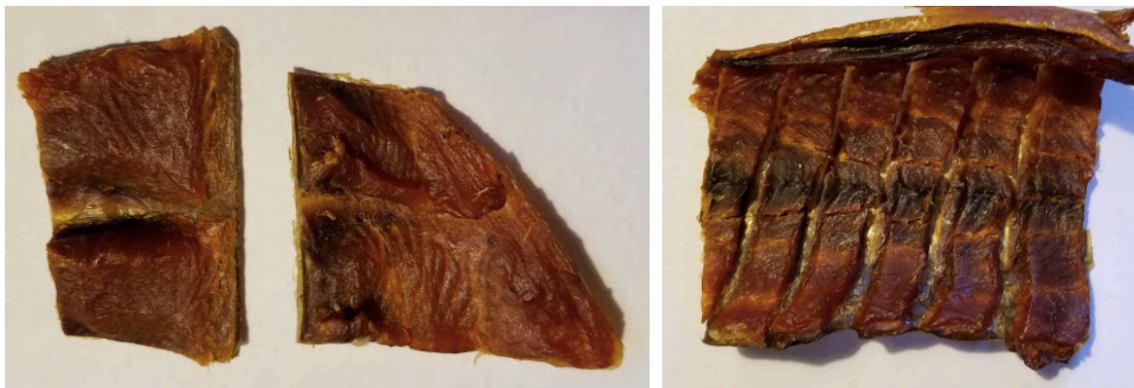


Figure 41. Salmon slabs (left) versus salmon strips (right). Both are common cuts of fish in Quinhagak. Thank you to Julia Hill for the gift of this cut and smoked fish.

Butchering

Large uluat would have been useful for big butchering tasks, particularly large animals such as bearded seal, walrus, and beluga whale (Smithsonian Arctic Studies Center 2020; Fienup-Riordan 2005; Issenman 1997). Jimmy Anaver (2017) found that blade #7800 (Figure 37a) was “for the biggest seals, to cut,” and suggested bearded seal as a likely candidate. Willard Church (2019) identified the shape of the beautifully carved

handle #33321 (Figure 40e), measuring 19.2 cm, as “bearded seal, the old man of the sea, wisest of them all,” and indicated that this was likely the animal butchered with this tool. Large knives could also be used for “flensing whale blubber or cutting up large mammals” (Smithsonian Arctic Studies Center 2020). Considering large butchery tasks on “walrus or whale skin,” Jimmy Anaver (2017) wondered how his ancestors could have performed this work with slate-bladed knives, which dull easily. But Anaver (2017) concluded that “those people were strong,” and that the large knives could be easily sharpened.

“Everyday” Uluaq

Although most uluaq from Nunalleq were likely multifunctional, Willard Church (2019) suggested that medium knives would have been the most generalized and widely used size of all. As he stated, “medium sized uluaqs, even today, are preferred by ladies in the kitchen,” and these are “used for everyday purposes around the home” (Willard Church 2019). In considering the tray of knives during her interview (Figure 37), Annie Cleveland (2017) joked that handle #7258, measuring 13 cm, would be just about the right size for her to use around the home. Noting the abundance of medium-sized uluaq in the Nunalleq assemblage, Willard (2019) commented: “it’s all medium-sized; nothing has changed.”

Handle Shape

Few Quinhagak residents commented on handle shape in 2017 interviews. This may be because two of the three uluat presented on the tray during interviews were blades only; however, participants did view images of four additional uluat with handles (Figure 37b), so handles were certainly available for consideration. I suspect that handle size and blade shape trump handle shape for understanding uluaq functionality from a Yup’ik perspective. In my 2019 interview with Willard Church, with the (near) entire Nunalleq uluaq assemblage at our disposal, I asked specific questions pertaining to the

shape of uluat handles to better understand how local users and makers think of these components.

Not all uluat from Nunalleq would have had handles, but as Jamie Small (2017) explained, “the handle makes it work better,” because it allows the user to “push down” on the blade more successfully. There are multiple factors at play in uluaq handle design, including grip, “how you want your hand to be shaped when you're doing the work,” “the kind of work,” the size of the user’s hand, “the shape of the cutting edge,” the type of animal one is working on and one’s relationship to its spirit, and, of course, the aesthetics of good design (Willard Church 2019). All of these factors intersect in handle morphology.

Ensuring a good grip is one of the most important components of successful handle design (Martha and Frank Mark 2017), and understandably so, as processing animals is a messy job, and the last thing that an uluaq user wants is to have their sharp knife slip from their grip mid-slice. Issenman (1997, 62) suggested that the length of the handle was important in determining the grip of Inuit knives, as a longer handle “provides a secure grip even if the handle is slippery from grease and blood.” Grace Pleasant (2017) pointed out that the inclusion of a notch, or indent, at the center of the handle was likely related to grip, and important “because the fish are slimy.” In Willard’s (2019) opinion, the size and style of a notch will help the handle to fit well in one’s hand, while also keeping one’s pointer finger on the forward portion of the handle, and he makes some of his uluat with notches for this reason. But for Willard (2019), grip is best ensured through the handle’s shape, because “if you have a bloody hand, your hand is less prone to slipping on (a) handle with a flatter...design with square edges.”

Material choice may have also played a role in creating good-gripping knives. The vast majority of uluaq handles from Nunalleq are made of wood (98.5%), and only two are made of ivory, a smooth material that would have inhibited a good grip (also suggesting that the ivory knives were not used for messy tasks). But discussing handle material, Willard (2019) suggested that the choice to use wood may have had more to do with ivory’s rigidity versus wood’s pliability. Since “wood will swell and tighten up,” it

would have allowed a maker to create a “self-maintaining blade insert.” (Willard mentioned that this is the same principle that makes wooden boats impermeable). The SASC (2020) describes this process: “The maker would have soaked the handle in water, inserted the blade, and then let the wood dry around it for a shrink-tight fit.” Frank Matthew (2017) noted other benefits to using wood for uluaq handles, namely that this is “an easy and soft material to work with,” which “gives you lots of options for shape.”

Willard (2019) suggested that some decorative components of uluaq handles may have also allowed for a good grip. Looking at a handle with inserts on three sides, he stated that these “(don’t) really serve any functional purpose,” but could have helped provide traction to prevent the handle from moving around in the user’s palm. On the elaborately incised ivory seal-shaped handle (#23918; Figure 40f), Willard (2019) suggested that the “life line” design etched along the “spine” of the seal both “make it look nice and improve the grip” (see Chapter VIII, Figure 58).

As a craftsman, Willard’s (2019) preferred style of uluaq handle “retains the more squarish features,” further indicating the importance of grip. As he explained, “with a handle that’s a little more square, especially on a bigger knife, you are able to hold it a lot better, and give it more leverage, if you’re going to do some heavy cutting, and put a lot of pressure on it.” Even so, one of Willard’s favorite uluaq from the Nunalleq collection is in a very different style— #12165 (Figure 40g), a rounded, dome-shaped handle. Considering this uluaq, Willard (2019) stated “this is a really good design here, I like it...It could be a modern handle.” Willard was especially impressed by the way that the maker of this uluaq carefully “hollowed out” a bit of the body, making a concavity that would improve the user’s grip on the smooth dome. Not only did this design choice make the uluaq more functional, but it also “makes them look really pretty” (Willard Church 2019). The most remarkable uluaq designs seem to be those that strike a balance between utility and beauty.

It is perhaps for this reason that Nunalleq’s cylindrical handles (Figure 33c) gave Willard pause during our interview. As rounded as they are, cylindrical handles do not provide the user with much traction, and the shape would have inhibited a good grip.

Looking at these handles, Willard (2019) posed a question: referring to the maker at Nunalleq, “why would he make a rounded handle?” He then answered for himself: “Oh I know! He was a younger uluaq maker. He was more modern. He was testing out some new designs. He was trying to help the uluaq-making practice to evolve.” Though Willard made this comment in jest, I think his intuition is sound. There are only three cylindrical handles in the collection, indicating that this was an uncommon style. Today’s uluaq makers are “always trying out new designs,” and Willard (2019) imagines that this was the case at Nunalleq, too: “someone was testing out a new handle design and see what kind of response they got from the ladies in the village— that’s how I can see it.” Though functionality would have played an undoubtedly large role in determining handle design, the creativity of the maker was also consequential, for as Pauline Matthew (2017) explained, “it’s the maker’s choice to decide the style” of an uluaq handle. The diversity of Nunalleq’s handle shapes and sub-styles, and the fact that few of these correlate closely to different sizes, speaks to the innovative nature of the makers.

Relationality to the spirit world was likely also at play in certain handle designs. Yup’ik philosophy dictates that animals will give themselves to people who respect them, and one way of demonstrating respect is to use tools for animal processing tasks that are both well-maintained and beautifully designed. In considering the zoomorphic handles (Figure 33e), Willard (2019) explained that “all the animal designs were probably designed for that, to show respect for the animal that the knives are going to be used on.” The ivory seal-shaped handle, #23918, is a perfect example (Figure 40f; and see Chapter VIII, Figure 58). Beautifully carved and embellished with numerous decorative incisions, the knife, likely used in skin sewing, reminded Willard (2019) that “you’ve got to have pretty tools to make pretty things.”

Though the sloping rectangle handle shape was the most common at Nunalleq, this type was not expressly discussed by Quinhagak residents. This is not a design that Willard (2019) makes or uses himself, and although tapered handle #7258 was included on the tray of artifacts presented during interviews (Figure 37a), the design drew little commentary. Very few, if any, of the uluaq collected in late 19th century Alaska and

documented by ethnographers like Nelson (1899) resemble the sloping rectangle uluat from Nunalleq, suggesting that this design may be unique in both time and space.

Considering the Uluaq User

Quinhagak residents explained that the identity of an uluaq's intended user²¹ could affect the object's shape, size, and style. Frink et al. (2003, 116) describe the uluaq as a "personal and curated item" because these objects were custom-made for specific persons, and may have thus been cherished and kept close. Annie Cleveland (2017) illustrated this well with the story of her own "perfect" uluaq:

I had a favorite uluaq. One time I lost it -- I was cutting grass in my yard, and I take the whole grass...down by my smokehouse. And after all that work for how many days, I realized my favorite uluaq is gone. I turned my house upside down how many times, looking, and I even checked my trash!... And that pile of grass was like this [Annie gestured her hands high]...getting really high. I cut all the grass around my house, and down by my fish rack. And next year, I was still looking. Next year that big pile of grass was down. And, I think, what if I dump the grass along with my uluaq down there? So I got out, and went down to where that pile used to be, and dig around, and sure enough, there it was. I found it! [The uluaq that] I really like, that fits my hand just perfect. And I even told my kids: when I die, instead of flowers, put this knife in my hand!

Though uluat are by definition "women's knives," a number of interview participants suggested that knives of certain sizes and shapes were more likely used by men for their various subsistence-related tasks. In addition, like many other Yup'ik technologies, uluat would have been custom designed to fit in the hands of their intended users, and thus the size of the knives may be indicative of the user's age. Knowing this, is it possible to predict the types of people who once owned, used, and cherished the uluat from Nunalleq?

²¹ The identity of the uluaq maker may also have been important; see Chapter VIII.

The Gender of the Knife

Uluat are an interesting case of gender attribution. Gendered as “women’s knives,” these are immediately evocative of certain forms of subsistence labor that women tend to perform in Yup’ik communities. At the same time, the uluaq can be a symbol denoting identity *beyond* the feminine — it can be an emblem of Alaska Native cultural pride, or an icon of strength and achievement more generally (Gillam 2009, 58-61, Issenman 1997). In addition (and as demonstrated by my first uluaq mentor Larry), Yup’ik men are not strangers to using uluat, and not just because this technology is important for survival, but because boundaries between genders are not strictly maintained in Yup’ik subsistence. Thus, there is no simple, one-to-one correlation between uluat and female user-ship.

People in Quinhagak discussed the gendered nature of uluat during interviews. Most often, gender was mentioned in relation to knives that were cataloged with uluat but that may have been made for men, suggesting that uluat are associated with women by default, but that the typological lines separating differently gendered knives are not always distinct. For example, Willard Church (2019) identified #27907²² (Figure 40h) as “probably a man’s uluaq,” because the handle is shaped to hold an extended blade, and because it is

more decorative...you know how men are when it comes to knives: they want the prettiest knife that they can have. Probably nothing has changed from then to now. We all want to have a beautiful knife to carry with us, so we try to add additional artistic features to the handle or the blade, to make it stand out, to be prettier than your hunting partner's knife.

Willard (2019) also explained that knives “with the longer blades would be men's knives;” indeed, Willard identified “men’s knives” as one of the uluaq sub-sets in his size categorization of the assemblage. In their group interview, Jimmy Anaver, Joshua Cleveland, and John Smith (2017) conferred that blade #7800 (Figure 37a) “might be the men’s knife” due to its size, which John Smith suggested would be good for butchering

²² Willard’s identification of this knife, as well as its unusual shape, led me to exclude it from the uluaq analysis.

meat. Size was also at play in Willard Church's (2019) description of "women's knives," for as he explained, the "smaller ones (would be) for the women" for activities "in the house," like "cutting meat, cooking." For Quinhagak locals, there are many factors, including a tool's decoration, size, shape, and affiliated activities, that hint at its user's gender.

Since size and shape relate closely to a knife's utility, this may actually point to linkages between gender and activity. Quinhagak residents confirmed this pattern in 2015 interviews in which they were asked to discuss and define Yup'ik concepts of gender. Although literature has long acknowledged that task differentiation is one of the most important lenses for understanding Yup'ik gender roles²³ (Ackerman 1990; Fienup-Riordan 1994; Frink 2003, 2005, 2007, 2009; Jolles 2002; Jolles and Kaningok 1991), it was powerful to hear how locals expressed these ideas in their own words. Subsistence and its associated roles and activities was a recurring theme in conversations about gender, with men's and women's contributions considered distinctive. Quinhagak residents' commentary often focused on the *quality* of these actions rather than just the actions themselves.

A majority of 2015 pilot interview participants (n=11) defined men's roles in Yup'ik communities as acquiring resources for their families, with just over one third of people (n=5) specifically using the terms "provide" or "provider" in association with men (Sloan 2020b). In the words of Emma White (2015), a man is "a provider, someone who hunts." Annie Cleveland (2015) concurred, stating that "in (the) Yup'ik family, the father — the man of the house— is the hunter and provider." Provisioning the family not only includes hunting and fishing, but also providing resources such as wood and, in modern times, money. It makes sense, then, for "men's knives" to be those useful for the immediate butchery tasks necessary for bringing food back from the tundra or sea— the

²³ Yupiit are not alone in embracing gendered task differentiation as a way of organizing their communities (see Bodenhorn 1990 for Iñupiat, Guemple 1995 for Inuit; and outside of the Arctic, see Spector 1983 for Hidatsa, and Gero and Conkey 1991, Wright 1996, and Nelson 2007 for general overviews, amongst many others).

larger knives, or those with long blades allowing for butchery of big animals at their joints at the places where they were acquired (Willard Church 2019).

There was an almost equally strong association in interviews (n=10) between women and the work of clever, efficient processing of food resources (Sloan 2020b). Fannie Johnson (2015) explained that “a woman's role is....having to take care of men's catches before they get bad or before they spoil.” Discussing women’s roles in the context of the family, Pauline Matthew (2015) described her mother’s role as “when my dad comes back with something like game, she gets up and takes care of it right away.” John Fox (2015) expressed similarly: “This woman has to take care of everything this man catches, and not just his wife but also other female family members.” The expeditious cleaning, processing, preparation, and storage of food would have been integral to the survival of Yup’ik communities, especially before the time of refrigeration. Being able to wield an uluaq well for tasks of skinning, flensing, butchery, and cutting likely contributed to a woman’s sense of self and purpose.

Although Quinhagak residents differentiated between women’s and men’s subsistence roles, they also communicated a sense of flexibility regarding which gendered bodies could perform each task. In contemporary Quinhagak, it is not uncommon for men to help their wives to cut fish or pick berries, or for women to hunt and fish alongside their male relatives. John O. Mark (2017) explained that it is “both genders...pitching in here and there. My wife will...teach my grandsons and granddaughters. Knowledge is passed on, shared, in whichever way is convenient.” Similarly, Willard Church (2017) noted that

it’s more of a ‘we do things together’ role. Whether it’s cutting fish, or plucking birds, or taking care of game animals, or skinning seal, or gathering wood—there’s no his and hers role anymore. It’s something I think that is taught, maybe from old teachings, but in our contemporary culture today, those role differences have changed considerably, to where it’s now both of their responsibility.

Even traditional Yup’ik teachings state that husbands should help their wives with women’s tasks. As Frank Andrew (Kwigillingok, in Fienup-Riordan 2018a, 197) noted,

they say a man...should try to help (his wife) and work alongside her. This goes for both a woman and a man. A man will not sit around because he is a man, even though he can complete women's tasks. If he loves his wife, his spouse, it is his duty to help her work, even though it's considered women's work. I am not lying now to say that I know how to sew because I was taught. I know how to sew and cook. And even though my wife's not capable of completing all of men's tasks, she also helps me because she was also taught. That is good.

Recall that a young man, Larry, was my first uluaq teacher, not only because of this flexibility, but because the most important factor in the moment was our timely processing of a fish, rather than the gender or skill level of the uluaq user. In discussing fish processing tasks, Emily Friendly (2017) explained that "it's a nice surprise to see a guy helping his woman doing fish harvest...It's a nice surprise to see guys cutting fish," but at the same time,

a group of men might be looked down on if they were harvesting fish, hanging them, and smoking them while the women go off and do other things. Unless she was in the hospital or really sick, or going to school, then every other woman would have an excuse to gossip about that! Because women traditionally are the ones working on that part...But that doesn't mean that men don't know how to do that job. And a lot of them are good cooks, too!

Emily's words suggest that the *timeliness* of the labor is of far greater importance to Yup'ik people than the gender of the person performing that labor. That is, the concept of shame only enters into the equation when a man is filling in for a woman who is lazy or incapable; otherwise, his "women's" labor is seen as noble, and a boon to the community and his family relationships.

Other cases point to a different kind of gendered subsistence flexibility wherein children of one gender will be taught the roles and responsibilities of the opposite from a young age, sometimes becoming well-known or skilled practitioners of these tasks. Two interview participants, both men, discussed being brought up in this way. The first was taught by his mother from a young age to do cooking and cleaning tasks with her, partly because there were no daughters in their family and the work needed to be done. The

second man was interested at a young age to learn skin sewing, and so his adoptive grandmother taught him. Eventually he became skilled at this, and is known today in Quinhagak as an expert. In his work with the Akiak community, Kawagley (2006, 13) also references men learning traditionally women's tasks, explaining that "some Yupiaq men become skillful fish cutters." These situations are inherently different from the more casual contexts where someone like my friend Larry might use an uluaq to cut fish— that is, Larry knows he is not an expert, has not necessarily been trained to do this task well, and likely would not choose to engage in the task if it weren't obligatory given the time constraints of the situation. Importantly, when men are trained to do such tasks, it is done "without shame" (John Foster 2015).

While contemporary Yup'ik communities practice gender separation only casually, it is difficult to determine the antiquity of this pattern. Modernity and westernization have played a role in the permeability of gender in Quinhagak today, but it is also apparent that a Yup'ik worldview accommodates such flexibility. What does this imply for how we think about task differentiation at Nunalleq, and the gender of the ancestors who used the uluat found there? Considering action as a root of identity-formation helps to parse these complexities. As Paul John (Nelson Island) explained in Fienup-Riordan (2005, 157), "uluat are considered women's tools, but some men use them when they work on seals." John draws a distinction here between an idealized association between the tool and a specific gender identity, and that practical action does not always reflect this ideal. Thus, we can think of the uluaq as a symbol for ideal femininity through its association with women's labor and the values associated with its proper execution, but we should not uncritically equate the physical artifacts with an individual gender identity. Implicit here is the notion that action is what makes a person who they are, rather than identity being inherent to a person. Uluat are tools that are used in the process of crafting identities, rather than tools used *because* of a specific gender identity (i.e., I wouldn't use an uluaq because I'm a woman; I would use an uluaq because I need to cut fish, an activity that is associated with women). Uluat are interesting vis-a-vis gender because the actions that they facilitate are gendered, not because they indicate the gender of their users in any

absolute sense. As we have seen, any person, no matter their gender, may use a “woman’s knife” “without shame” while adhering to the predominant Yup’ik cultural narrative.

The complementary nature of gender roles in Yup’ik cosmology is also relevant. Male and female are considered parts to a whole, with balance between these components necessary for the well-being of the universe. The aforementioned trend in flexibility suggests that we might differentiate the essential gender role from the person filling the role in any given moment. While something like a “woman’s role” or “man’s role” remains consistently necessary and thus relatively static (e.g., a community will always need “providers”), the gender of the person filling the role is less important than that the role gets filled, at least for certain types of subsistence labor. In this complementary schema, while the roles themselves may be non-negotiable, the means through which they are successfully filled can be flexible. As long as the work of subsistence gets done well and with the proper values attached to it, the gender of the body doing the labor does not upend the complementary gender dynamic.

Gender roles within the complementary system are valued equally, with neither male nor female contributions appreciated above the other. Quinhagak residents expressed a sense of mutual appreciation when discussing the roles of the opposite gender, a sentiment that echoes Ackerman’s (1990, 220) observation that “no great discrepancy in status existed between Yup’ik men and women.” This aligns with Yup’ik conceptions of the value inherent in all beings, a theory that “each does its job equally well” (Kawagley 2006, 16). Rather than the gender of the worker, what brings the most value to subsistence contributions is the manner of their completion— whether someone has done the labor with speed, acumen, skill, and attentiveness. Although Quinhagak residents described the values associated with each type of gendered labor somewhat differently, points of overlap suggest a unified value framework regarding subsistence. At the same time, gender roles remain a concrete concept in Yup’ik subsistence lifeways, and the skills of each gender are viewed as distinct. Both women and men are respected and admired for the unique contributions that they make in their communities; for example, Frink explored the expert nature of Yup’ik women’s labor (Frink 2002, 2009;

Frink et al. 2003; Frink and Giordano 2015) and how the skills involved in this work would have impacted women's status (Frink 2005, 2007). "Women's subsistence labor" thus remains an important category of analysis, despite the gender ambivalence suggested by the flexibility permitted in who performs it.

Because the boundaries of gendered subsistence labor are somewhat fuzzy (in contrast to the identity- and state-based regulations that appear in other traditional Yup'ik lifeways, though note that some such regulations do apply to the subsistence sphere; see Chapter VI), we must use care when considering how the materiality of subsistence relates to identity. The operative mechanism connecting uluat with the concept of "women" is one based on *action*— that is, the *labor* enacted with the knife that somehow "belongs" to women, even if men can participate in it too. That uluat are defined as "women's knives" does not connote that it was only Nunalleq's women who used these knives, but rather that the tasks associated with these knives were typically the contributions of women. As such, we likely cannot determine the gender of the person who used each of the knives in the Nunalleq assemblage. These objects are resonant with Yup'ik conceptions of gendered tasks, offering an avenue for a slightly different type of analysis. If Nunalleq's uluat are symbols for certain types of feminine labor (e.g., skin sewing, butchery, fish cutting, etc.), then focusing on the labor itself provides us a perspective on gender identity.

Perhaps because much of my field work was completed in summer, conversations about subsistence with Quinhagak residents often revolved around fish-cutting. Women in particular shared information about when fish are harvested, how they are cut and prepared, and memories from fish camp. I learned that fish-cutting is often a social affair, and that information about a specific gender identity can be communicated, learned, taught, and celebrated in these contexts of collective "doing." A Quinhagak-based perspective on gender in subsistence must thus include some discussion of fish-cutting and processing tasks. As the tools most closely associated with this labor, uluat are relevant to understanding how such tasks were enacted in the past at Nunalleq, even if it was not only women who used them.

Cutting Fish in Social Context

Fish have been and continue to be the most significant food resource available to Yup'ik people living at the confluence of the Arolik and Kanektok rivers. Willard Church (2019) connected the ubiquity of fish in the present to the past, explaining that:

we're a fish culture, here. If you look at what people are doing today, it hasn't really changed a lot....Looking at some of the early pictures of Quinhagak, the racks we have today are nothing in comparison to what they had back then. They covered a lot of square footage, and they cut a lot of fish. And what I was told growing up was, as soon as the salmon arrived, they'd cut fish all throughout the whole season until the salmon disappeared. So it was a full-time activity that folks were involved in.

Fish are harvested nearly year-round in Quinhagak today (Sloan 2020a, 250) and are seen as synonymous with a subsistence lifestyle. Willard's (2017) words once again are evocative: "it's like our uncle used to say: there's no difference between the word 'fish,' and the word 'food'...fish is food, food is fish." Archaeological evidence suggests that this was also the case for the ancestors at Nunalleq. Both faunal remains (Masson-MacLean et al. 2019, 5) and isotopic data from non-mortuary human hair (Britton et al. 2018) demonstrate that fish, particularly salmonids, would have provided the main source of food for village inhabitants, estimated at least 50% of dietary intake. Fish were also utilized as food for the numerous dogs kept as traction and companion animals at Nunalleq (McManus-Fry 2015; McManus-Fry et al. 2018), and as Nick Mark noted, the ancestors "didn't discard fish roe and heads, but they processed them to make cooked dog food" (in Rearden and Fienup-Riordan 2013, 256).

Processing and preserving fresh fish requires numerous steps, depending on the desired preparation: first, cutting the fish into various shapes like strips or slabs (Figure 41) or fillets; then salting, drying, smoking, or freezing these; fermenting the heads; and preparing the eggs (Emily Friendly 2017; see also Frink 2002). As Emily Friendly (2017) explained, "each species of fish, in their time, when it's harvested, is cut differently," and prepared differently too. Emily alluded to the skill inherent in these tasks, particularly in fish cutting, by explaining that "people who've got the experience" do a "really neat,

even” job of “cutting out of the slab, of one whole fish,” and that “filleting a fish without cutting off, and including the backbone....is a practice” (Emily Friendly 2017). All fish preparation techniques require uluat. Looking at the Nunalleq collection, Willard Church (2019) found it likely that “a lot of these uluaqs were probably used for preparing and cutting salmon.” The majority of Nunalleq’s uluat are medium-sized (68%), the appropriate size for fish-cutting.

Once fish have been cut, if they are not to be eaten immediately, they must be stored. A number of different fish storage techniques have been identified at Nunalleq, including grass baskets, underground caches, and pottery vessels. Some basketry fragments from the site have been identified as *kuusqun*, or woven grass containers for fish, of the sort that George Pleasant remembered his grandmother using to prepare frozen fish (Fienup-Riordan et al. 2015, 57; see also Masson-MacLean et al. 2020, 97). Residue analysis on Nunalleq’s pottery suggests that many of these vessels may have been specialized to hold aquatic resources, including fish (Farrell et al. 2014). At least a few underground fish storage features have been identified at Nunalleq, likely pits lined with grass that may have been used for fermentation (Madonna Moss, 2015, personal communication). Such preservation methods would have allowed for fish to be a consistent food source long after summer had passed, and Nunalleq’s residents must have taken advantage of these techniques in order for salmon to have been a part of their diet year-round (Britton et al. 2018, Masson-MacLean et al. 2019).

Like other subsistence tasks, cutting fish in Quinhagak is typically collective labor (Emily Friendly 2017, Willard Church 2019; see also Frink 2002, 101)— in fact, the “doing together” of it is part of its purpose. In interviews, Quinhagak residents spoke to this sense of sociality in subsistence; for example, Edward Mark (2017) referred to the practice of subsistence as being “like a reunion.” In many cases, relatives²⁴ do subsistence labor together, and Willard Church (2019) stated that fish-cutting would be done by “most of the ladies in the family group, while the men were out getting the fish.” Other times, groups of friends do subsistence together— and note that these groups are

²⁴ “Relatedness” in Quinhagak is also based more on action than on blood; see Chapter II.

not mutually exclusive. This seems to be particularly true for those subsistence practices associated with women, which most often occur in a village or camp context rather than out on the water or tundra. For example, I was impressed by the scene I saw one late August day when dropping off a gift for my friend Gertie²⁵ in the village: she opened the door to her home, and while I expected to see her children inside, I was surprised to see an additional three or four women filling up her small kitchen, each processing fish with a cutting board and uluaq, music in the background creating a social, jovial atmosphere.

Quinhagak residents find it preferable to perform tasks like fish-cutting in groups for many reasons. First, given health and safety considerations, time is of the essence once fish and game are harvested, and many hands make for lighter (and perhaps better) work. As Julia Hill (2017) explained, when given a large animal to process, the first thing she does is call her daughter and granddaughter or sisters to come and help her work on it, because she knows she won't be able to accomplish the labor quickly on her own.

The places where people typically process fish may also be conducive to collectivity. Emily Friendly (2017) recalled how, in the old days, everyone in the village had their fish racks (used for drying fish) set up along the same part of the river, so the work of cutting and drying fish was almost always done in proximity to others. When not in the village, it was common practice for a few families to travel together to “fish camp” for a few weeks at a time, and in this context group work would be a given. Nowadays, though Quinhagak's fish racks are more dispersed, there are still sets of multiples clustered along certain parts of the river, suggesting the continuity of these practices, at least for some families. Not everyone in Quinhagak has their own fish rack, and Emily Friendly (2017) explained that she will often work with her friends to process fish at their own racks, and then will trade or buy some of the resulting goods.

Emily's statement hints at the Yup'ik custom of sharing food, wherein collectivity refers not only to the “doing” of the labor, but also to its products. As she explained, she will often bring food from the village to share with her relatives when she travels to Anchorage, and trade between villages for differentially available fish and subsistence

²⁵ I anonymized this anecdote because I did not complete an informed consent procedure with this friend.

resources is common (Emily Friendly 2017). Food will often be given to community members in need who are unable to produce their own because of illness, age, or admonition. I recall feeling struck by John Teddy Roberts' immediate desire to share fish with an elder relative after an early evening fishing trip— though it was getting dark, he insisted that we drop off the fish to them on our way back from the river. In this instance, Roberts was putting into action words spoken by his sister Mary Church (2017): “The most important thing (is) sharing and giving, after gathering subsistence, and especially give to elders and widowers, and don't expect anything in return.” In the Yup'ik culture, sharing food is both a norm and a deeply-seated value (Fienup-Riordan 2005, 2007; Jolles 2002), so working on food together is also second nature.

Many Quinhagak residents spoke to the joy inherent in this type of collective subsistence labor. People believe that doing subsistence together is what makes a family strong, and strong families are a central priority for Quinhagak residents, especially elders. Lynn Church (2017), who is not an elder, explained that “we were taught to work together, and that's what keeps families strong... That's what subsistence lifestyle taught me... how to be independent, work hard, provide for your family.” Julia Hill (2017) described the relationship between subsistence and family as fostering togetherness, explaining that “we're closer because we stay together for 4 to 6 hours at fish camp together.” This shared familial “doing” is a happy thing, for as Edward Mark (2017) explained, “when you think of it, your family is working together, they're enjoying themselves, enjoying their company, and doing what they love.” Subsistence encourages relatives to bond and Yup'ik people of all ages to learn about family, life, and their roles in the community.

Despite the shared nature of many subsistence tasks, each person working on the task will have their own way of doing it, resulting in ample expressions of individuality within the collective. Emily Friendly (2017) discussed the tension inherent in trying to replicate a single person's cutting style when working as a group, noting that she often feels timid to assist friends in cutting their fish because she might unintentionally cut in a way that the friend doesn't like. She recalled one instance of collective fish cutting where

a friend demonstrated that she wanted her king salmon tails cut in a certain way, and a different friend who arrived later to help struggled with the task, not having seen the demonstration. In some cases, Yup'ik women would cut specific individualized or family-related designs, called *neqem cetra*, into their fish to mark them as their own (Fienup-Riordan 2007, 188; see also Frink 2002). Such a system would prove especially useful when multiple families were sharing a fish rack or smokehouse (Emily Friendly 2017). Emily Friendly (2017) elaborated on this practice, explaining that “women had their own designs each... You know how the kings had their own rings, to mark with? Women had their own patterns.”²⁶ In other cases, cutting specific designs onto different types of fish would help a person differentiate between species during processing. Emily Friendly (2017) provided an example: “sure enough, when they hang from the rack... and you look from a distance, you can tell which ones are kings.” As with much else in Yup'ik lifeways, there is a balance between utility and style, for fish need to be cut and hung in a certain way in order to prevent insects from laying eggs and contaminating them (Emily Friendly 2017). Yet much room for creativity exists within these functional parameters.

Older women are generally acknowledged as the masters of fish processing tasks. Frink (2002, 2003) documented elder women's knowledge of fish cutting and processing in Chevak, finding that these elders demonstrate “advanced management skills, such as shorthand long-range decision making” regarding which fish to process, and when and how to process them (Frink 2002, 100). Frink (2002) noted that elder Chevak women establish their own fish camps, and the infrastructure here— including tents, drying racks, pits, and smokehouses— is considered their property. Elsewhere, Frink (2009, 286, 289) noted that social status, power, and influence often attend elders who are experts in various modes of production. Concepts of expertise in Yup'ik society are built at the nexus of gender and age.

It follows that the knowledge associated with mastering these tasks would also flow along gendered and diachronic lines (Frink 2002). As John Fox (2015) explained,

²⁶Emily Friendly (2017) noted that, like clothing patterns, some of these designs might have also been related to a person's village or regional affiliation. The same is true for labrets and tattoo designs (see Chapter VI).

girls had to be taught by women of what they learn from toddler all the way up, when they get married, and what they have to do in life. They teach them what they know. These women teach these little girls. And these men, they teach the young boys because on a certain age these young boys move to their fathers in the men's house.

Similarly, Bav'illa Small (2015) noted that “ladies talk to the young girls and the old men talk to the young boys, to tell them what their roles will be while they're growing up.” Emily Friendly (2017) described learning how to cut fish from her grandmother and her aunts, and also “remember[ed] watching my mother cut some.” Having learned in this way, she explained that when cutting fish, “there are some days when I think of my grandmother, [and] sometimes I wonder which of my cousins cut in the same way” (Emily Friendly 2017). Now as an adult, Emily noted that she teaches “her girls,” although they live away from her and aren't “handy right now” (Emily Friendly 2017). Because fish processing is a woman's task, it is women's purview to pass down the associated technical and value-based skills to the younger generation.

Even so, several practical exceptions to this rule were made apparent during interviews. For example, Julia Hill (2017) discussed learning subsistence tasks in a mixed group of children, and explained that she now teaches all of her grandchildren about traditional women's subsistence tasks, regardless of their gender (but, she noted that “the boys don't really like doing that.”) In another instance, Emily Friendly (2017) recalled that she learned to fish and cut salmon slabs as a child by going out on the water with her dad, because her mother wasn't a part of her household. Both these instances allow us to constrain our assumptions about women's roles as teachers of feminine tasks, and girls as their learners. In Julia's case, she (the elder woman) is still the primary teacher, but she does not exclude boys from her lessons, and in fact encourages their participation. In Emily's case, family circumstance meant that her father needed to teach her more than just the tasks of his own gender. While it may be true that much of this knowledge is passed from woman to woman, the gender flexibility accommodated in the broader Yup'ik worldview is also operating here.

Intergenerational knowledge transfer plays a central role in the collectivity of subsistence practice, and is another reason why it is important to perform these tasks in a group context. When women (and others) process fish together in a group, those with greater skills can demonstrate and teach, while novices can watch and learn. Emily Friendly remembered the girlhood fun of learning how to cut fish alongside friends of her age group. Referring to girls, she explained that “they were always eager to be able to use an uluaq, an Eskimo women's knife, so yes, they helped out” (Emily Friendly 2017). Julia Hill (2017) noted that “even if they're little, we give them a knife,” because teaching kids young ensures that a person will enjoy subsistence tasks when older. Inviting young learners into a task can be “kind of scary,” as children “learned the hard way about knives” (Emily Friendly 2017). Such collective learning environments also provide a bonding experience, as for my friend Gertie and her companions, or Emily and her friends, or Julia and her daughter and granddaughters. The act of cutting fish together is a powerful locus for the survivance of gendered Yup’ik subsistence knowledge, and a place where community resilience is reaffirmed.

An Intergenerational Education

One of the things that surprised me most in interviews was how questions about gender roles inspired Quinhagak residents to speak about processes of teaching and learning (Sloan 2020b). Sharing knowledge was mentioned in 93% (or 14/15) of 2015 interviews, and was a theme in the 2017 conversations, suggesting that educating is one of the more important ways that Yup’ik people enact their gender identities, and identities as Yup’ik people more broadly. This connectivity makes sense: in order for a beloved subsistence lifestyle to survive into the future, new generations must learn the skills and behaviors associated with it.

As in many other cultures, the proper age dynamic in Yup’ik education is that the “old” teach and the “young” learn, so education is a consistently intergenerational endeavor. Age is significant in Yup’ik social organization as a whole, and respect for elders is a fundamental value. Fienup-Riordan (1994, 148) explained that “whereas,

ideally, young people were active but quiet, their elders sat down and spoke;” that is, the proper role of an elder was that of a teacher, while a young person’s role was to listen and learn. Emma White (2015) demonstrated the importance of age by asking “how old is that?” in response to a question about how girls and women are supposed to act in Yup’ik culture. Before Emma could speak with me about gender, she needed to know the age of the person I was referring to, as this is the more significant index for behavior.

Acknowledging the significance of teaching and learning, and knowing that the pattern tends to be the old teaching the young, are there ways that we might look for these Yup’ik modes of intergenerational knowledge transfer in the archaeology at Nunalleq?

Since uluat were likely custom-made for specific people, the size and shape of these objects may indicate the hand size of the intended user, a potential correlate for age. Most Yup’ik objects in the past were custom-fit for the bodily proportions of the person who would be using them (e.g., see the diagram for body measurements for tools in Fienup-Riordan 2007, 91). Emily Friendly (2017) noted that she was taught when young to “keep my uluaq to myself,”²⁷ strengthening the notion that handle size and shape will be good predictors of the intended owner’s hand size. Referring to Inuit ulus, Issenman (1997, 62) explained that “the length of the handle approximates the width of the hand,” suggesting that handle length in particular may be a good proxy for hand size. Indeed, I measured my own adult female hand and used this length (approximately 10 cm) as an initial benchmark for size “medium” when beginning this analysis. While an uluaq user’s gender remains somewhat elusive from an archaeological perspective, we may be able to determine a user’s age, an identity category that holds deep significance in Yup’ik sociality.

In interviews, Quinhagak residents emphasized the connection between hand size and the length and width of uluaq handles. As Annie Cleveland (2017) expressed, “you know, our hands are different sizes. So, like our feet, we have to use different sizes of shoes. Same with uluaq, for hands-- different sizes.” Annie further explained that she

²⁷ Note the spiritual implications here. Keeping one’s objects to oneself was also a way to control for boundaries when people, like young women, were in liminal states, such as menstruation (see Chapter VI).

“cannot comfortably use that uluaq for cutting, because it doesn't fit my hand. My hands are small. I like one with not a bulky handle.” However, with the “perfect knife, with a perfect handle,” the user is able to cut anything they need to “in the right way” (Annie Cleveland 2017). Anna Roberts (2017) noted that her favorite uluaq is medium-sized: “not big, not small.” Grace Hill (2017) recalled a time when her father made an uluaq for her mother that was too big for her hands, and her mother wasn't able to use it. Pauline Matthew (2017) discussed the process of choosing a new uluaq, explaining that

whenever I'm going to buy an uluaq, I always test it to make sure it's comfortable for me to use, because some are too big.... You have to try them out to see if it really is good for your hand when you're filleting, or cutting, and I try not to get one that's too big...so it just depends on each person, that the feeling of the handle is just right for you to do the cutting.

Willard Church (2017) noted how uluaq makers attend to such issues, by “put(ting) a lot of thought into the design, to make it fit naturally.”

For uluaq handle length to be a good estimate for the user's age, two things must be true: 1) uluaq handles must approximate hand size, and 2) hand size must approximate age. Quinhagak residents' knowledge suggests that the former is true, although it is possible that the uluaq's intended task had a greater effect on its size than the hand size of the user,. For example, small sewing uluaq are consistently tiny because of the detailed cutting tasks they accomplish, not because the hands of their intended users were very small. Children's hands are smaller than those of adults, but did Yup'ik children have small uluaq made specifically for their small hands, or would they have learned cutting tasks on whatever sized uluaq were available?

Quinhagak residents differ in their opinions about this. Jamie Small (2017) explained that, when teaching kids to use uluaq, “the (more) regular-sized, the better,” because “you wouldn't baby talk to a baby”— essentially, children should always be

treated as mature and capable of using adult-sized tools.²⁸ Other participants stated that children do sometimes learn cutting tasks with smaller-sized uluat, some of which were more blunt than the standard. Grace Hill (2017) recalled that “they used to give us little ones” to learn with, but that these uluat “were not real,” and not as sharp as their adult-sized counterparts. Emily Friendly (2017) remembered that when she first began using uluat at age seven or eight, she and other children were given smaller-sized knives to learn with. In describing the process of fish cutting at an Akiak fish camp, Kawagley (2006, 57) recounted a scenario in which the thirteen-year-old daughter asked to help: “After watching her mother cut several fish, she said that she would like to cut fish also. Her mother did not deny her, but immediately gave her a smaller uluaq and looked among the fish until she found a smaller one that was somewhere between five to seven pounds.” In the ethnographic literature, Fienup-Riordan (2005) presents an intriguing entry from the notes of Johan Adrian Jacobsen, who was collecting along Alaska’s Bering Sea coast in 1882. She explains, “Jacobsen noted that another (uluaq blade) was made to be used by a young girl to practice cutting up fish and doll clothing”²⁹ (Fienup-Riordan 2005, 161). All of this suggests that younger uluaq users were often given smaller-sized tools when learning cutting tasks.

If children were practicing with smaller uluat, were these made specifically for this learning purpose, or is it more likely that the adult or elder teaching the task would select a smaller model from their existing uluat arsenal for incidental use in a learning context? Anna Roberts (2017) stated that “there’s always different sizes;” essentially, since a regular uluaq toolkit already contains multiple sizes, perhaps smaller uluat were sometimes used as learning tools, though this may not have been their express purpose.

²⁸ I still have a vivid memory of a presentation made by Alutiiq anthropologist Dr. Sven Haakanson during the 2015 field season in Quinhagak. Haakanson was presenting slides of his time amongst the Nenets people of Russia’s Yamal Peninsula. In one memorable image, a tiny girl dressed in traditional garb wields an axe in front of a chopping block— Haakanson explained that she could only have been 3 or 4 years old, but was still tasked with cutting wood for her family. In Nenets culture, as in Yup’ik culture, there is an entrenched value in children’s full participation in subsistence life.

²⁹ This object is listed as “Kjimak Ulloak,” #IVA3580, but unfortunately no image of the uluaq is included in Fienup-Riordan’s work nor in the online catalog for the Ethnologisches Museum, so I cannot verify its size.

On the other hand, Nunalleq’s extensive uluaq assemblage makes clear that residents were making and using a huge array of uluat regularly, and that there was no dearth of materials for fabricating these. With this constant customization and creativity, making uluat specifically for children would not have been out of the question.

Either way, we would expect some uluat in the Nunalleq assemblage to be of sizes appropriate for younger learners. What sizes might these have been? The smallest uluaq, those measuring 4.5-6.5 cm long, were likely used for sewing by teachers and learners alike. Uluaq from about 8.5 cm upwards would have been well-sized for adult female hands of various sizes. Could the range in between these more established usages, from about 6.5 to 8.5 cm, be a “sweet spot” for identifying children’s uluaq? Two children’s uluat fabricated by Willard Church (Figure 42) have handles that fall close to this range: one is approximately 6.35 cm long, and the other is 7 cm long. Looking at a scatter plot distribution for these smaller uluaq, they cluster from 6.8 cm to 8.6 cm (Figure 43; note that this correlates to the larger end of the small category and the medium sub-group A). Uluat in this range would have been useful for sewing tasks, skinning animals, or perhaps for cutting blubber (and several look like they may have been designed for these purposes), but they also would have fit nicely in the hands of children. Although this subset is small (n=26), it is informative.



Figure 42. Two children’s uluaq handles made by Willard Church. On the left, the handle measures 6.35 cm (2.5 in). On the right, the handle measures approximately 7 cm (2.75 in). Images courtesy of Willard Church.

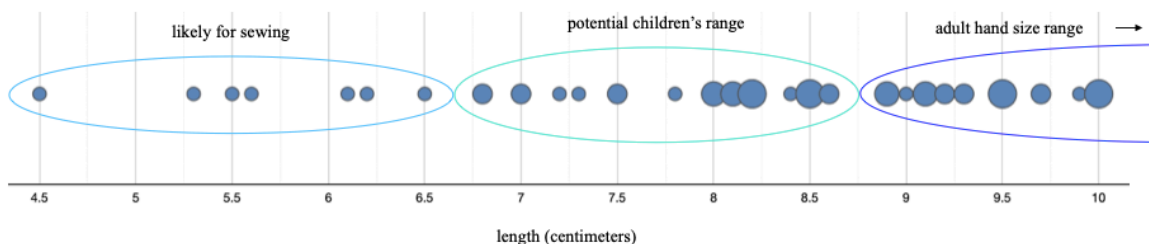


Figure 43. Frequency distribution of small-to-medium uluat from Nunalleq, with potential children’s range indicated (6.8-8.6 cm). Note that uluat in this “children’s” range are larger than typical sewing knives, and smaller than the “medium-sized” blades for general adult use.

Uluaq handles in this length range vary in shape (Figure 44); 20 are sloping rectangle, four are double-hump, and two are zoomorphic. For the sloping rectangle specimens, seven sub-styles are represented (six flat top plain, three flat top inset, three mid-angle pointed, three regular, two medium-angle rounded, two shallow angle, and one steep angle). While no single pattern is strong enough to suggest style as a unifying factor for this group, the frequency of flat-top styles is interesting. A full 29% of all flat top - plain specimens in the assemblage are in this size group; 25% for flat top - inset. Flat-top styles generally trend towards the lower end of the medium spectrum (sub-groups A-C; Table 6), suggesting that there may be a functional link between these handles and smaller size— perhaps they were easier for little hands to hold?

Recall that the medium-angle pointed and steep angle shapes only occur in small and medium categories, and within the latter, only in sub-groups A and C, similar to the flat-top shapes. The longest steep angle uluaq in the entire sample measures 12.6 cm with a majority being smaller, and the medium-angled pointed handles do not exceed 10.8 cm long. Because these flat top and “pointy” handles tend to occur in smaller size groups, these may be the preferred style for use by younger people with smaller hands. Note that several flat top and pointed specimens in the 6.8-8.6 cm sample have somewhat of a “chunky” appearance (Figure 44), and these handles tend to be thicker than those in the

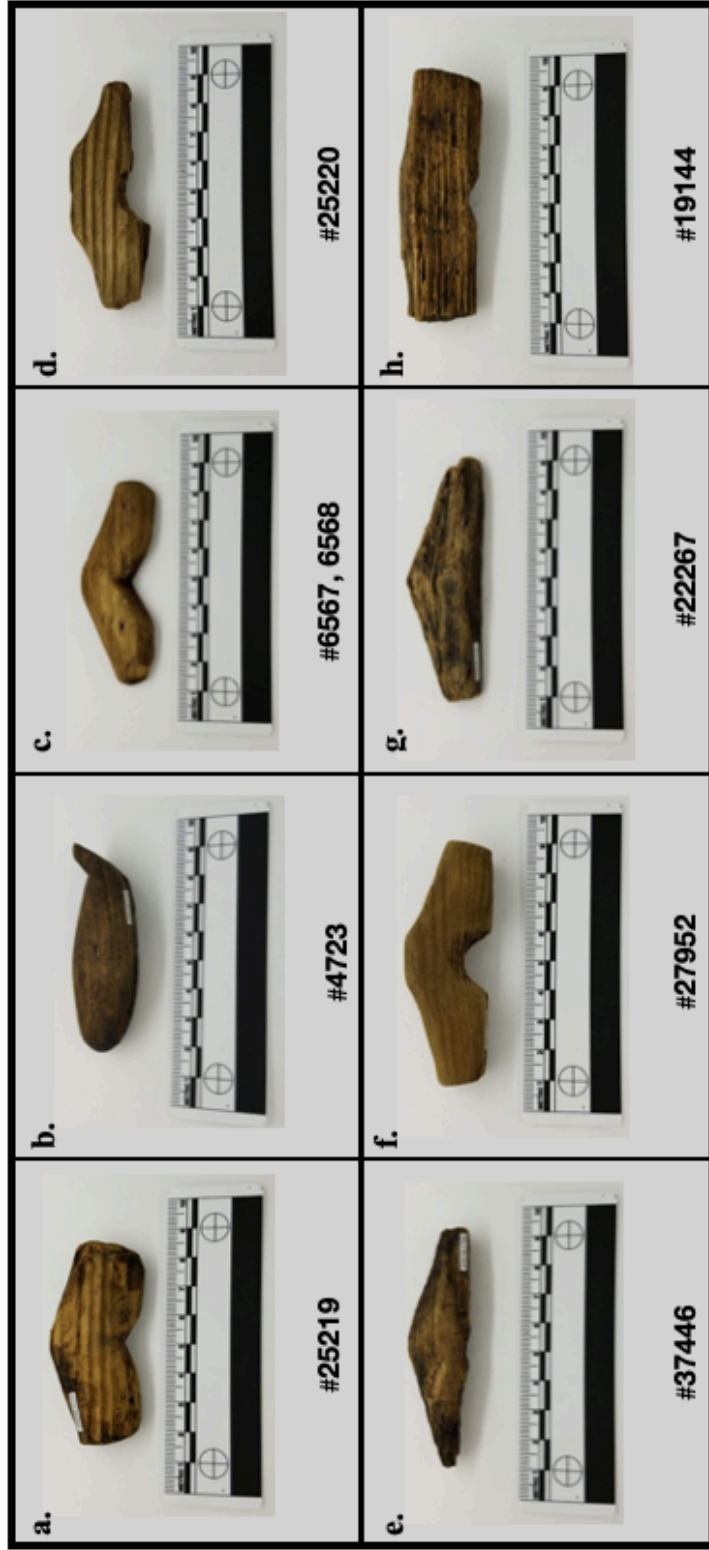


Figure 44. Potential children's uluat from Nunalleq. Handles are within the 6.8-8.6 cm range, with shapes suggestive of use by children, including both "pointy" (a, c, e, g) and flat top (d, f) styles. Note the generally thick, "chunky" handles that would have been easier for young hands to grip while learning to cut. Scale bar measures 10 cm.

“small” category immediately preceding them. Thicker handles may have allowed smaller hands to gain a better grip on knives during the learning process.

One of the two zoomorphic specimens in the 6.8-8.6 cm range, #4723, is unique in the assemblage as a whole (Figure 44b). This uluaq resembles a simply rendered beluga whale, and is very rounded in shape, with a raven track incised on both sides (see Chapter VIII for further analysis of this design) and diagonal scratches superimposed across the body. When we looked at this handle together, Willard Church (2019) stated that he was “still trying to figure this one out, here,” because the shape, size, and design were a bit confounding. Upon reflection, I wonder if this uluaq may have belonged to a child. At the risk of generalizing based on Western cultural norms, it seems possible that the simplistic animal design would have been pleasing to a child, and that the thick, rounded handle would have provided an easy grip. At 6.8 cm long, this uluaq is perfectly within the size range for smaller hands. Perhaps the diagonal scratches, which are a bit free-form, were incised by the young owner, a sort of “doodle” of the type that parents often find etched into various of their children’s belongings.

A few additional uluaq handles from Nunalleq may have been toys, another nod to children’s activities at the site (Figure 45). Uluaq #30278 is about 6.5 cm long and slightly tapered in shape with a triangle notch, but lacking a blade slot on its underside. Measuring about 8 cm in length, #33087 is a bit larger with slightly upward-flaring ends, and similarly has a triangle notch and no apparent blade slot. Handle #4437, about 7 cm long, is another potential toy: its shape is somewhere between the linear and dome styles, with diagonal lines incised across its body, and no notch. The most ambiguous of the three, this is a more fragmentary piece, with a large cut made to its top suggesting a possible alternative use. All three specimens are near the preferred size range for children’s uluaq, and the fact that they lack slots for blades indicates that they were not handles in the traditional sense. Playing with peers was an important means by which cultural information was (and is) shared in Yup’ik communities. These toy uluaq suggest that Nunalleq’s children also learned about subsistence tasks by emulating the actions of adults they saw around them.



Figure 45. “Toy” uluat from Nunalleq. None of these specimens have slots for blades on their undersides.

Considering a different kind of learning, some uluaq specimens also suggest apprenticeship in the tool-making process. While some children (mostly girls) would have been learning how to use uluat for various subsistence tasks, others (mostly boys) would have been learning how to make uluat to supply their female relatives. The level of refinement varies greatly between uluat handles in the Nunalleq assemblage, with some specimens showing an advanced level of craftsmanship (e.g. #23918, Figure 40f), while others are simpler in design (e.g. #7950, #7218). Handle #41366 (Figure 46) is likely a preform due to its incomplete manufacture (the slot for the blade is partial) and the fact that it has been only roughly shaped (angles have not been filed down). Making mistakes and trying, no matter the maker’s skill-level, are acknowledged methods in Yup’ik teaching and learning, and these objects are evidence of such educational strategies in action.

Since age is such an important factor in Yup’ik teaching and learning, identifying the likely age of an uluaq user is one way to approach archaeological interpretation in alignment with local values. All societies are home to children as well as adults, but adults have most often been the focus of archaeological inquiry (Baxter 2008; Coşkun 2015; Crawford et al. 2018; but see also Losey and Hull 2019 for an example of how this is changing). At Nunalleq, attention to tools that may have been tailor-made for children

or incidentally used by them, as well as the toys that they played with and the results of their apprenticeship attempts, can help us better understand how teaching and learning functioned as actions contributing to the identities of both the young and the old. The gender categories associated with such actions are only one component in a larger complex of belonging enacted through uluaq use.



Figure 46. Potential Nunalleq uluaq preform #41366. Note the incomplete shaping, breakage on superior view, partial slot in inferior view, and unformed notch at center. Scale bar measures 10 cm.

Enacting Identity through Subsistence

Identity is wrapped into Yup'ik subsistence practices and their tools in myriad ways. People perform gender by engaging in “men's” or “women's” subsistence tasks, often in a manner aligned with their own gender identities, though not exclusively. The collective, social nature of gendered subsistence action contributes to a person's sense of belonging within their community. Such gendered actions needed to be learned and taught, with older generations passing knowledge along to the young. While gender was my initial exploratory lens, it is only one of many identity components that operate in these processes, and is often eclipsed by other categories of being. The *actions* that one chooses to perform, the *manner* in which these are performed, and the *values* that are embodied through the performance say far more about a Yup'ik person's self than any intrinsic identity characteristic.

Gender identity and subsistence are deeply interrelated, but not in the absolute way sometimes assumed in the anthropological literature. How gendered subsistence roles are imagined in an idealized, balanced Yup'ik universe differs from how their practice plays out in reality. The roles of “provider” and “processor” are closely tied with ideals of masculinity and femininity in Yup'ik society. At the same time, people of any gendered body can and often do perform these tasks. Flexibility between traditionally female and male roles is accepted, and gender collaboration is encouraged. The idea of transformation between states is commonplace in Yup'ik thought. For example, human-animal transformation is a real and acknowledged occurrence— I remember a Yup'ik friend recounting a story of how their uncle needed to run fast between two villages, and as he picked up speed on the tundra, he turned into a wolf, then transformed back into his human self as he approached his destination. Rather than being a source of dissonance, moving in and out of different identity states makes sense in a Yup'ik worldview. In subsistence tasks, this manifests as people being permitted to perform a task associated with either gender without losing their fundamental gender identities. Though rigidity can be the rule in other contexts (e.g. bodily admonishments, or the spatial sanctity of the *qasgi*), it is rarely so in subsistence, and often people of differently gendered bodies

performed the tasks idealized to the opposite gender without rebuke or distress. For this reason, a gender attribution model for subsistence-related artifacts in Yup'ik communities is not very useful. Although the connection between gender and subsistence is profound, it does not transfer easily to an archaeological framework of materiality.

Age, however, marks a person's identity at a given time, and thus may be a more appropriate means of measuring identity in subsistence from an archaeological perspective. Age is a common and respected form of social segmentation in Yup'ik society, with elders afforded deep respect, and age-appropriate behaviors emphasized for all (Fienup-Riordan 1994, 2005; Rearden and Fienup-Riordan 2013). It would be uncouth, for example, for a young person to claim the power, authority, and expertise of an elder in a Yup'ik community. Unlike gender, age is not a flexible identity state in a given moment, although of course this will change over time. Age follows a unilineal trajectory, with people advancing from youth to adulthood to elder status, with no real flexibility between stages. Age-based identity distinctions seem to structure Yup'ik communities more concretely than those based on gender, at least within the context of subsistence. I find it likely that age has always been a predominant marker of Yup'ik identity, though whether this would have been true at Nunalleq is unknown. Nevertheless, Quinhagak residents spotlighted age in interviews, as well as processes of teaching and learning that are embroiled with age-based identity dynamics. Filtering the archaeological record through this lens, we can identify a small-to-medium sized category of uluat that would have been appropriate for use by younger learners with small hands. These objects lead us to consider intergenerational practices of teaching and learning subsistence at Nunalleq, still so important to this community today.

Interview data suggest that the sense of identity that attends subsistence has as much to do with the values imbuing the tasks as with their associated identities. Fish-cutting, when performed quickly, carefully, and with skill, is of great benefit to the community and is something that an individual can feel proud of, no matter their gender or age. The way a person performs an action indicates something about their person, and impacts the action's perceived quality. Through listening, observing, doing, or teaching, a

person participates in the Yup'ik way of life and demonstrates their full personhood within their community. This is a very action-centric way of conceptualizing identity, and provides the actor with agency and independence in how they demonstrate personhood. Much social obligation is rolled into action, as one's actions and their quality will impact other individuals and the collective. Tension exists between self and community, the individual and the group, but within this tension floats a fair amount of flexibility and choice.

In Quinhagak, as elsewhere in the Yup'ik world, teaching and learning are viewed as particularly valuable actions. Through these processes Yup'ik people come fully into themselves as contributing adults in their society, both by learning the proper way to do the tasks that need doing, and by passing this knowledge on to following generations. As Fienup-Riordan and Rearden (2018b, v) explained, "sharing knowledge is a central part of what it means to be a Yup'ik person." Julia Hill (2017) provided a personal example, stating that "it was good for my mom to teach me. That's how I know how to do stuff. And it's good for me to teach my grandkids, so if I'm gone, they can know how to do it." While teaching the action itself is central to any knowledge transmission, what really stood out in interview data was the importance of teaching the manner in which a task should be done, or the behavior necessary for its success. Julia Hill (2017) spoke about the most important lessons she was taught: "don't do bad things, or this person will come to get you; you'll get hurt if you don't listen to parents and elders; and if you're too mean, it will come back to you; if you hurt someone, you will get killed; if you don't work well on food, you'll have no more food." When asked which lessons she found most valuable to pass along to her children and grandchildren, Julia (2017) stated "subsistence, and help other people that might need help, and also to be kind, and don't answer back when people are being mean, (and) to help others." There is a sense in Yup'ik society that it is everyone's responsibility to teach, and people are admonished not to restrict their teaching to their kin (Emma White, 2015, personal communication). Fienup-Riordan (1994, 148) learned from her Yup'ik informants that "to selfishly instruct only one's own children was considered even more reprehensible than neglecting to instruct altogether."

Kelly-Buccellati (2016, 203) noted that “apprenticeship is central to the early transmission of cultural practices and social traditions due to its ability to provide a positive setting within which both technical knowledge and behavioral norms are transferred in the formation of identities.” This is exactly the case for processes of teaching and learning in Yup’ik society, which instruct simultaneously on action and on proper ways of living within the community.

These interwoven, intentional, and intergenerational forms of education contribute significantly to cultural resiliency. A desire for providing a better life for younger generations was implicit in discussions of teaching and learning in Quinhagak. Several interview participants expressed a fearfulness surrounding cultural loss— not surprising, given this community’s history with colonial intervention in education.³⁰ Pauline Matthew (2015), a retired educator, described the connection between teaching and learning and the wellbeing of the Yup’ik family, stating that “my mom used to tell me, you know, from one generation to the other they pass on what they know... and if that is not followed, you start to gradually lose your roles as a father and a mother to your children.” There is a sense amongst Quinhagak’s older generation that the role of the “parent” as traditionally defined is especially important for family resiliency, and it is crucial for such roles to continue on into the future, as they have for generations past. Looking to the literature, this focus on proper Yup’ik parenting comes into even more obvious focus; many of Fienup-Riordan’s works documenting the words of Yup’ik elders from various communities contain sizable sections discussing proper relations between parents and children (e.g., 44 pages in Fienup-Riordan 2018a, 50 pages in Fienup-Riordan 2018b, 27 pages in Rearden and Fienup-Riordan 2013), and Emma White shared that the majority of the 2005 Kinguliamta Ciunerkaat Elder Capture that she attended in Bethel was dedicated to the topic (Emma White, 2015, personal communication).

³⁰ How Quinhagak residents remember and talk about their boarding school experiences has much to do with their generation. Several adults and elders I spoke with who were in school from the 1970s onward have positive memories of attending Mount Edgumbe School in Sitka, AK, or Chemawa School in Salem, OR. Some older elders had more negative experiences with these institutions, and abuses within the American Indian and Alaska Native boarding school system more generally are well-documented (Barnhardt and Kawagley 2010; Napoleon 1995; Surface-Evans and Jones 2020). Quinhagak residents’ memories of boarding school are polythetic and varied, and I hope this will be an area for future research.

Something fundamental to Yup'ik culture lives on in the replication of familial social structures. Strong Yup'ik families mean a strong Yup'ik culture, and a brighter future for the community as a whole. The significance of subsistence practice to maintaining strong families is clear from interview data, further suggesting this as a locus of cultural resiliency. In the context of settler colonialism, which actively attempted to pull Yup'ik families apart through residential boarding school systems and the negation of traditional values, the idea of Yup'ik family wellbeing can be seen as even more vital.

Knowing the value placed on family structure and intergenerational teaching and learning in Quinhagak and the linkages between these themes and subsistence, how might we connect all these concepts back to the archaeology of Nunalleq? Table 7 offers some suggestions. Uluat are the tools often used to do and teach subsistence, and as such, they offer an especially potent platform from which to explore the materiality of these values. Uluat are symbolically linked to a type of feminized labor, and thus tell us about the relationality between gender and subsistence, as long as we understand that it was likely not only women who were performing these tasks. The number and diversity of uluat from Nunalleq suggests that the types of labor they facilitated were both common and specialized. The assemblage points to a vast array of possible tasks and usages, including cutting skins and threads for sewing, making seal skin pokes, cutting and scraping blubber, skinning animals of a variety of sizes, cutting fish, and butchering. Since these are symbolically-female forms of labor, we can say that the women of Nunalleq were highly skilled at a number of different tasks, and that their toolkits reflect this. Uluat makers had Yup'ik values of efficiency, expediency, craftsmanship, and respect for animals in mind in designing the tools' handles. Note that this gender assessment of uluat is action-focused, rather than attribution-based; it is the actions that the uluat facilitated that will tell us the most about the identities of their former users.

association	possible n	criteria	cat. nos. from interviews
sewing	13	small, beautifully-made, slender handles, very sharp blades	#7877, #27747
making mukluks	1	small, blade useful for crimping footwear soles and cutting beveled edges	#7877
skinning small animals	9	extended blade tip allows scraping inside paws and face, or rounded blade, or long blade	#7877, #12147
seal skin pokes	—	small-medium size	—
cutting blubber	4	thin blade, flat cutting edge	#27906
cutting fish	112	medium-large size (approx. 8.5-25 cm.); curved blade, or long handle with long blade for making slabs; good gripping handle	#7053, #7800, #7943
everyday use	94	medium size	#7258
skinning large animals	5	large size, rounded blade good for flensing, long shape allows better access in bigger animals	#7800
butchering	24	large size	#7800, #33321
decorations improve grip	19	insets or incised designs	#23918
shape improves grip	96	handle includes a notch and/or shape supports grip	#12165
respect for animal spirits	8	animal design, beautifully-made	#23918, #27906, #33321
“men’s” knives	25	large size, or elaborate decoration on non-standard design	#7800, #27907
children’s-sized	14	sized between 6.8-8.6 cm (larger than sewing, but smaller than adult-hand-sized), and handle is thick or in shape to improve child’s grip (including pointed and flat-top shapes)	—

Table 7. Associations between Nunalleq uluat and the primary concepts of subsistence and identity that came out of interviews. “Possible n” is the possible number of uluat from Nunalleq whose physical features suggest association with a given concept. Most are likely over-estimates, with the exception of categories defined by blade shape and size (“making mukluks,” “cutting blubber,” both “skinning” categories) which are likely under-estimates, because the majority of uluat in the sample are handles only. Criteria are derived mainly from information shared by Quinhagak residents during interviews, and catalog numbers are only those that were explicitly identified by residents. Note that uluaq specimens are not exclusive to any one category, and there is considerable overlap due to uluaq multi-functionality; for example, #7877 is associated with sewing, mukluks, and skinning small animals.

Uluat from Nunalleq also speak to age-based dynamics in teaching and learning subsistence. The sub-set of handles from 6.5 to 8 cm are not specifically suggestive of any of the task categories outlined by Quinhagak residents, and may well have been used by children who were learning how to cut. It is more difficult to assess whether these objects were made specifically for the purpose of teaching children, or if they just happened to be made in this size for other purposes and were secondarily convenient for teaching younger people. In either case, the length of these handles, closely correlated to hand size, suggests they were best suited for use by young people. If children at Nunalleq were learning to cut, they must have been taught by those older than them with the requisite expertise. Wrapped into these teaching and learning processes were notions of proper Yup'ik personhood and role fulfillment within the community, and perhaps also an experience of familial bonding and collective strength. The uluaq assemblage from Nunalleq is intergenerational, with implications for how Yup'ik skills and identities are passed down over time and resonance with how Quinhagak residents conceptualize these values today.

As ever in archaeology,³¹ little in this analysis is absolute or cleanly defined. Many of the categories of analysis are overlapping. A Yup'ik worldview oscillates between extremes, seeking balance between component parts that often appear in contradiction. Topics of gender, identity, and sociality reveal a tension between flexibility and rigidity. The same could be said for the Nunalleq uluaq assemblage, which contains such a vast diversity of forms, shapes, and sizes so as to be extremely individualized, and yet also indicates collective labor and broadly-expressed community ideals. Indigenous feminist theory and feminist archaeologies are well-equipped to deal with this fuzziness, but the people of Quinhagak are the ultimate theorists that I rely on in these interpretations.

³¹ I acknowledge that some archaeologists would argue to the contrary, but I follow Wylie (1992) in understanding archaeology as bound by the constraints of human knowledge production and partial evidence, and Gero (2007) in viewing archaeological datasets as messy, ambiguous, and uncertain by nature.

Epilogue: Learning to Cut

A Yup'ik family is gathering at fish camp, a good ways up the Kanektok River. They left Nunalleq village five sun-cycles ago, their qayaqs filled with the provisions they will need for the summer season. They have assembled their camp just slightly inland from the flat, smooth rocks that form the riverbank, a safe spot that they have returned to for decades. From here, the men have easy access to the river, which shimmers every day with the wiggly fins and tails of king salmon, and the women can wander in the nearby brush to find grasses and berries.

A young girl, about age six, emerges from these bushes with her sisters, younger brother, and cousins, their wooden berry buckets full of cloudberry the color of a Bering Sea sunset. A breeze comes up from the river, gently billowing their light summer skin garments. Done with their berry-picking, they have come to join their mothers, aunts, and grandmother to cut fish on the river bank. The older women have been cutting fish together for two days, and the racks are full of kings splayed at their tails, drying in the open air, marked in the pattern traditional to their family. Each of the women wields an uluaq, well-formed to her hand, and each has a cutting board resting in front of her kneeling frame, working on a pile of fish. A mother signals to the group of children, waving them over to come and help. The six-year-old girl feels a jolt of excitement and anxiety: she has not yet used an uluaq, but her older cousins have told her that this should be her first summer cutting fish. She senses that this signals something about her role in her family and in the broader community, and she is eager to succeed at the task.

The children gather around their grandmother, who is so skilled with the uluaq and cuts fast. She is telling the women a story as they quietly work, her voice held at a slow but consistent timbre, and she pays the approaching children little mind, except to subtly adjust the positioning of her cutting board so that the young eyes can have a better view of what she is doing. The young girl's mother hands her an uluaq from her collection — one with a thick, pointed handle, just the right size for her hand— and places a small fish in front of her on the cutting board. The girl glances at her eight-year-old cousin next to her, who holds a beautiful uluaq in the shape of a beluga whale, one

that her older brother has carved especially for her when she started cutting salmon last summer. She watches her cousin cut, pushing her wrist up and away to slice, then glances at the others around her: many hands, holding many knives, cutting this bounty of fish. She takes a deep breath, and begins.

CHAPTER VIII. MARKING IDENTITY, RELATEDNESS, AND BELONGING AT NUNALLEQ

I was cleaning artifacts in the Nunalleq Culture and Archaeology Center lab with a fellow volunteer early in the 2017 field season when Mary Church, our local friend and camp cook, came in the door to tell us her plans for the afternoon. There was a memorial feast happening at Pauline Matthew's house in honor of a late relative, and the whole village was invited.

Not one to turn down a cultural learning opportunity nor an invitation, I excitedly decided to join Mary at the feast, and convinced my volunteer peer to come along too. We closed down the lab and made the five-minute trek around the winding dirt road to a home in the center of the village with people trailing out the door — clearly the right spot. Inside, friends and neighbors had brought mountains of food: multiple type of agulaq or “Eskimo ice cream,” mixed fresh beach greens, macaroni and cheese, a few types of meat, and a real luxury — clam stew, made from clams that had been dug out around Platinum, to the south of Quinhagak. Our hostess, Pauline Matthew, was herself dishing up this coveted stew, and I took the opportunity to say hello when I passed her in the food line. I had interviewed Pauline two years prior, and would again later that summer. After we filled our plates high with food, we settled into a cozy corner of Pauline's home, which was filled with dozens of people from the village. Some sat in groups chatting; others milled about without conversation partners; still more encircled the large sheet cake decorated with a photo of the deceased, the person this feast was meant to honor; children young and adolescent wound their way through the tangle of legs in the living room. It seemed that the whole village — family or not — was present to partake in the event.

Of course, everybody knows everybody in Quinhagak, and I should not have been surprised by this extension of household hospitality to a group much larger than even the most extended of family relations. Invitations to such events are always broadcast over the village-wide VHF radio system, indicating that everyone is really and truly welcome.

When my volunteer friend initially balked at the idea of attending this event without knowing the hostess (a Westerner like me, she found the idea of opening one’s home in this way neither familiar nor comfortable), Mary reassured us that it was really okay for us to come by— in fact, it was the point. The sharing of bounty with one’s community and the extension of kinship practice beyond the nuclear household are both important fixtures of Yup’ik sociality.

* * * * *

Family was mentioned in my Quinhagak interviews more than any other theme, and its significance in contemporary village life is clear. In Quinhagak, the concept of family is expansive and enacted at the village level, where everyone is considered some sort of relative to everyone else (see Chapter II). Relatedness and kinship structure day-to-day activities and subsistence obligations described in Chapter VII, which contribute to family strength, stability and connection. Sharing food and resources is one way that people “demonstrate relatedness,” and is even a “way to create relatives” (Fienup-Riordan 2018a, 204). Paul John (Tooksok Bay; in Fienup-Riordan 2018a, 198) noted the obligation surrounding family affiliation, explaining that a person “cannot ignore their relative;” that is, there is a “requirement to give help when needed” in these relationships, and this “distinguished a relative from a friend.” Kawagley (2006,18) emphasized “the value of the extended family, not only for survival but to be very aware and appreciative of the bloodline” in Yup’ik culture. He explained that the “elaborate system of relationships” that defines extended Yup’ik families “formed people’s identity— who they were, where they were from, and what they represented” (Kawagley 2006, 18).

Pauline Matthew (2017) suggested the time depth of traditional Yup’ik family values, explaining that “a lot of the people long time ago were very close, and they helped each other.” Based on Yup’ik ways of knowing, we would expect the cohesive, interconnected family unit to also have been a meaningful social category for the ancestors at Nunalleq. This assumption has structured some archaeological interpretations about the site, particularly those regarding incised markings found on bentwood vessel bottoms, often interpreted as family ownership marks (Figure 47). These markings are

evocative, and some cross artifact categories, making them an object of fascination for archaeologists and locals alike. When I explained my interest in the markings to Grace Hill, Pauline Matthew, and Julia Hill (2017), Grace requested that I follow up once I had some answers, asking “will you tell us” what they mean?



Figure 47. Example of a bentwood vessel bottom from Nunalleq. Note the *qaraliq*, or marking, and the gouge at the center.

Incised markings on the undersides of bentwood vessels are familiar in the ethnographic record (Fienup-Riordan 2005, 131-132; Fienup-Riordan 2007, 299; Fienup-Riordan 2017, 216; Himmelheber 1993, 24). As Frank Andrew (Kwigillingok, in Fienup-Riordan 2017, 216) explained, the ancestors “could not go without making line designs that were not painted but were engraved on the bottoms of bowls. After making a mark on the center, they made scratches to make a design.” Andrew’s (2017) description of the “mark on the center” (like the gouge in Figure 47) surrounded by incised “scratches” is congruent with the marking types found at Nunalleq. Elsewhere, Andrew (in Fienup-Riordan 2007, 304) referred to such “scratched on” markings as “*qaraliq* [mark],” a term that I adopt here to describe those found at Nunalleq.³²

Family markings are prevalent and meaningful in Yup’ik cultural context. Information about family affiliation was commonly encoded in parka designs, kayak paddle emblems, and markings on cut fish. Fienup-Riordan (2007, 297) even noted that women would traditionally mark the top of their bowls of *agulaq* with their family design before bringing them to celebrations in the *qasgi*. Based on ethnographic information and knowledge from Quinhagak, family might be a powerful way to interpret what *qaraliq* meant to the ancestors. At the same time, human signification systems are complex to interpret, with numerous factors affecting the style, form, use, and meaning of a symbol in specific temporal, spatial, and cultural contexts. Yup’ik theory accommodates such complexity, emphasizing an integrated view of systems and how different facets of meaning intersect to form a whole. Yup’ik design is known for “double images” (Fitzhugh and Kaplan 1982, 142) and “layered visual narration” (Mossolova et al. 2020, 114) that references multiple concepts at once while hinting at themes of concealment, duality, and transformation. Many objects from Nunalleq reflect such cleverness in design, including masks (Mossolova et al. 2020; Mossolova and Knecht

³² In addition to the incised marks on bentwood bottoms, Yup’ik people often painted a different design on the inside of the vessel using black paint (Fienup-Riordan 2005, 131-132; Fienup-Riordan 2007, 299). Himmelheber (1993, 16) noted that these small paintings depicted “ancestor stories” from either parents’ side that were passed down over generations. The incised marks may have served a different signification purpose than the paintings, because these “can’t be washed off. . . which frees the painting from its original function as indication of ownership” (Himmelheber 1993, 24). Knecht and Jones (2020, 37, 39) noted that painted designs are *not* found on Nunalleq’s bentwood vessels — only incised markings.

2019), figurines (Knecht and Jones 2020, 38), uluaq handles (see Chapter VI), and others. Even if qaraliq are referencing Nunalleq social collectives of the past, what other dimensions of meaning are embedded in their design?

Archaeologists have approached symbolic interpretation from a number of angles over time, tending to view symbols either as “tokens” or “instruments of communication,” as “girders” that “constituted and structured the mental and social world of ancient people,” or as “tesserae” that are “temporarily assembled and experienced as meaningful by people” using them (Robb 1998, 332). Post-processual interpretations view symbols as a form of “concrete representation” allowing social relations to “become real” through active engagement over time (Preucel and Meskell 2007, 16; see also Robb 1998). Such archaeological perspectives find “the social” to be implicated in symbol and style, as these are always derived from systems that “give the cultural materials in question their social values” (Conkey and Hastorf 1990, 1; see also Hodder 1982). Symbols might also reference “beliefs, values, world views, and modes of conduct, especially those that were shared and exhibited in patterned and redundant ways in the multiple domains of cultural life.” (Gillespie 2002, 2).

Such archaeological understandings of how sociality relates to symbolism underpin my analysis. However, I am cognizant of the colonial nature of assumptions that style, symbol, and design can be “read” by archaeologists outside of the cultural contexts in which they were created. Systems of archaeological classification that uncritically define styles and types contribute to a power dynamic wherein archaeologists are the ones who define the past (Conkey and Hastorf 1990), to the detriment of community empowerment. The qaraliq from Nunalleq prove an interesting example, because Quinhagak locals did not authoritatively define their meaning, but did express interest in their study and provided ample information about the social categories considered important in a Yup’ik worldview. To complete this analysis in a way that vests power in Yup’ik interpretations, I rely as much as possible on Yup’ik conceptions of style and design, Quinhagak interviews discussing precedent for material markings and important

Yup'ik social categories, and other Yup'ik voices speaking to these topics. Multi-vocality in interpretation serves as a “check” against a singular archaeological narrative.

In this chapter, I first review my analytic approach and present the archaeological data for qaraliq found on bentwood vessels at Nunalleq, as well as information about related markings found on labrets and uluat. Next, I propose four different interpretative approaches for understanding markings at Nunalleq. Then, I return to the archaeological data with each interpretive approach in mind, and discuss their intersections in relation to each marking. A Quinhagak-centered interpretation of qaraliq suggests the importance of family, but a multidimensional analysis points to how other factors can compound and elaborate this interpretation, helping us to better understand the ancestors at the old village.

The Archaeology of Markings

I began my assessment of qaraliq by photographing all available marked bentwood vessel specimens at the Nunalleq Culture and Archaeology Center in February and March 2019— a total of 112 objects. Additional marked vessels may have been identified in the collection since this time due to further excavation and cataloging. Because I knew my analysis would be focused on symbol morphology, I did not record vessel dimensions, though each was photographed with a 10 cm scale to document size, and size-and-shape based analysis would be a valuable point of future study.

I then used the photographic data to assess the design elements of each marking, finding a total of 28 different markings (Figure 48). Eleven specimens had undeterminable markings. Some markings are repeated on multiple bentwood objects, and others are found only once. Frequency data for each marking are listed in Table 8.

Next, I clustered similar markings into groups based on shared design elements (Figure 49). I identified five groups, defined as follows:

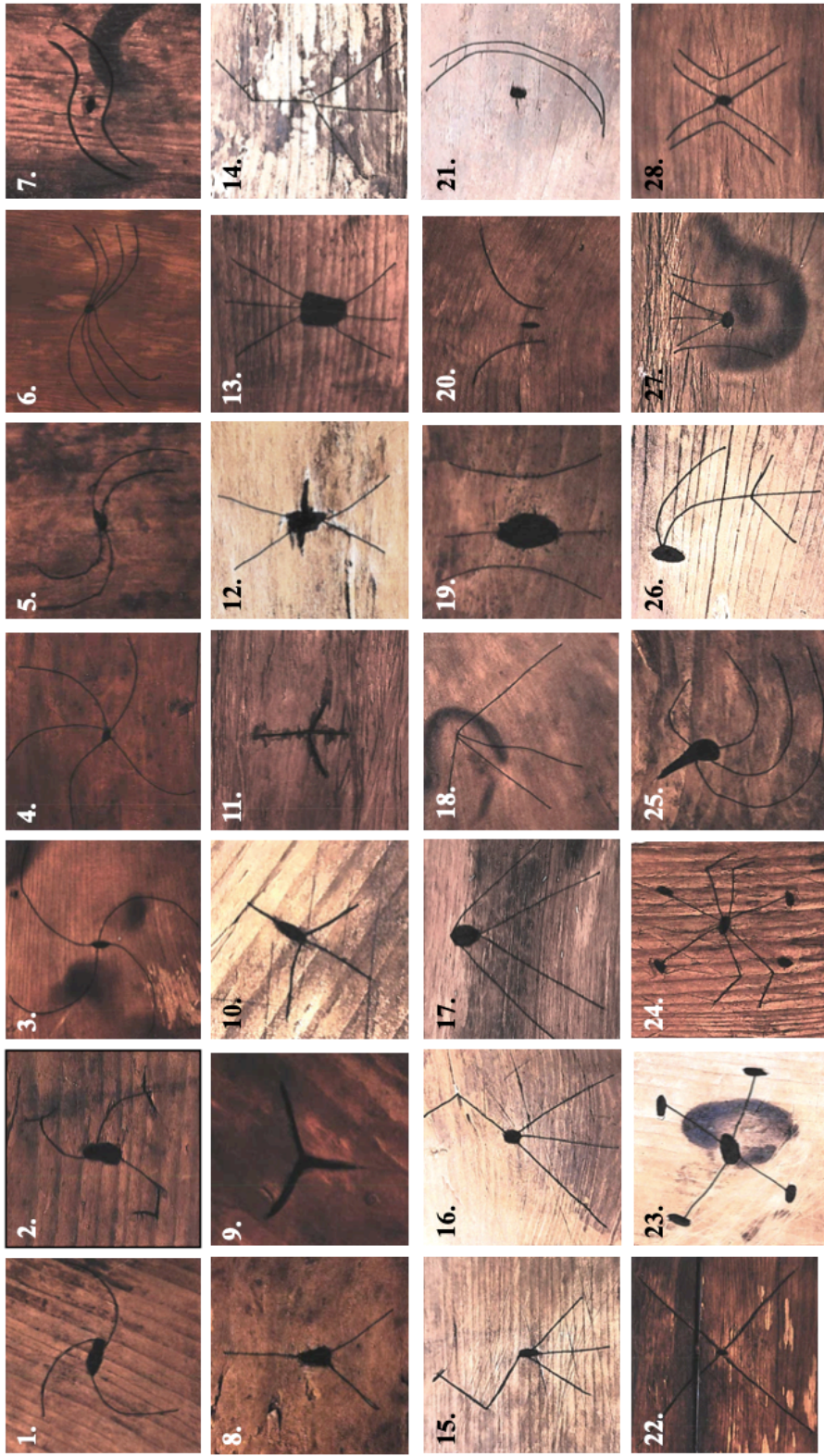


Figure 48. Qaraliq markings on bentwood vessels from Nunalleq. Images have been reinforced with black ink to make the incised designs more visible.





























qaraliq	number	qaraliq	number
	15		1
	2		1
	1		1
	1		1
	11		23
	1		1
	1		1
	2		11
	3		5
	5		1
	3		2
	1		1
	3		1
	1		1

Table 8. Numbers of qaraliq designs on bentwood vessels from Nunalleq.

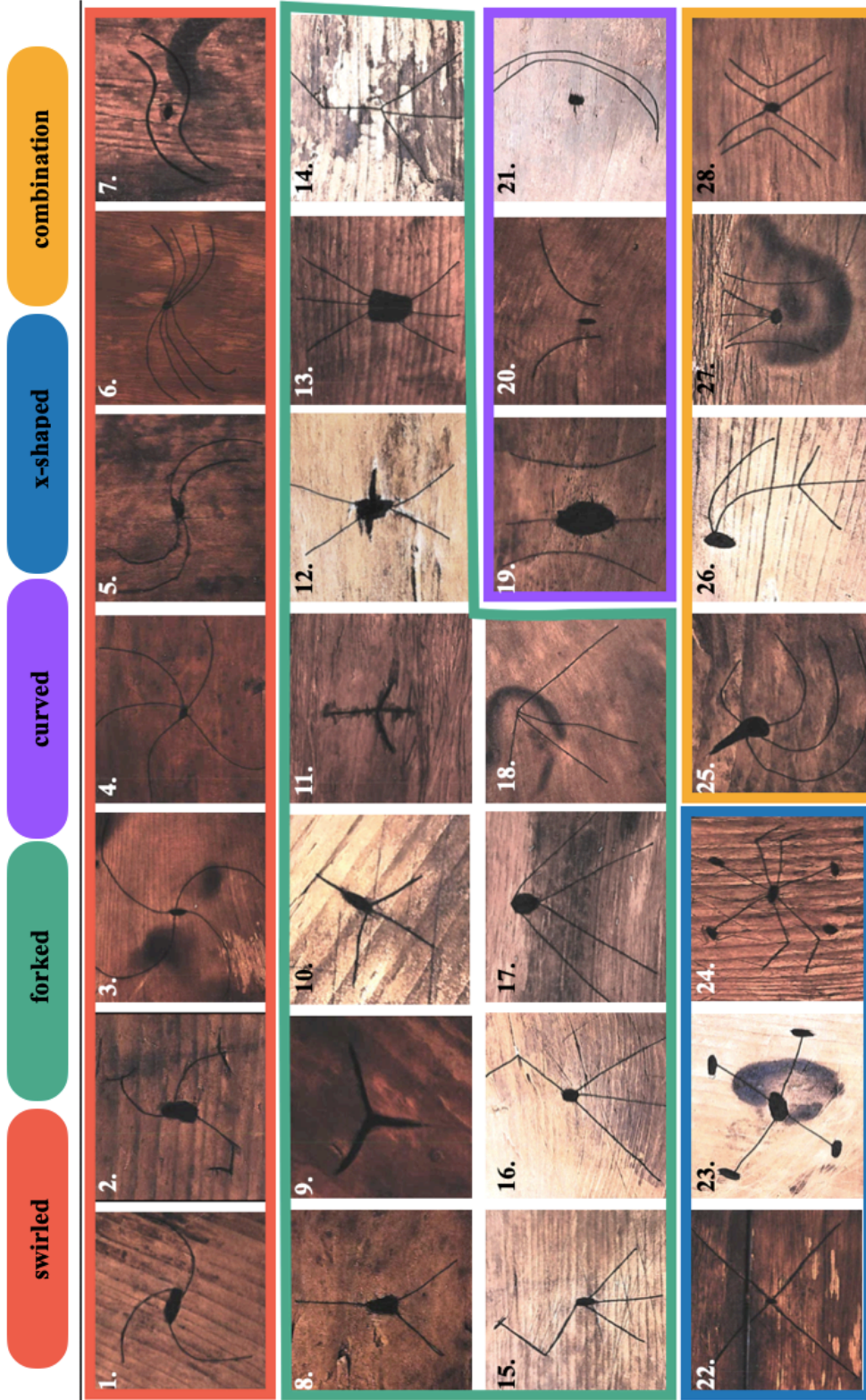


Figure 49. Qaraliq markings on Nunalleq bentwood vessels, by shared design element.

1. *Swirled designs*: Curved, rotating lines emanate from or near a central point. Includes seven different markings. Note that the swirls rotate in different directions depending on the specimen. Specimen #7 is different from the other markings in this group, because the lines do not come from a central point, but the movement of the lines is similar.
2. *Forked designs*: Multiple prongs extend from a central point. Includes eleven different markings.
3. *Curved line designs*: The design consists of a central point with two curved lines (like parentheses) oriented around it in various positions. Includes four different markings.
4. *X-shaped designs*: The design consists of a centrally-placed X, sometimes with elaboration. Includes three different markings.
5. *Combination designs*: The design appears to be a combination of two of the above categories. Includes four different markings.

The groups differ in abundance (Figure 50). Swirled designs are the largest category (32%), followed by curved line designs (25%), forked designs (22%) and x-shaped designs (17%). There are only a few combination designs in the sample.

I completed similar design analyses on the labret and uluat samples discussed in Chapters VI and VII. Thirty-seven wooden labret specimens are decorated with incised designs (see Chapter VI, Figure 18), which fall into nine categories of varying frequency (see Chapter VI, Figure 19: 1) pinniped face (43%), 2) x-motif (13%), 3) horizontal line (13%), 4) vertical lines (7%), 5) diagonal lines (10%), 6) chevron (3%), 7) diagonal notches (3%), 8) hashmarks (3%), and 9) track lines (3%). Several “pinniped face” specimens resemble the “curved line designs” found on bentwood vessels, and the “x-shaped” designs are also similar across these artifact categories.

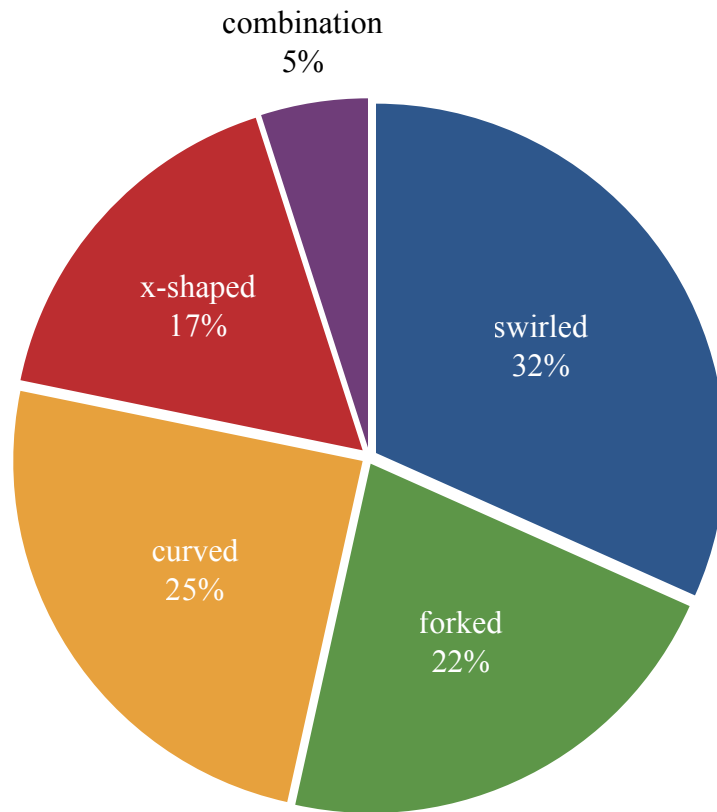


Figure 50. Frequencies of qaraliq design categories on Nunalleq bentwood vessels.

Uluaq handles display several forms of decoration, including animal shapes, inlays, ochre, and incised lines. I focus on the 31 wooden uluaq specimens decorated with incised lines, due to their similarity in nature to the bentwood vessel and labret markings. Incised designs on uluaq handles fall into six categories (Figure 51) of varying frequency (Figure 52): 1) forked designs (55%), 2) x-shaped designs (19%), 3) parallel lines (16%), 4) diagonal lines (3%), 5) combination designs (3%) and 6) pinniped face designs (3%). “Forked,” “x-shaped,” and “pinniped face” designs are similar to those found on bentwood vessels, while “parallel” and “diagonal” line designs also occur on labrets.

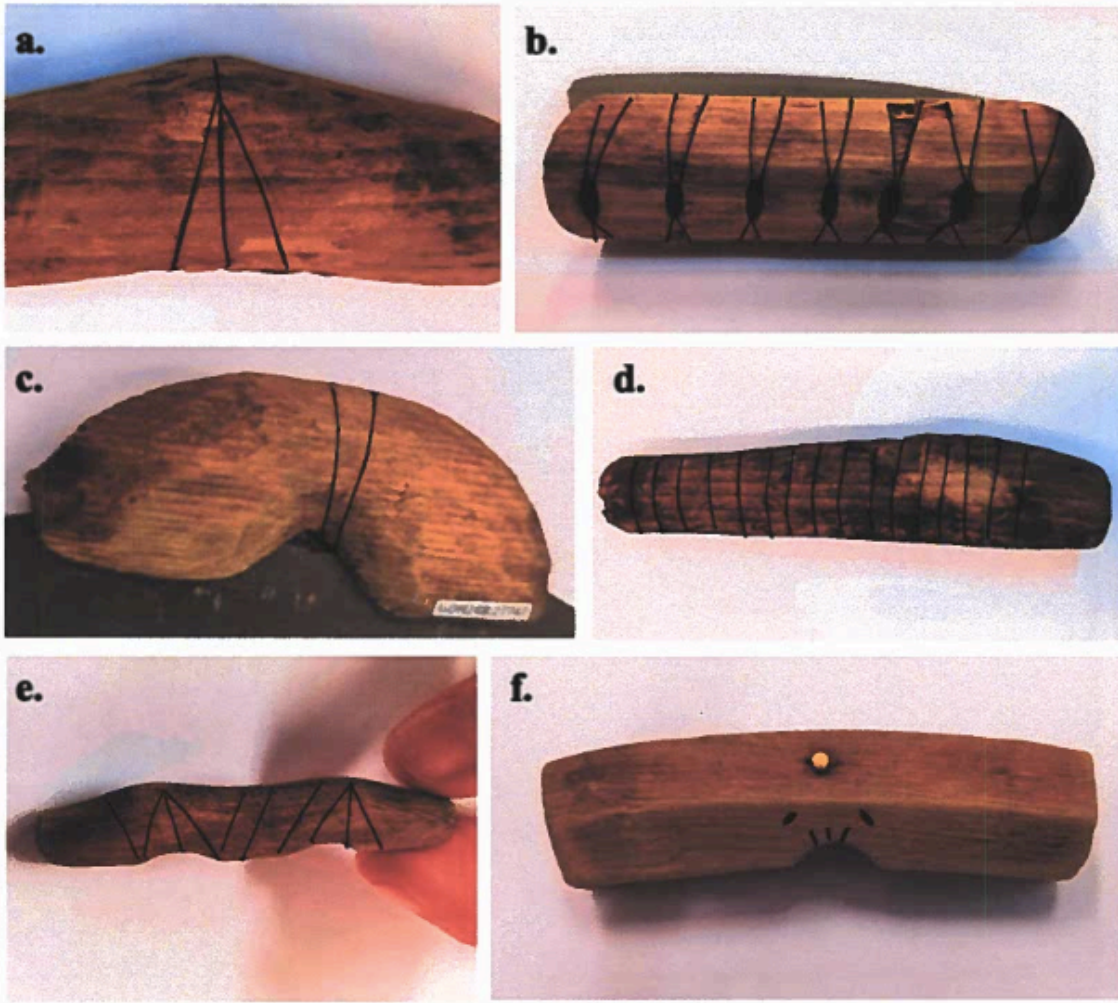


Figure 51. Markings on Nunalleq uluaq handles: a) forked; b) x-shaped; c) and d) parallel lines; e) combination; f) pinniped face.

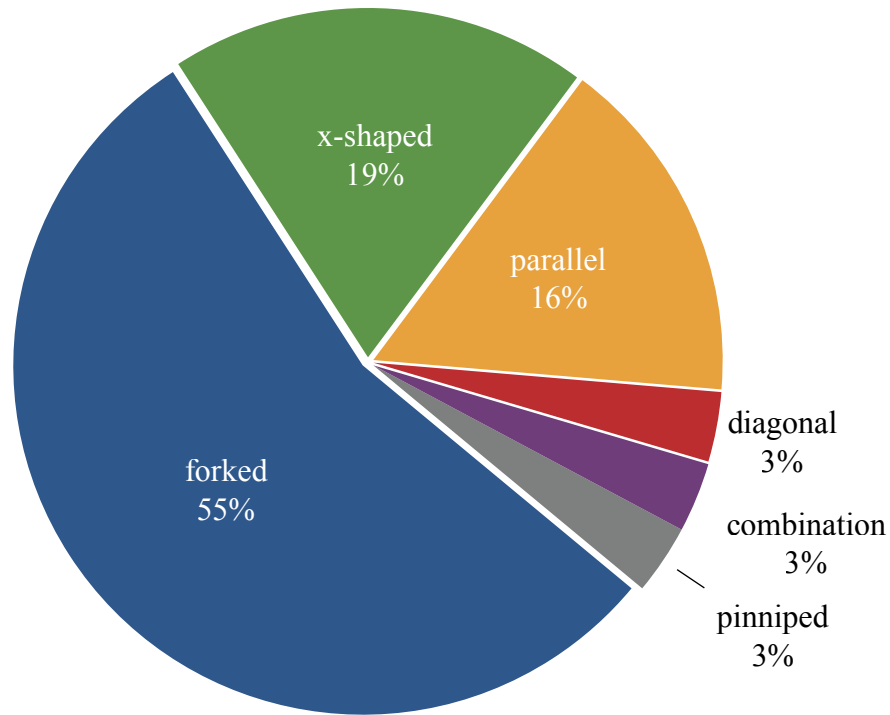


Figure 52. Frequencies of uluaq design categories from Nunalleq.

Multiple Perspectives on Markings

Interpreting symbols in archaeology is complicated, and a number of factors must be considered when exploring meaning. As Robb (1998, 329) explained, “human symbolism is so diverse (it includes cognitive structures; ritual icons; identities such as gender, prestige, and ethnicity; technological knowledge; and political ideologies) that multiple approaches are needed to deal adequately with it.” Of course, archaeologists are always interpreting symbols and significations, whether acknowledged or not (Conkey and Hastorf 1990, 2). When we recognize that any interpretation of material remains actively inscribes meaning onto the past, we can take care to center analytical methods that acknowledge complexity, confront ambiguity, and incorporate multiple perspectives (Gero 2007).

Robb (1998, 341) suggested that “there is...no specific methodology unique to the archaeology of symbols. Instead, the key starting point for investigation is realizing what are the right questions to ask.” In the spirit of asking the right questions,³³ I approach my analysis of markings at Nunalleq using four intersecting interpretive lenses:

- 1) Artistic and iconographic traditions, with particular attention to how Yup’ik artists from Quinhagak and elsewhere think about design;
- 2) A use-context approach considering how the marked objects were utilized in Yup’ik context;
- 3) Considerations of the makers, owners, and users of marked objects, which was a strong theme that emerged from Quinhagak interviews; and
- 4) A social approach that looks to Yup’ik concepts of kinship, affinity, and belonging to assess if and how the markings might indicate collective group membership.

The nexus of these perspectives is a fruitful place for interpreting the markings, for as Robb (1998, 330) explained, “symbolic systems work because of the coherent ties between different kinds of meanings.” Such a multi-dimensional approach is compatible with Yup’ik ways of knowing, which emphasize balance between constituent parts of a whole (John 2010; Kawagley 2006).

With the Nunalleq assemblage, we have the advantage of assessing how symbols appear across different artifact categories, including bentwood vessels, labrets, and uluat. Such marked objects are common throughout the North (Fitzhugh and Kaplan 1982), particularly at sites associated with coastal Thule-related peoples (Reynolds 1989), making some regional comparisons possible. Comparing how symbols “cross boundaries” can prove crucial to elucidating meaning and “to understanding how objects are understood and used” (Robb 1998, 341-342). Comparisons across object types and regional communities add another layer of complexity to the analysis.

In 2017, Nunalleq artifacts with qaraliq were presented for Quinhagak residents to comment on during object-centered interviews (Figure 53). In 2019, I held a focused

³³ I am grateful to my dissertation committee chair Dr. Madonna Moss for asking *me* the right questions about this analysis, which helped me refine and improve my approach.

interview session on markings with Quinhagak elder Grace Anaver, due to her personal interest in the subject. Within these four interpretive approaches, I aim to privilege the local Quinhagak perspectives conveyed during these interviews whenever possible. However, like me, Quinhagak residents also found the markings from Nunalleq complex to interpret. Local knowledges about design, style, object function, and history are woven into each discussion, but note that explicit local interpretations of the markings are largely absent, making a multidimensional approach all the more important.

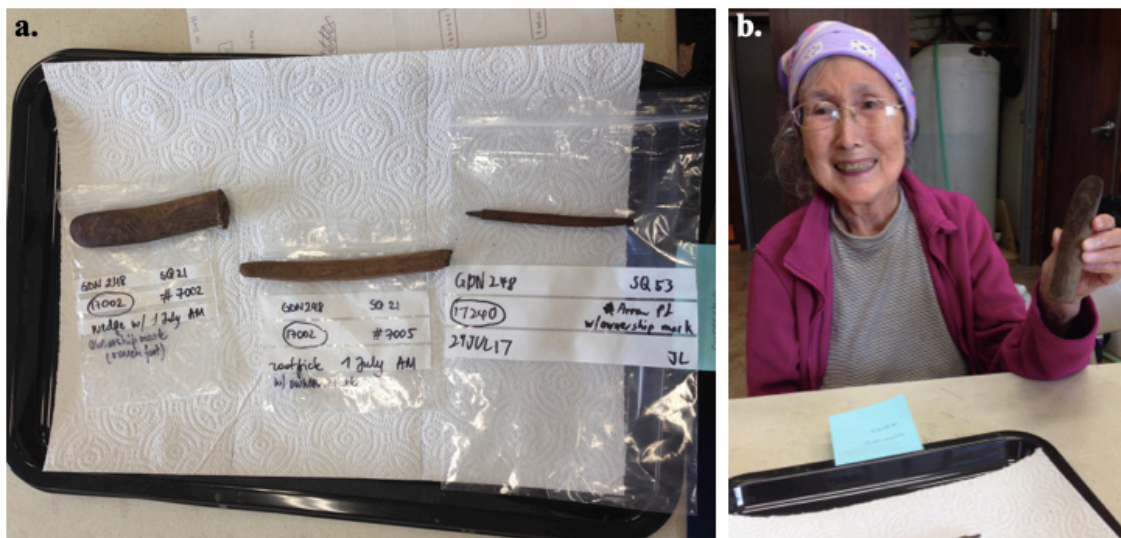


Figure 53. Images of marked objects from 2017 object interviews: a) Tray with Nunalleq artifacts with markings that were shown to interview participants; b) Quinhagak elder Pauline Beebe poses with a marked wedge. She noted that this object did *not* display a marking associated with her family.

Artistic and Iconographic Approach

The markings from Nunalleq display parallels to themes in Yup'ik art and iconography. The western Arctic is known for a “well-developed artistic tradition” dating back to about 2,000 BP (Fitzhugh and Kaplan 1982, 247). Archaeologists and anthropologists have long noted that art in the western Arctic cannot be

compartmentalized as such because objects from numerous use contexts are decorated and made to look beautiful, often with reference to symbolic meaning and implied spiritual potency (Fienup-Riordan 2005, 2007; Fitzhugh and Kaplan 1982, 142, 192; Mason and Friesen 2018; Willard Church 2019). Recall Willard Church's (2019) comments that nicely-made zoomorphic uluaq handles were probably designed "to show respect for the animal that the knives are going to be used on," because "you've got to have pretty tools to make pretty things." Aesthetics are important, as this is pleasing to the onlooker and the spirits that representations are sometimes meant to appease (Willard Church 2019).

Story and narrative are particularly important components of "Kuskokwim Eskimo" design, which emphasizes representation in addition to aesthetics (Himmelheber 1993, 11). When asked by anthropologist Hans Himmelheber to comment on some European paintings, Yup'ik artist Lame Jacob (Bethel) explained that "those are all good paintings, but they don't tell me as much because I don't know the stories³⁴ which go with them" (Himmelheber 1993, 11). One of my more profound moments of realization during Quinhagak fieldwork occurred during an on-site interview with Annie Cleveland in summer 2017, when I asked her to interpret some of Nunalleq's architectural features that had recently been revealed by archaeologists. To do so, she immediately picked up a stick, smoothed out an area of dirt in front of her, and began drawing (Figure 54). Annie was story-knifing, a common form of storytelling play amongst Yup'ik girls wherein the "storyteller illustrates her tale by drawing symbols in the mud, which are erased and replaced by new symbols as the story unfolds" (DeMarrais 1992, 120). Story-knifing is an evocative example of how visual representation and narrative are intrinsically linked in a Yup'ik worldview.

³⁴ Quinhagak residents frequently used story as the medium for transmitting knowledge and demonstrating certain points during our interviews, and once I recognized this, it was easier to understand what people were trying to convey to me. Story is a very Yup'ik way of communication, and oratory is a noted and valuable cultural form.



Figure 54. Annie Cleveland storyknifing at the Nunalleq site, summer 2017.

The natural world is a central theme in Yup'ik iconography, and makers frequently depict animals and representations of the circular universe³⁵ (Fitzhugh and Kaplan 1982, 200). Animal symbolism is particularly salient at Nunalleq, where a number of artifacts across object categories evoke animal imagery (recall the zoomorphic uluat discussed in Chapter VII). Mossolova and Knecht (2019, 19-20) noted that masks (and perhaps other objects depicting animals) simultaneously evoke themes of human-

³⁵ Though “representations of the circular universe,” “eye of the universe,” or *ellam iinga* (see Chapter II) have been found on ivory earrings and other carvings from Nunalleq, these are not depicted on bentwood vessels, labrets, or uluat, so I do not pursue discussion here.

animal transformation (as animals are capable of “crossing and recrossing ontological borders”) and “respect and gratitude” to animals and their vital relationships with humans. Many masks and maskettes from Nunalleq “depict animals with high symbolic value: seals, walrus, wolves, owls, and other birds,” and while “these animals held a central position in the Nunalleq lore and cosmology...not all played major roles in the Nunalleq subsistence” (Mossolova et al. 2020, 132). In general, animal iconography at the site strikes a balance between “cultural conventions and...people’s everyday encounters with natural entities and events” (Mossolova et al. 2020, 116).

Some of Nunalleq’s qaraliq make clear reference to animals. In particular, many of the bentwood vessel markings in the “designs with curves” category (Figure 49, #s 19, 20, and 21) resemble a walrus or seal nose with closed nostrils, as when the animals surface from underwater (Figure 55). These “pinniped snout” markings cross artifact categories, with significant representation on labrets (43%) and minimal representation on uluat (only a single specimen, Figure 51f). While pinniped snouts are consistently represented in stylized form on bentwood vessels, the labret forms are more varied and representative of entire faces (Figure 56). Still, there is cross-over in symbolism: some pinniped labrets are exact likenesses for the bentwood vessel forms, and others use the bentwood motif as the “nose” on a larger pinniped face (Figure 56). The single uluaq marked with a pinniped face references both the realistic and abstract forms of the design (Figure 51f). Recall that John Fox (2017) shared an important story regarding walrus and labrets in Chapter VI. Given the relationship between pinniped motifs on labrets and bentwood vessels, his story of human-walrus transformation and regional affiliation may imply a similar meaning for the curved line qaraliq. Nearly identical markings associated with walrus have been found on a Yup’ik mask collected by Jacobsen from the Yukon (Fienup-Riordan 2005, 237, Figure 11.12) and a bentwood hat collected by Sheldon Jackson in 1893 (Fienup-Riordan 2007, 128), suggesting this design was not unique to Nunalleq.

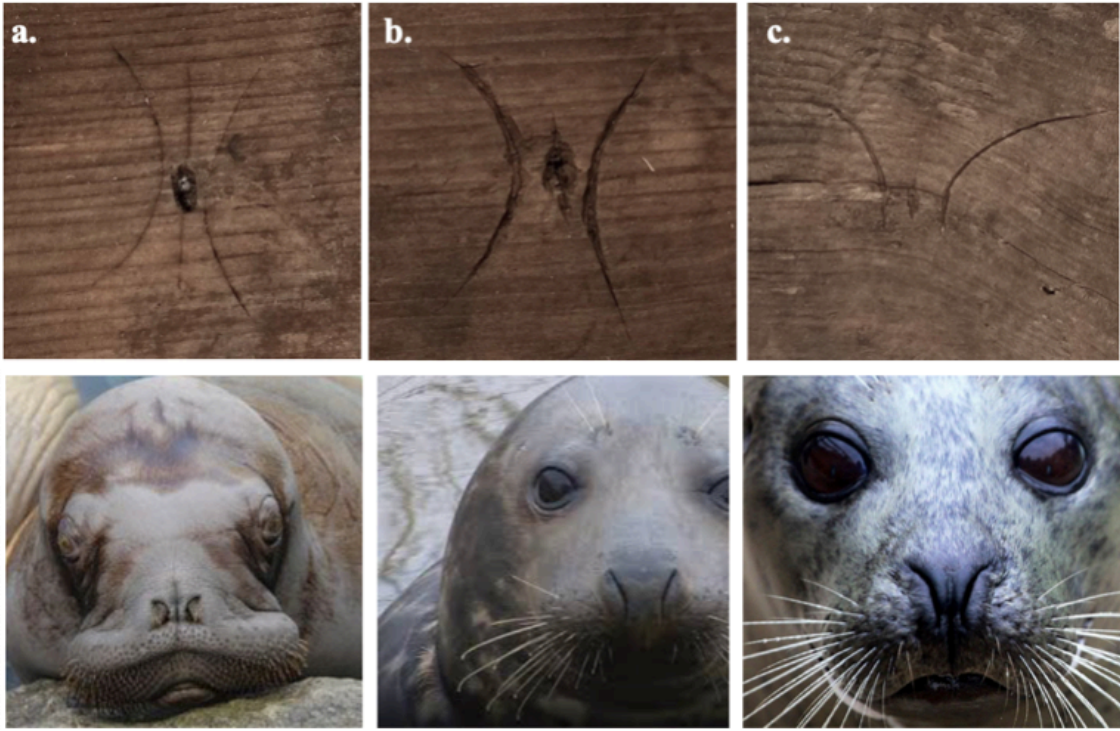


Figure 55. Comparison of curved line designs from Nunalleq to pinniped snouts.



Figure 56. Nunalleq labrets showing variations on the pinniped snout design.

Birds are another important iconographic theme at Nunalleq (Mossolova et al. 2020), and in Yup'ik art more generally. Several of the “forked designs” may represent bird tracks,³⁶ or *yaqulgem itгаа* (Margaret Andrews, Kotlik, in Fienup-Riordan 2017, 216), including those of anisodactyls like ravens (Figure 57a), zygodactyls like owls (Figure 57b), and totipalmates like cormorants (Figure 57c; after Gleason 2000, 29-32). One forked motif resembles a raptor’s claw (Figure 57d).

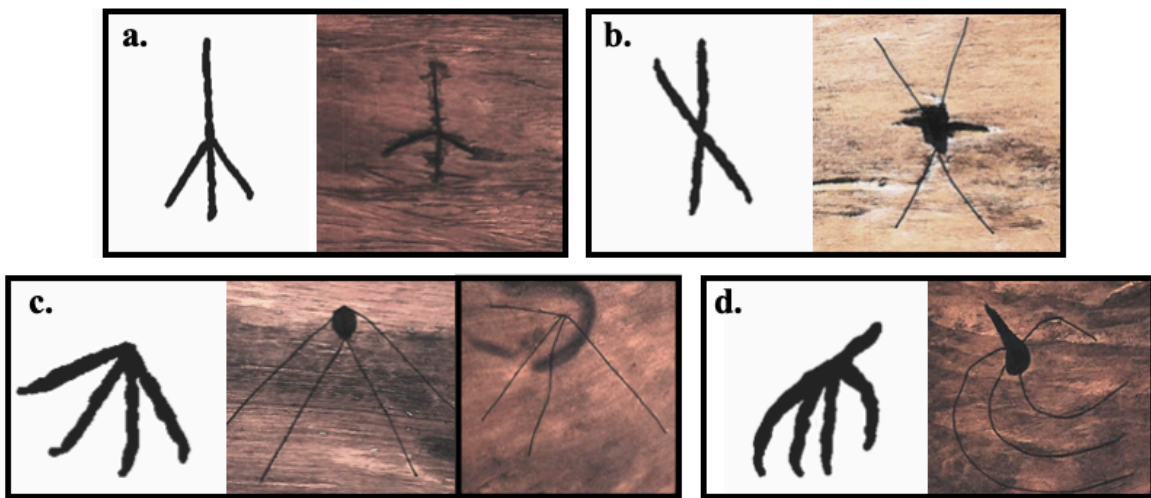


Figure 57. Comparison between bird tracks and Nunalleq qaraliq designs: a) anisodactyl, b) zygodactyl, c) totipalmate, and d) raptor claw.

Of these, the raven footprint is notable for being both common and geographically widespread in Yup'ik iconography. Raven, or *tulukaruk*, is a prominent but “complex and contradictory” character in Yup'ik oral tradition, simultaneously a “lazy scavenger” and “the creator of light and life” (Fienup-Riordan 2017, 215-216). Frank Andrew (Kwigillingok) explained that the raven’s footprint motif was “widely-used” and frequently placed on Yup'ik bentwood containers (Fienup-Riordan 2017, 216, 219).

³⁶ Madonna Moss’s observations were instrumental to these inferences.

Nelson (1899, 324-325) observed the raven design to be widespread on arrows, spearheads, and tattoos as far away as East Cape and Plover Bay in Siberia. Reynolds (1989) identified symbols resembling the raven's footprint on hunting implements from archaeological sites in Nuwuk, Utqiavik, Walakpa, Tikeraq (Point Hope), and Nunivak, where they were interpreted as ownership or property marks (though level of ownership was not determined, and note that designs similar to the x-shaped and curved line motifs were also found at these locales in smaller numbers). A number of ethnographic objects documented in Fienup-Riordan 2005 (pages 159-160) and Fienup-Riordan 2007 (pages 45, 68, 80, and 301) bear the raven's footprint marking, demonstrating common usage across the Yukon-Kuskokwim Delta. At Nunalleq, the raven's footprint mark is found in substantial frequencies on bentwood vessels (22%) and uluat (55%), but is not found on labrets.

Small numbers of raven, owl, and cormorant remains have been recovered from Nunalleq, but none of these birds was a prominent subsistence resource at the site (Masson-MacLean et al. 2020, 187), suggesting that the role these birds played in the iconography was symbolic or spiritual (Mossolova et al. 2020, 125). Some cormorant and raven remains were worked, and the bones, skins, and feathers of these animals may have been considered spiritually potent (for example, see the ethnographic mask in Fienup-Riordan 2017, 218 featuring "raven feet nailed to the forehead and a raven head sticking out of its thick funnel-shaped mouth"). A number of artifacts suggest owl symbolism at Nunalleq, including masks, maskettes, and figurines (Mossolova et al. 2020, 118). Bird track markings on bentwood vessels and uluat may have referenced such bird-centered symbology.

A few possible associations for the X-shaped design category are found in Yup'ik iconography. One of the most prominent designs in Yup'ik art (also found in Iñupiat and Inuit imagery) is the skeletal or "lifeline" motif, which represents an animal's stylized backbone running from their mouth to their backside (Figure 58). Fitzhugh and Kaplan (1982, 200) identified "lifelines" and "skeletal motifs" as two of the most significant symbol systems in Bering Sea Eskimo iconography. Such osteological renderings reflect

not only an understanding of an animal’s biology but also attention to its spirit or inua, thought to be located along the backbone, the “central spiritual and biological channel of an organism” (Fitzhugh and Kaplan 1982, 201). As they explained,

these devices do not qualify an object or image. Rather, they impart an aspect —part decorative, part symbolic or religious— that conveys the image’s condition or state of being³⁷ with respect to biological life, human relationships, and its individualism or status as a discrete entity in the world (Fitzhugh and Kaplan 1982, 200-201).

X-shaped designs on bentwood vessels, labrets, and uluat (Figure 59) resemble the lifeline motif and may be a reference to this iconography. Because the shape of the uluaq handle mirrors a mammal’s body (recall the zoomorphic uluat from Chapter VI), and because uluat were used for many animal processing tasks, such spiritually potent symbolism may have been particularly important in subsistence use contexts.



Figure 58. Lifeline or skeletal motif on an ivory uluaq handle from Nunalleq.

³⁷ Note the parallels between interest in an animal or spirit’s state of being and attention to a human person’s state of being as explored in Chapter VI. “State of being” and “condition” are both significant themes in a Yup’ik worldview.



Figure 59. Comparison of x-shaped designs across Nunalleq artifact categories. From top: on a labret, on an uluaq handle, and as a qaraliq design on a bentwood vessel.

Willard Church (2021, personal communication) suggested an additional factor for interpreting the X-shaped designs. Willard noted the similarities between the X-shaped motifs and some of the pictographs used in the Yugtun (Yup'ik language) writing system created by Uyaquq, or Helper Neck, around the year 1900 (Figure 60; Jacobson 2012, 277). Little information exists on the representations in Uyaquq's pictographic alphabet, which was later converted to a syllabary. Yet the similarity between some of Uyaquq's chosen symbols and the X-shaped designs, especially those with notched ends, suggests that this was a meaningful symbol in a Yup'ik worldview at the turn of the 20th century.

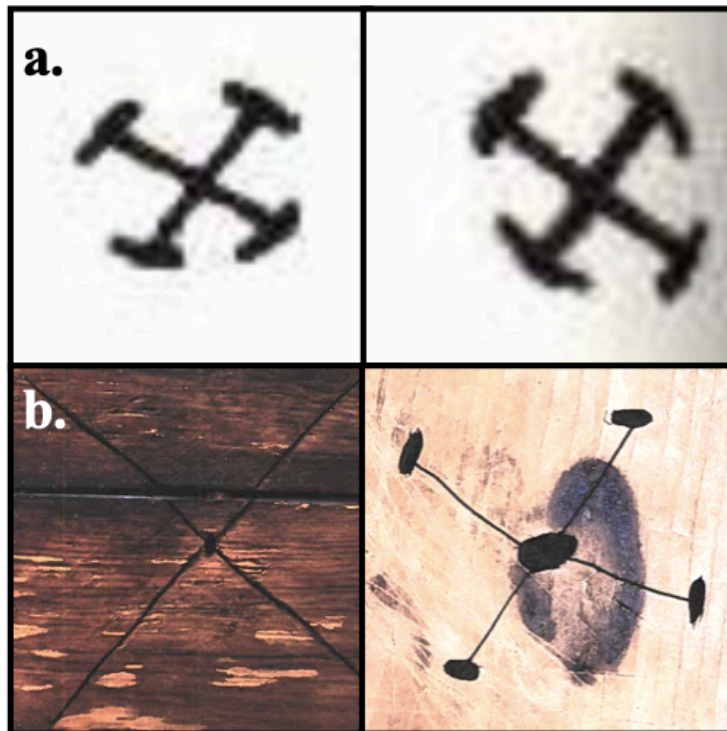


Figure 60. Comparison of a) pictographs from Uyaquq's Yugtun writing system and b) x-shaped qaraliq from Nunalleq.

One X-shaped specimen, #24 (Figure 49), is suggestive of “bent leg” iconography which referenced myths of “monsters,³⁸ like the *kokogiak*, that lie on their backs waving many sets of their long legs in the air” (Fitzhugh and Kaplan 1982, 247). These designs may also depict the practice of “Eskimo warriors who showed derision for their enemies by flopping down on their backs in the heat of battle and waving their legs in the air” (Fitzhugh and Kaplan 1982, 247). Bent leg designs are found across western Alaska, and “appear to have developed from the full skeletal pattern” (Fitzhugh and Kaplan 1982, 247). The combination of the x-shaped motif and the bent leg design in this Nunalleq specimen lends credence to this developmental trajectory.

The most abundant design, the swirled group (32%, Figure 50), is the most difficult to locate in traditional Yup’ik iconography. None of the artifacts displayed in Fienup-Riordan’s visual inventories of Yup’ik objects (2005, 2007) depict this motif. While cycles and circles are important ideas in Yup’ik philosophy, the swirl is different from the circle, whose ends are always shown touching in the iconography. Madonna Moss (2021 personal communication) noted the aspects of movement inherent in the swirl design, which may reference natural forces like wind or water. While this is a good hypothesis, we cannot know what the swirl represented in a Nunalleq worldview based on iconographic evidence alone.

Object Use-Context Approach

How, where, and why each marked object was used is important information that may speak to the significance of the markings. Based on their shape and size (Fienup-Riordan 2005, 2007; Nelson 1899, 72), the marked bentwood vessels from Nunalleq are most likely food containers, water buckets, or urine pails. These uses were unlikely to overlap. A more detailed size and shape analysis may help determine which specimens would have been appropriate for each use; however, many specimens only consist of the

³⁸ Other monster iconography has been found at Nunalleq, including the serpentine-like *palarayuk* monster (see uluaq handle in Chapter VI). Archaeologists found this character so evocative as to take it as the symbol for the Nunalleq Archaeology Project’s logo.

allungak, or vessel bottom (Fienup-Riordan 2005, 127), making identification difficult. The notion of “containing” powerful substances like food and bodily fluid is important in a Yup’ik worldview (Fienup-Riordan 1994; see also Chapter VI), and as Annie Blue (Togiak, in Fienup-Riordan 2005, 121) explained, “when people possessed few things, they always used bags and containers to protect them.” Though bentwood vessels would have been commonplace in daily life at Nunalleq, they likely carried ideological significance.

Bentwood vessels in various forms were used in food preparation, storage, and service. Large containers could be used to store prepared foods in outdoor caches (Fienup-Riordan 2007, 292), or to serve food in a family setting. Smaller bowls were intended for personal use, with each household member assigned their own unique vessel. Theresa Moses (Toksook Bay, in Fienup-Riordan 2007, 298) recalled that “the bowl was our own. It was completed for us,” and Nick Charles (Bethel, in Fienup-Riordan 2007, 298) similarly shared that “we each had our own wooden bowl that we didn’t share with others.” Men’s and women’s bowls were made in different styles, with men’s most often carved from a single piece of wood, and women’s made with detachable *allungak* bottoms³⁹ (Fienup-Riordan 2005, 131). People cherished their individual bowls and were taught to care for and clean them well, with implications for future hunting prosperity, for as Frank Andrew (Kwigillingok, in Fienup-Riordan 2007, 298) explained, “this bowl is the pathway of all food” (see also Fienup-Riordan 2005, 131). As the ones most often preparing and storing food, women were also implicated in this care for men’s bowls. Annie Blue (Togiak, in Fienup-Riordan 2005, 131) remembered that:

Back in those days, women cared for men’s bowls with utmost respect. A man’s bowl was never left out in the open but was always put away neatly on a shelf. And when a woman picked up a man’s bowl, she was not allowed to take it with her palms down. If a woman picked up a man’s bowl like that, it was said that the man’s future catch was being covered. And it was important to always keep it clean.

³⁹ While this difference in gendered forms is an interesting avenue for future analysis and may help determine specific uses for Nunalleq’s vessel specimens, note that detachable bottoms were also often a part of the water buckets and urine pails used by people of all genders, complicating the potential for accurate gender attribution.

Aligned as they were with the individual, bowls themselves were also seen to have personhood: “each was created, decorated, feasted, then finally, when its owner died, ‘killed’— rendered useless by cutting a hole in the bowl’s bottom”⁴⁰ (Fienup-Riordan 2007, 299).

Water containers, or *merviit* (Fienup-Riordan 2007, 290), were used to store potable water for drinking in the home and the *qasgi*. Water buckets were to remain covered, their contents distributed with a dipper or ladle. As water intake was generally regulated, so was access to the water container, and these seem to have been personal items akin to the individual food bowls (Fienup-Riordan 2005, 127). As Annie Blue (Togiak, in Fienup-Riordan 2005, 127) explained, “when I first became aware, I used to see an old woman who always kept a *tumnacuar* (small oval wooden bowl with handle) filled with water by her side. The little bucket was always covered, but when she was about to do something, she’d take a little sip.” Catherine Moore (Emmonak, in Fienup-Riordan 2005, 127) similarly commented that “when I moved to the Yukon, I saw one person who had a bucket like this. She didn’t allow her children to use it. She was the only one who used it. Perhaps the buckets’ makers made them with a purpose for the owner. [She] didn’t allow us to touch her bucket at all.”

Urine containers, or *qurrun* (Fienup-Riordan 2005, 128, Fienup-Riordan 2007, 294) served dual purposes: they allowed those too young or too old to urinate outside to relieve themselves indoors, while also serving as repositories of a valued and potentially powerful substance. In traditional Yup’ik lifeways, fermented urine was used to wash hands, face, and hair, and for processing fish and mammal skins and seal intestines for use in sewing (Fienup-Riordan 2005, 136, 157; Fienup-Riordan 2007, 294-295). The ammonia in fermented urine was a powerful cleansing agent, and as Neva Rivers (Hooper Bay, in Fienup-Riordan 2007, 294) explained, “oil never stays on a ringed-seal skin washed with urine. It would look new, but one that hadn’t been washed with [urine]

⁴⁰ Such holes cut on the bottoms of “killed” bowls are different from the characteristic “gouges” found on many intact bentwood vessel bottoms at Nunalleq (see the “small dark square” gouge noted in Fienup-Riordan 2007, 300-301).

would be rancid and oily and unattractive.” John Smith (2019), who is a descendant of Neva Rivers, remembered that “women used urine (as) shampoo...One of my grandmas used to let me urinate in her wooden bucket. Somedays I used to go over and empty it, and she starts up a new batch. Keep it under her bed, yeah, fermenting it.” While some elders remember individual urine containers (Fienup-Riordan 2005, 128), it is also possible that “each family had their own bentwood urine tub” (Fitzhugh and Kaplan 1982, 123), but that use of the tub was restricted to persons in certain states of being. Neva Rivers (Hooper Bay, in Fienup-Riordan 2007, 294) recalled that “they used only the urine of men, boys, girls who hadn’t had their menstrual periods, and old people. They never used the urine of a person who had her menstrual period.” The urine of young boys was also considered a liminal substance, because “it was said that boys were born with their *cirla* [substance with the power to harm]”⁴¹ (Annie Blue, Togiak, in Fienup-Riordan 2005, 131).

Grace Anaver (2019) recalled that her mother had seen urine buckets for girls’ use only, indicated as such with a design. Could some of the qaraliq on Nunalleq vessels have served a similar purpose? Given the spiritual potency of the substances they contained, food containers, water vessels, and urine buckets were all carefully maintained and meant for use by specific persons only. In such a scenario, indications of personal use and ownership are important, but would have only been useful if prominently displayed. Because food bowls were stored upside down near house entryways, Fienup-Riordan (2007, 300) noted that “designs on bowl undersides...were the most visible part of the bowl and among the first things one saw when entering the house” (Fienup-Riordan 2007, 300). In addition to the individual identity of a vessel’s owner or user, it was important to know their gender and state of being so as to avoid contact with dangerous substances. Information about gender was conveyed through vessel design and storage

⁴¹ Rivers’ comment suggests that boys and girls were considered powerful at different times in their development. While boys were to be dealt with carefully in infancy because of their power to do harm, “when they got bigger, they would lose their *cirla* and become vulnerable” (Neva Rivers in Fienup-Riordan 2005, 131). Girls were considered “protected” from birth until first menstruation, when they took on new bodily powers associated with this change (Fienup-Riordan 2005, 131).

location (Fienup-Riordan 2007, 298), and may have also been coded into the marking system.

The use-context for uluat is discussed in detail in Chapter VII. Recall that uluat were used (mostly) by women for a number of subsistence tasks, many of which were performed collectively. While uluaq use was related to female identity performance, this labor was not gender-segregated, nor were men discouraged from learning to use uluat. The rules and regulations surrounding uluat use vary considerably from those for bentwood vessels. As such, we would not expect to see individual identity markings on uluat; or, at least not those that would indicate them as spiritually hazardous objects to be handled by only one person.

Labrets are similar to bentwood vessels in that they likely encoded information about the wearer's identity and state of being: qualities such as gender, age, and status (see Chapter VI). However, labrets were intended for use as bodily adornment, and would have signaled identity in contexts beyond the household or qasgi where bentwood vessels were primarily utilized. A person wearing a labret was displaying their identity while hunting on the tundra, kayaking on the sea, or visiting a neighboring community. Labret styles likely held regional significance, and labret-adorned faces communicated where the wearers were from, even from afar. At the same time, labrets, like bentwood vessels, were intensely personal objects that were intrinsically tied to the body. Pinniped and x-shaped designs appear on both bentwood vessels and labrets, suggesting that these symbols were meaningful in these multiple contexts.

Maker/Owner/User Approach

Information about an object's maker, user, or owner might also be embedded in the content of a marking. In historic-era Yup'ik communities, men typically made their own tools for use in hunting, fishing, woodworking, and other maintenance tasks. Men would also fashion tools for their female relatives, including their wives, mothers, sisters, and daughters. In these cases, a man might place his emblem on the tool he had designed and made. As the place where adult men lived for most of the year, the qasgi served as a

communal workshop and learning space. John Fox (2017) explained his understanding of what went on in the qasgi:

As far as I know, in the men's house, they're always...helping each other, making sleds, kayaks, harpoon heads...And they used to instruct young boys, talking to them how they're going to live in the future, and they taught them how to hunt...and they always tell them to watch their elders while they're working, so they can, in time, start making things that they've been making.

Willard Church (2019) suggested that some of the incised designs visible on uluaq handles might be maker's marks or "signatures." A maker himself, he is familiar with the desire to mark one's products. Nunalleq's uluaq handles are each unique in shape and style, so even in the absence of signatures, their makers may have been evident.

Marking one's property was (and still is) common practice in Yup'ik communities (Himmelheber 1993, 24), particularly on object classes used in communal contexts or for tasks where tools are easily lost (e.g., hunting on the tundra, fishing out at sea). Frank Matthew (2017) suggested that markings were for "identification...I've heard that, anything they have, they could tell by the marks...I've heard that the people here in the past, if they have a harpoon, they would have a little mark somewhere on it" in order to identify the owner in the case of loss, or in the presence of multiples. Grace Anaver (2019) described how ownership marks on hunting implements helped a person retain the products of their hunt if a person lost their catch, or if it floated away with the hunting tool still in it. John Fox (2017) similarly explained that

if somebody else harpooned a large mammal or a beluga whale, and then the string snapped, snaps off and that animal escapes, and then in the other village somebody caught it and killed it, and they accidentally find something that was snapped off with a spearhead inside...When they look at it, they'll know from which village this animal escaped, just by looking at the design on the harpoon heads. So their hunting tools had designs also...Even men had designs on their hunting equipment.

Fox's (2017) note that hunting tool markings might signify "which village" suggests that this form of signification could operate at multiple affiliative levels.

After John Smith (2017) used the terms “ownership marks, signature” to describe markings on bentwood vessels during object-centered interviews, Jimmy Anaver (2017) told an interesting story about how such marks were sometimes placed on cooking vessels:

There’s a lady and a man in Kipnuk. That lady, whenever he [the man] bought something, she put her initial right there: EJK. Wherever, whatever. I heard one day she bought a cooking pot, [a] regular one, (and) put his initials, probably on the bottom...and then she lost it. Sometime, many months after, he's seen that pot right there, in another house. That lady told that man over there, ‘looks like this is mine,’ and then that man was arguing that ‘that's his.’ And then that lady turned [the] pot upside down....‘that's my initial!’ ...So the way we understand those different kinds of marks in those days are the ones that if they lost something, they could find it with the marks like that. Or each family had different kind of marks.

In some cases, marking would record the important deeds of an object’s owner (Himmelheber 1993, 12). Men might adopt a novel marking or re-work an existing one after performing some amazing feat (Lantis 1946; Nelson 1899), and the new mark was subsequently “used on his possessions as an alternative to his lineage sign” (Ackerman 1990, 255). Markings indicating multiples, like sets of lines, may have indicated counts or a tracking system (e.g., number of caribou killed, number of mukluks made; Madonna Moss, 2021, personal communication). Such an accomplishment-based marking system emphasizes the significance of individual action, decision, and responsibility— common themes in Yup’ik ways of knowing.

A person might come into possession of an item bearing a maker’s or owner’s mark that was not their own through trade (Grace Anaver 2019). Nelson (1899, 70) explained that the Tinné of the lower Yukon were expert bentwood vessel makers, and their coveted goods were “distributed over a much greater extent of territory by means of intertribal trading among the Eskimo themselves.” Such items typically bore the emblem of the Tinné maker (Nelson 1899, 70). In cases of trade, an object’s maker’s mark would not hold a relation to its new owner.

Nunalleq designs that are repeated on multiple specimens suggest that in some cases, different people were inscribing the same general design on objects, but in slightly different styles. For example, the curved designs resembling pinniped snouts come in a variety of forms and styles that all harken back to the same general imagery (Figure 56). Noticing that “sometimes, no two designs are alike,” Grace Anaver (2019) explained that “all the clan had the same design, but there was one little mark, you know, just like your handwriting, that you could tell who made it.” In such instances, different elements of a marking could signify different things, with the overall design representing some form of collective identity, while more subtle design elements (like “one little mark”) might reference the maker or owner.

Social Affinity Approach

Archaeological, ethnographic, and oral historical data suggest that some of the Nunalleq markings may represent social collectives like families, lineages, or villages. Understanding Yup’ik categories of relatedness proves important to this approach, as we need to know the affinity groups to which a person might belong in order to determine which marking patterns (if any) fit these categories. Present-day social categories are not analogous to those of the past, but a culturally-centered analysis can help guide an assessment of Nunalleq’s social world by signaling the places where affinity is felt most strongly in the Yup’ik perspective.

Family is the most important social organizing principle in Yup’ik society today, and may have been similarly so for the ancestors at Nunalleq. In the historic past, the Yup’ik family unit numbered up to about 30 people, and daily life revolved around engaging with this group (Fienup-Riordan 2018a, xv, 185). Evidence from Nunalleq suggests that the site was home to “a small number of family groups” over its approximately 100-year occupation (Knecht and Jones 2020; Ledger et al. 2018). Based on Yup’ik ways of knowing, the people included in each extended family group might vary, but likely included a set of adult partners and their children, parents, siblings, siblings’ partners, nieces and nephews.

Yup'ik concepts of relatedness are generally open and flexible, with kinship determined more by action than by blood (see Chapter II). Still, lineage is important and acknowledged. Some scholars characterize Yup'ik kinship as bilateral, traced through both the mother's and the father's families (Fienup-Riordan 2018a, xv, 185; Himmelheber 1993, 16; Kawagley 2006, 19). Lillian Ackerman (1990) suggested that Yup'ik descent is traced along the male line, but that women's families are given precedence in everyday life, with wives tending to remain in their home communities amongst their own families after marriage— a matrilineal society, but with patrilineal dispersed clans. Although Ackerman (1990) uses the word “clan,” this is not a term commonly used in Yup'ik context. Although Grace Anaver (2019) initially used “clan” to describe certain affinity groups, she immediately corrected herself, stating “we never use the word clan here.” Anthropologists differ in opinion about the existence of Yup'ik clans proper, with Nelson (1899), Lantis (1946), and Fitzhugh and Kaplan (1982) all confidently using the term to describe patrilineal affinity groups. The “clan” designation is not appropriate in this analysis given Quinhagak residents' reluctance to use it, but patrilineal kinship-based affiliation does appear to be a resonant theme within Yup'ik culture.

Plentiful evidence suggests that family emblems were used for marking objects in historic-era Yup'ik communities (Fienup-Riordan 2005, 2007, 2017; Himmelheber 1993, 13; Lantis 1946; Nelson 1899). As Wassilie Berlin (Kasigluk, in Fienup-Riordan 2005, 125) explained, “when they applied designs on things they made, they didn't do it casually. Designs were family crests and were passed down from generation to generation...over many years.” Nelson (1899, 322) wrote that “from Kuskokwim river northward to the shores of the Bering strait and Kotzebue sound the Eskimo have a regular system of totem marks and the accompanying subdivision of people into gentes... People belonging to the same gens are considered to be relatives.” Sometimes, such markings are described as specifically patrilineal emblems. Nelson (1899, 326) recounted that a villager from the lower Yukon told him that “all of our people...have marks which have been handed down by our fathers from very long ago, and we put them on all of our

things.” On Nunivak Island, Lantis (1946, 239-240) noted that “each lineage owned property marks...which were placed on one’s possessions, providing a sense of common identity among lineage males.” Assessing marking systems across Iñupiaq and Yup’ik archaeological contexts, Reynolds (1989, 103) concluded that “in one or more of these systems, related men made similar marks” which were “probably inherited.” Though the specific pathways of inheritance are unclear at Nunalleq, it is likely that some of the markings found here represent extended family lineage groups.

In the historic era, Yup’ik villages were comprised of several extended family groups. John Fox (2017) described this organization:

These people, they may not be so many, but they used to say a few, living together as, like, relatives -- cousins to each other. And in those days, they don’t get married like these young guys or young women, at like probably fourteen... and their parents choose their mates ...that's what they used to do, because they're all related, but they always say, not the first cousins. So, in those days, these family members who are related to each other used to stay together out in the wilderness— what they call the good hunting sites. But, probably coming winter, when they're done with their harvest, they come back to the village. Not just those families out in the wilderness, but lots of people come back to the village.

Fienup-Riordan and Rearden (2016, 15) echoed this description, explaining that “an overlapping network of family ties joined *ilakellriit* (relatives) in a single community... Winter villages ranged in size from a single extended family to several hundred people” who lived in about “a dozen overlapping extended family households interrelated through marriage and adoption” (Fienup-Riordan 2018a, 199). These village groups were “territorially centered (as opposed to discretely bounded),” and while “the population of a single village group might gather at a central winter settlement... much of the year it was scattered among a number of seasonal camps” (Fienup-Riordan and Rearden 2016, 16).

Residency was subdivided by gender in historic Yup’ik villages, with women and young children living in single-household enet and men and boys over the age of about eight living collectively in qasgiq. Proportionate to the size of the village, enet would be

numerous, while qasgiq would be few — small communities might only have one qasgiq for all men and boys, while larger villages might have up to three, with about 50 men assigned to each (Ackerman 1990, 256; Fienup-Riordan 2018a, xvi; Fienup-Riordan and Rearden 2016, 15; Kawagley 2006, 12). How qasgiq membership was determined is unknown, but Fitzhugh and Kaplan (1982, 84) suggested that these may have been associated with patriline, and Fienup-Riordan (2005, 203) noted that relationships between qasgiq in the same village were marked by “a combination of respect and friendly competition.” Frank Andrew (Kwigillingok, in Fienup-Riordan 2018a, 203) explained that Qinaq’s two qasgiq each had its own name and song, with members referred to as belonging to that name, and there was no free visitation between the two.

Marriage united both insular villages and friendly neighboring villages within the same regional group. As Fienup-Riordan and Rearden (2016, 16) explained, “exchanges of food, women, names, feasts, and visiting served to unify village groups into larger, more comprehensive regional confederations of village groups.....which joined in offensive and defensive action against each other during the precontact period.” Intermarriage between villages meant that one’s relatives would be “scattered all over” the landscape (David Martin of Kipnuk, in Fienup-Riordan 2005, 205).

Until the 1800s, groups of affiliated Yup’ik villages frequently banded together to form regional partnerships. Fienup-Riordan and Rearden (2016,15) count at least twelve of these across the Yukon-Kuskokwim Delta and islands, and note that the differences between groups were significant enough that members “thought of themselves as separate peoples.” These groups were distinguished by “social rather than territorial boundaries,” and each had its own cultural norms, dialect, ceremonial cycle, resource base, and patterns of travel (Fienup-Riordan and Rearden 2016, 15-16). Regional groups considered themselves autonomous and distinct, and were “willing to wage war to remain so” (Fienup-Riordan and Rearden 2016, 16).

Marriage norms demonstrate the traditional distrust between Yup’ik regional groups. Young people were discouraged from engaging in interregional marriages, because differences between groups meant that a spouse might be mistreated in cases of

scarcity or famine (Fienup-Riordan and Rearden 2016, 16, 66). Other prejudices are revealed in traditional teachings. As Fienup-Riordan (2018a, 166) explained, “young people living along the coast were advised against marrying people from tundra villages, as these interior communities were more often in need and might come begging to their coastal in-laws.” Several Bow and Arrow War stories detail raids foiled by a spouse from another region, who reveals secret information to their home village in advance of the attack— admonishments to be careful who one trusts.⁴² The Bow and Arrows Wars were defined by such tension and violence between interregional groups. Nunalleq was inhabited during this period, and regional affiliation likely played a strong role in how village residents envisioned their identities.

Social affinity is often represented materially in Yup’ik lifeways. The cut, layout, length, style, and details of a parka would signal the family, village or region of the wearer, along with their gender (Fienup-Riordan 2007, 311-315; Grace Anaver 2019; John Fox 2017; Nelson 1899, 30). Kayak and paddle shapes and styles also differed by region (Fitzhugh and Kaplan 1982, 60; Nelson 1899, 216-224). Nelson (1899, 224) noted that designs displayed on kayak paddles from Nunivak and other Bering Sea islands were likely the “private marks,” “ownership marks,” or “totem marks” of their owners. John Fox (2017) explained that “some used to paint their crests on their kayaks” and paddles, and that designs “on the paddle areas...are for the men's side.” Chapter VI explored how labret and tattooing styles similarly varied by village and region in 19th and 20th centuries. In all of these object categories, affinity emblems served a purpose: they allowed for people from other places to easily identify strangers who they encountered out in the world. As Fox (2017) explained,

you go someplace wearing your parka, and then other people from other villages don't know who is this person coming this way, and then when it's visible, when you read the parka, looking at it, the designs and where the

⁴² To this day, regional differences are points of comment for Quinhagak residents. For example, I’ve heard people refer to general geographic differences (e.g., “the people up north”), river system differences (e.g., “the Yukon people versus the Kuskokwim people”), and coastal versus inland differences when discussing cultural norms. There tends to be an “us versus them” flavor to this discourse, but in a sense that is playful rather than antagonistic.

tassels are -- and then they'll know which village you came from. That's how they used to read their clothing in those days.

Fox's (2017) notion of "reading" the parka transfers well to other object categories. This is a skill that would have been significant at Nunalleq during the Bow and Arrow War period, when identifying enemies and allies in the wilderness may have had life or death consequences.

In discussing parkas, John Fox (2017) provided an example of how some affiliation marks relate simultaneously to family, lineage, and region. Inspired by the image on pg. 312 of Fienup-Riordan (2007), Fox (2017) explained that his family's parkas, "probably on the women's side," also used a piece of land otter fur to make two white vomit designs on the front of the garment. Fox (2017) then told the "story that comes along with that design," involving a hunter who eats a large amount of caribou fat before being pursued at haste by his enemies, resulting in him vomiting the white fat over his shoulders. Fox (2017) recounted:

and then from then on, whoever is related to that person will have two white...(designs)...on their chest representing vomit designs. So whoever is related to that person, when they make parkas for the women, they start putting white patches on the chest... And then people who notice that parka with white patches on the chest will know who is related to that person. So on my family's side, from my ancestor's side, I am related to that person (the hunter) also.

But as Fox (2017) continued his tale, he expressed a tension as to whether the vomit design ultimately signaled a family or a regional affiliation. As one of Quinhagak's expert skin-sewers, he had been approached several years back by a kassaq teacher friend who commissioned a traditional Yup'ik parka—a souvenir to take when he left the village. Fox recommended that he use his family's vomit design on the parka, but the teacher balked: wasn't this meant to just be a design for members of that family? Fox reassured him that rather than signifying the family, this design would demonstrate where the parka came from. As he explained, "if you go anywhere, or up north area, when elderly (people) see you wearing two white patches, they'll know where that parka came

from. Because they all know what area that design came from” (John Fox 2017). Fox (2017) further hinted at the complexities of this affiliative combination, stating that “only here in this area they have two white patches, whoever is related to (the vomit design ancestor).”

This simultaneous family and regional affiliation makes sense given how kinship is rendered in Yup’ik ways of knowing, with families typically clustered in villages and regional village groups, at least in historic times. While Yup’ik teachings encouraged the members of extended families, villages, and regional village clusters to look to one another as kin, those outside this circle were something different and “other.” Yup’ik terminology points to these subtleties. Fienup-Riordan and Rearden (2016, 16) identified *nunalgutkellriit* as the Yup’ik language equivalent for “regional group,” which translates directly to “people from the same village or place,” but also implies “people who consider themselves related to each other and who share use of a common subsistence range.” Regional and village affiliations clearly overlap with the notion of family writ large, but the inter-regional level of affiliation is where the Yup’ik “extended family” metaphor meets its limit.

Explaining Qaraliq

Considering these four analytical approaches, what can we say about the qaraliq from Nunalleq? Symbolic, use-context, maker/owner/user, and social affinity considerations all likely played a role in what the markings meant, but perhaps to different extents. Iconographic and symbolic connotations are evident in the curved line designs resembling pinniped snouts, but these likely also relate to family and regional level affiliations, given local Quinhagak interpretations and the use-context for labrets. Swirled designs, which only appear on bentwood vessels known for being intimate objects assigned to individual users, require a more user- and context-centric approach. No single approach explains any one of the markings, but intersections and overlaps point to fruitful interpretive possibilities.

For the swirled designs (Figure 49), two factors are significant: 1) the designs only appear on bentwood vessels, and 2) this is the most abundant design category at Nunalleq (Figure 50). Given their exclusive appearance on bentwood vessels, could this design relate to the use-context of these objects? We know that some marked vessels were likely water pails or urine buckets, objects whose use was generally well-regulated and restricted to persons in certain states of being. Knowing which vessel was for which substance would have been important, particularly in the case of urine, considered a powerful and valuable fluid. The swirled designs are reminiscent of eddying water, further suggesting such signification.

Frequency data add an additional layer to this interpretation. While swirled designs are generally abundant at Nunalleq, numbers vary greatly between individual designs. Design # 1 (three widely-spaced swirls, n=15) and design #5 (double sets of two closely-spaced swirls, n=11) are found at much higher rates than the others in this category, which only appear on one or two specimens each (Table 8). Personal attribution was very important for vessels such as food bowls and water pails, which were restricted to use by specific individuals only. Maybe the singular designs connote individual identities (e.g., names), while the abundant designs suggest common use signification across households (e.g., “for urine”)? If so, perhaps each of the frequent designs signified intended use by persons only in certain states of being (e.g., one design for menstruating girls’ urine, and the other for all others’ urine)?

Forked designs resembling raven’s footprints are familiar across the Western Arctic (Fienup-Riordan 2017, 216, 219; Nelson 1899; Reynolds 1989), and suggest Nunalleq’s connections to Yup’ik iconography across time and space. Nelson (1899) made 25 different references to the “raven totem” in his work documenting Yup’ik and Iñupiat groups across the Bering Sea region, noting that objects bearing the motif were found in numerous communities. Yet raven’s footprint was associated with specific families— for example, Mary Ann Sundown (Scammon Bay, in Fienup-Riordan 2017, 216) explained that “the men in our family had Raven's footprint as their emblem from the beginning.” Given the raven symbol’s wide dispersal, any associated lineage must

have been old and well-established. Such regional scattering “over a large territory” would not be unheard of for a family affiliation mark, particularly given inter-village (and sometimes inter-regional) marriage patterns (Ackerman 1990, 255).

Symbols referencing raven’s footprint are somewhat abundant on bentwood vessels and come in a variety of forms (Figure 49), suggesting personal creativity, or perhaps elaboration based on individual achievement or familial differentiation. On uluat, raven’s footprint symbols are common, indicating frequent reference between this object category and ideologies associated with raven. Absent on labrets, the raven connotation may not have been an important outward signifier for people at Nunalleq— perhaps because the design was not unique to this region. Whatever its signification, this motif may have been most significant in social contexts internal to the village, given its distribution and object use-context.

Other bird symbolism may be present on bentwood vessels (Figure 57), but only on a few specimens. It is possible that select individuals at Nunalleq used bird-related symbols as maker’s, owner’s, or user’s marks, which we would expect to find on these highly personal items. The markings may tell stories of specific experiences with these birds, or of hunting accomplishments. They may also channel the birds in an iconographic sense, given the significance of certain represented species in Yup’ik lifeways (e.g., owls).

Curved line designs are clearly associated with walrus based on information from John Fox (2017), naturalistic resemblance, and ethnographic examples. The animal symbolism inherent in the motif is mirrored in its use on labrets, which were placed on the face in the position of walrus tusks (and recall John Fox’s [2017] story to this effect). Forty-three percent of labrets bear the walrus symbol, further emphasizing the connection. As Mossolova and Knecht (2019, 19) explained, an object like a labret “which depicts an animal, becomes neither animal nor object but a new entity that combines the qualities of the animal and the function of the object.” Worn on the face, walrus labrets evoke human-animal transformation, a central theme in Yup’ik cosmology.

The prevalence of walrus iconography on labrets also suggests that this was an important identity to display outwardly to the world. Could this symbol connote a familial or regional affiliation, like that implicit in Fox's (2017) description of these objects? As he explained,

so up to here in Quinhagak area....even these faces, they have holes on the sides. And we recognize them right away, because we know what they are, and how they became to be...you won't see any labrets in the interior area; you notice these in the coastal area, where there's walrus (John Fox 2017).

Like parkas and kayak paddles, labrets served the purpose of identifying strangers from a distance and allowing one's affiliation to be known upon approach. Social affiliation played a big role in the Bow and Arrow Wars, with associated lineages teaming together against enemies from other regions and kin groups. Walrus affiliation may have been particularly relevant in this wartime context. But walrus designs are also common on bentwood vessels used in the village context, so this identity was clearly also meaningful within the community.

The walrus design is found in diverse forms on labrets (Figure 56), signaling individual style and attribution. At the same time, walrus also existed as a more generalized design convention, found in relatively consistent form on bentwood vessels (Figure 49). It appears that multiple individuals were associated with a larger walrus-referencing group. Could the walrus represent an extended family at Nunalleq, full of individual members? Or could it symbolize a category of person, or a certain status group, such as warriors? Whatever walrus represented, it was an identity relevant at multiple social levels and in multiple contexts.

Artifact distribution suggests that the walrus symbol was more closely associated with men than with women. Walrus designs are prevalent on large wooden labrets, which were likely worn by men (see Chapter VI). Only a single uluaq bears the walrus motif, suggesting that this affiliation was not expressed in female-centered subsistence contexts often. Given the frequent association of qaraliq with patriline, is it possible that the walrus design is a family symbol associated with a male lineage? Ackerman (1990, 262)

noted that part of the utility in tracking lineage with affiliation symbols was to “integrate autonomous villages” in the case of violence or war. Nunalleq’s wartime context, the association of labrets with male status, and the similarity between northerly labret patterns and those evident at Nunalleq all suggest that walrus may have been a patriline with origins north of the Yukon. This interpretation is consistent with the Agaligmiut story recorded in local Yup’ik oral histories.

X-shaped designs are found across artifact categories in moderate numbers. Some designs are reminiscent of skeletal “lifeline” motifs common in Yup’ik iconography, while others are similar to symbols found amongst Uyaquq’s Yup’ik pictographs (Willard Church, 2021, personal communication). These designs are tricky to interpret, with no single approach providing an obvious explanation. Reference to the “lifeline” motif would have been particularly meaningful in subsistence contexts, and perhaps those qaraliq that most resemble this motif (#23, Figure 49) are related to the object’s or user’s connection to subsistence practice.

Combination designs (Figure 49) could be explained by practices of intermarriage uniting two distinct family lineages. As Pauline Matthew (2017) commented, “through intermarriages, they get another family, and probably these two became, you know, close together...worked together, do everything together.” Oral histories suggest that some interregional marriages occurred between families located at Nunalleq and elsewhere. As Joshua Philip (Tuluksak, in Fienup-Riordan and Rearden 2017, 264) explained, part of what initiated the Bow and Arrow War-era aggression between the Agaligmiut (those from Nunalleq) and their neighbors were betrayals brought about by wives from other places, including a wife from Pengurmiut (Kwigillingok area) living with an Agaligmiut husband, and an Agaligmiut wife living with a Pengurmiut husband. But in cases of intermarriage, it is unclear whether designs would be altered from their original form, or if one spouse would adopt the design of the other. There are only four combination marks apparent at Nunalleq, so if this interpretation holds, altered designs must not have been the norm in intermarriage. Alternatively, the low number of combination marks could

connote people marrying within their own lineage— common in the old days, though people were admonished not to marry kin any closer than their first cousins.

Another explanation is that combinations indicate sub-family groups or relational clusters (e.g., siblings, cousins) within a single extended family (Fitzhugh and Kaplan 1982, 85; Lantis 1946, 242). Reynolds (1989, 90) explained that men sometimes created slight variations of their fathers' marks to differentiate themselves, and that brothers would thus have "closely related marks." Such variation may also have resulted in changes to designs through time. Single specimen designs might also be explained in this way (Table 8). Information about bentwood vessels, particularly food bowls and water pails, suggests that it was important for individuals to label these objects as their own. Personal identity and accomplishment are important in Yup'ik lifeways, and extraordinary encounters, novel life events, or notable achievements would have all been reasons to create a new mark or elaborate on an existing one. Announcements of a person's state of being were also significant and relevant to community well-being, and may have been part of the signification system.

Marking Identity and Belonging at Nunalleq

Nunalleq's qaraliq come into their fullest dimension when considered from multiple analytic angles. As Gillespie (2002) suggested, a symbol can mean many things simultaneously, and at different levels, which will be "contingent on cultural and historical factors." Based on local knowledge, ethnographic information, and archaeological data, the markings from Nunalleq could signal numerous things. Rather than being clearly bounded, these signification systems are overlapping and intertwined; for example, family groups lived together locally, with extended relations located in nearby villages, which altogether formed regional alliances strengthened through kinship ties. Families may have aligned themselves with certain concepts common in Yup'ik cosmology (e.g., raven's footprint), perhaps with implications for power and status. Signification is always an *active* process, with meanings and references changing across time and space. As Robb (1998, 341) explained, "with such an array of questions to ask,

our interpretations can never be final or lawlike. Instead, we will find ourselves crafting good ethnographies, which are always controversial.” Creating “good ethnographies” for qaraliq requires (at least) an understanding of cultural and cosmological teachings, likely object usages, the significance of manufacture and ownership, and social contexts, amongst other analytic categories that I am certain I have neglected. We approach a more holistic understanding at the nexus of these lenses, though any interpretations remain incomplete.

While a multidimensional view of qaraliq contributes to our understanding of the past, Quinhagak residents were clear about which signification system resonated most deeply with their memories of traditional Yup’ik life and current preoccupations: that of family and lineage. Discussing bentwood vessel markings during their group object-centered interview, Pauline Matthew, Grace Hill, and Julia Hill (2017) found qaraliq to be most evocative of families. As Grace Hill (2017) stated, “I think some families had their own symbols and their designs,” and Pauline Matthew (2017) agreed. While Annie Cleveland (2017) admitted to not knowing much about the markings, she guessed that these were “to show that it belongs to a certain family.” She continued:

maybe it’s a mark that belongs to somebody, because their stuff, their bowls, their tools, might be all out of the same material— same wood— and I think they mark them to show, 'the X is my mark.' Same with the bowls. They've got those kind of bowls only, so every family has a mark (Annie Cleveland 2017).

In her interview, Grace Anaver (2019) also suggested that marks on bentwood vessels signified family affiliation, explaining that “you know, each family had a different marking, not only on the wood or the ivory... Each family, like a clan, had their own same design.” Anaver (2019) postulated that such family “logos” might “stick with (them)” and be passed down through generations. Archaeological evidence also points to the likelihood that several qaraliq from Nunalleq were symbols related to families. The practice of expressing group affiliation via material objects is both familiar and meaningful to Quinhagak residents, and family is the analytic that rises to the fore from a local perspective.

Structural approaches that have sometimes been used by archaeologists and anthropologists to interpret symbols and assess social processes such as kinship would fall short in a Yup'ik context, where multiple facets of meaning appear to be operating simultaneously in complex signification systems. For example, the “clan” structure identified by Nelson (1899), Lantis (1946), and Fitzhugh and Kaplan (1982) is not one that Yup'ik people themselves recognize or name (Grace Anaver 2019). While Ackerman (1990, 255) thoroughly addressed this “clan conundrum” in her work, she was still preoccupied by trying to label Yup'ik social structure in terms of Westernized kinship terms: matrilineal/patrilineal, matrilocal/patrilocal, dispersed vs. corporate clans. In many ways, Yup'ik kinship defies such anthropological confines. The same is true for qaraliq, which cannot be simply interpreted using a single approach. Fienup-Riordan's (2018a) commendable work documenting over 50 detailed kinship terms used for extended family by Yup'ik people illustrates the expansiveness of Yup'ik forms of identity, relatedness and belonging, as assessed in their own terms, within their own cultural contexts. When qaraliq are considered in this light, we see their significance as likely emblems of familial connection, but which are also embroiled in complex iconographic systems, spiritual beliefs and ritual practices, notions of selfhood and ownership, and specific historical trajectories. Family- and lineage-based interpretations may be the most meaningful of all from a Quinhagak perspective, but compartmentalizing these as such side-steps their multidimensionality in a way that is incongruent with Yup'ik knowledges.

Epilogue: Qaraliq in the Qasgi

At nine years old, he was still relatively new to the qasgi, still learning its rules and regulations. Mornings, he and the other boys woke immediately when ordered and tended to the water pails and urine buckets of their older male relatives. On this morning, as he rose and prepared to exit into the cold, the corners of his mouth ached—the holes that had been cut just a month ago were still healing. The two small calcite labrets that currently adorned his cheeks would be gradually increased in size, until one day, he would be able to wear the large, round discs like his older cousins, uncle, and father,

carved with the intricate faces of the animals they hunted so successfully at sea: the mark of the walrus to signify the great men in his family.

But today was not that day. Today, he worked in service of the collective, for the older men in his lineage who were his mentors and guides. Out onto the tundra he went with his two cousins, wiggling through the snug tunnel and out onto the snow. They ran now, quickly, their fathers' water pails swinging. They reached the river and approached the bank to fill each vessel afresh. As the boy tipped his father's pail into the cold flow, and noted the qaraliq etched on the bottom: a central slash and two curved lines, oriented just a bit off-center, as his father's designs tended to be. This family mark had made much more sense to him beginning last spring, after witnessing his first walrus hunt. From his spot at the back of his uncle's kayak, he was the first to spot the wrinkled, slotted nose appear above the water's surface. Seeing the mark now, he recalled that moment of fear and awe.

In ten years' time, when the boy was no longer fetching water but having it fetched for him, he would sport those grand labrets in battle, and his association with this emblem would shift: still blood, but now that of a foe from another place rather than from that first catch at sea. The presence of the qaraliq meant that he was amongst family—a family careful to maintain its tender relationship to the walrus inua over generations, in simultaneous gratitude to the animals and reverence to the ancestors who had transformed into walrus so many years before. He was just one facet in this larger lineage, but he knew his thoughts and actions reflected on the whole and formed an integral part of who he was in this world.

CHAPTER IX. REFLECTIONS ON SPEAKING, LISTENING, AND LEARNING

In winter 2020, I was invited by the Southern Oregon Historical Society to give a “pub talk” on my dissertation research. I was excited for the opportunity to discuss my recently written chapter on facial adornment and labrets in southwest Alaska with new listeners. As this was likely an unfamiliar topic to many in southern Oregon, it seemed a good chance to “test the waters” of my findings, to practice sharing my research with a lay audience, and to further spread the word about the Nunalleq Archaeology Project.

The talk went well, and was followed by a lot of good questions from audience members. One of the final questions of the night came from a young man seated near the front. “You mentioned that the community of Quinhagak feels related to the people that once lived at Nunalleq. Is there any DNA evidence to back this up?” This was a tricky question, and I had to think carefully about how to articulate my answer. While human remains have been found at Nunalleq, their care and analysis has been dictated by “previously agreed to protocols and consultations with Quinhagak authorities,” which call for immediate reburial after minimal recording and assessment by a specialist⁴³ (Knecht and Jones 2020, 33). The village has given permission for archaeologists to carry out isotopic analyses on non-mortuary human hair (Britton et al. 2013, 2018), likely clippings from haircuts, which have revealed genetic similarities to Arctic populations writ large (Raghavan et al. 2014). Over two dozen people living at Nunalleq during its final occupation perished in the fire and collapse episode evident in the site’s archaeology (Knecht and Jones 2020, 33), precluding direct lines of relatedness to these specific ancestors. But we know that Yup’ik kinship networks are broad, and lineages may have been spread out across the Delta. Ultimately, as a white anthropologist and community outsider, it is not my place to determine the relatedness of the people of Quinhagak to the

⁴³ Such community-based consensual policies regarding treatment of human remains have long been a goal of Indigenous and decolonizing archaeologies. Because Nunalleq is located on land owned by the village of Quinhagak, NAGPRA — or the Native American Graves Protection and Repatriation Act — does not apply. However, the collaborative nature of the Nunalleq Archaeology Project has meant that community wishes are honored and respected, particularly regarding human remains.

people of Nunalleq, especially because defining Native relatedness based on Westernized notions has been a longstanding strategy of colonialism and white supremacy (Simpson 2014). If the Quinhagak community feels related to the ancestors from Nunalleq, then they are related — period.

* * * * *

This audience member’s question brings together many threads woven throughout this work, and leads me to a fair query: what is the *nature* of the relatedness that Quinhagak residents feel towards Nunalleq, and what are its implications? That these two communities are connected through time is a core assumption of my research, and a central factor in my methods. What is it that makes a Quinhagak-specific perspective appropriate and meaningful for archaeological interpretation at Nunalleq? Why are Quinhagak voices the ones we should listen to most closely for understanding the site?

The Connectedness of Nunalleq and Quinhagak

In Chapter III, I reviewed Yup’ik history on the Yukon-Kuskokwim Delta in broad strokes: from ancient times; to Norton occupations; to the Thule-era and early historic Yup’ik communities like Nunalleq which were involved in Bow and Arrow warfare; to the big changes that accompanied trade and settlement from Russians and then from other Euro-Americans; to the devastating disease epidemics of the 19th and early 20th centuries that resulted in monumental loss of population and culture; to missionization by Moravians in Quinhagak; to shifts in economy, education, and governance at mid-century. Focusing on Nunalleq’s story, oral histories suggest that the Aglurmiut, the warring faction from the north, resided at Agaligmiut village, located somewhere in the vicinity of Nunalleq (Fienup-Riordan and Rearden 2016, 74-75). In alignment with such oral histories, tattoo patterns found on dolls and walrus-related patterns on labrets and qaraliq hint at a northerly affiliation for Nunalleq’s former residents. Following conflict, the Aglurmiut group are said to have moved south to the Nushagak area, where they resided into the 19th century and were in contact with Russians (Oswalt 1990, 42). Taking this story literally, we would expect the direct descendants of Nunalleq’s last occupation

(Phase II) to be Yupiit living around Nushagak. But such specifics of population and history are confounded by two important factors: 1) the epidemic-driven population loss and settler colonialism-driven dispersal experienced by Yup'ik communities throughout the 19th and 20th centuries, resulting in people from various communities living all across the Delta, and 2) Yup'ik conceptions of kinship as broad, action-based, and inclusive.

Regarding the latter, recall John Fox's (2017) story of making a parka for a kassaq teacher friend detailed in Chapter VIII. Fox (2017) felt comfortable sharing his family-affiliated double vomit parka design with an outsider to the community, explaining how the design at once signaled familial, lineage-based, and regional forms of identity. This parka design is in fact widespread across the Yukon-Kuskokwim Delta (Fienup-Riordan 2007, 312), as are other symbols of Yup'ik identity and belonging (see Chapter VIII). As I experienced in the Bethel airport (see Chapter I), single families are spread across the entire Yup'ik region, with contemporary villages connected through ties of relatedness and kinship. Family in the Yup'ik sense is largely based on collective subsistence production networks (Chapter VII) and the intentional, action-based maintenance of relationships—lineage is important, but being related does not depend on bloodline. Relatedness also manifests in complex ways through time: John Fox (2017) feels related to the ancestor in the vomit design story, just as Mary Ann Sundown feels related to the raven's footprint design that she was taught belonged to her male ancestors (Fienup-Riordan 2017, 216). The names of the ancestors cycle in and out of Yup'ik communities through namesake practice, where children are recognized as becoming new versions of the deceased, and inherit all of their kinship relationships (Chapter II). In this context, the ancestors at Nunalleq can come into relation to the contemporary Quinhagak community in a variety of ways.

Shared land and resources are also significant to this feeling of connectedness. Quinhagak sits just a few miles north of Nunalleq, and although the landscape has changed in the past several hundred years, there is continuity in the presence of the Arolik and Kanektok rivers, and the resources these provide. Evidence suggests that the subsistence strategies that once provisioned Nunalleq— a focus on fish, with marine

mammals, caribou, and birds also important (Masson-MacLean et al. 2019)— are mirrored in Quinhagak today. Recall Willard Church’s (2017) comment that “food is fish, and fish is food,” which clearly also held true for Nunalleq’s inhabitants. Honoring the land and its lessons is a deep-seated Yup’ik value (Sloan 2020a, 249-253), and contemporary Quinhagak residents feel closely connected to the tundra, sea, and rivers in their community. As Lynn Church (2017) explained, practicing subsistence is like “coming home.” She spoke of feeling connected to the land of Quinhagak, even while living far away: “me and my sisters and my cousins, we may be living in Anchorage, or Wasilla in the city, or Fairbanks, but we still have our freezer full of seal, walrus, caribou, and all our berries” (Lynn Church 2017). The ancestors at Nunalleq lived off the same land that Quinhagak residents today call home, putting them into meaningful relation across centuries.

Contemporary Quinhagak residents express feelings of connection to the Nunalleq site and the ancestors that once lived there. As Emily Friendly (2017) stated, Nunalleq provides “a sense of identity— that...our people are not a forgotten people. They are us.” Numerous concrete points of connection exist between these past and present communities: continuity in material culture through pre-contact and historic eras (Knecht and Jones 2020, 38), the general expansiveness of Yup’ik kinship across space and time (Chapter VIII), and the land and resources shared by past and present peoples alike. Ultimately, Quinhagak residents are the authorities on who they are related to, and how, and why. Such local expressions of relatedness to the Nunalleq ancestors are the primary evidence driving my decision to privilege Quinhagak voices in social interpretation at the site.

Archaeology and Community

What does this relatedness mean for how Quinhagak residents find meaning at Nunalleq? The excitement for the Nunalleq Archaeology Project demonstrated in the Quinhagak community and by Qanirtuuq, Inc., speaks to the success of the collaboration and the significance of the archaeological stories revealed. Lynn Church (2017) grew up

around the Nunalleq Archaeology Project, and has been a frequent staffer and volunteer. She described the impact of the project:

You know, the logistics part, it took a lot of work. Behind the scenes stuff, it's a lot of work, you know?... When it first started, people were kind of iffy about it... They didn't know what they (the archaeologists) were doing. But...when people started seeing the artifacts that were coming up from the dig site, that's when the elders started talking. They started talking about the stories that they didn't want to tell before... Their memories started coming back... "We used to dance back then, but not anymore."... The archaeological project brought back that sense of pride in our people. Like, oh this was who we were! And nowadays you...hear everybody talking about Nunalleq, you know, "back then"... You know, this archaeological project brought a lot of good things to the community. It brought jobs for the local people-- there's some economic development there. It produced a book. It produced, you know, dissertations, bringing a lot of students from all over the world (Lynn Church 2017).

Mike Smith has been a part of the Nunalleq Archaeology Project since 2009, when he was 16 years old. He shared his thoughts on how the project has changed over the years:

I think it's pretty cool. I mean, they only started with like, four or five people, and they didn't even have any funding or anything. When they were screening it was just...four two-by-fours put together, with the little mesh, and a little bucket on the bottom. And I saw it go from four squares, up to fifty—it's big. It turned into something big. And, I know, traditionally, we're not really supposed to be touching the sites, since they're sacred to our ancestors....But, for Quinhagak, it was mainly for cultural revival...I've seen that with my own eyes (Mike Smith 2017).

When asked to elaborate on the cultural revival, Smith (2017) identified some of what he had seen.

One of my friends, he grew up not really speaking Yup'ik, but as soon as he got to college, he took some Yup'ik courses...so now I can actually have a Yup'ik conversation with him....And also, another local that I've heard of in town, he saw some of the ivory work-- and keep in mind he didn't ever carve anything, not wood, soap, nothing-- but as soon as he started seeing the carvings that were showing up, or that they displayed at the show-and-tell, he started taking up carving himself.

The reemergence of Yup'ik dancing in Quinhagak in conjunction with the archaeology project has been a major source of pride and inspiration for the community (Chapter III). As Lynn Church (2017) explained, “and then, you know, the dance group started...100 years of no dancing, and when it finally happened...the faces on everybody! They were so proud, they couldn't stop smiling.” Mike Smith (2017) has similarly fond memories of when people in Quinhagak began dancing again:

Back in, I think it was in '13 or '14 season...the year before they went to the Cama-i Dance Festival, and it was their first performance in a century. And the following year when we had our show-and-tell, I asked the dance leader, whose name was Kathy Cleveland, if her dance group can perform for the opening of the show-and-tell. And they agreed, and for the first time in over a hundred years, since the missionaries banned practicing Eskimo dancing, they were performing in front of a live audience, at the show-and-tell. I think that was one of the best years of the project. I mean, I've seen elders-- their faces were glowing like they've never glowed before. They were seeing what their parents and what their grandparents were doing while they were growing up, which they couldn't practice, but what they saw before it was taken away from them.

Key to the collaboration's success has been the power-sharing inherent in the project from its outset, and a real focus on community needs and desires on the part of the archaeologists. For example, the decision to house the entire Nunalleq archaeological collection locally in Quinhagak is significant, given the dearth of Yup'ik archaeological materials in the region and the quality and preservation of the artifacts. Such a collection would be at home in a major museum, but instead, it is accessible to the community from which it derived, with real local impacts. Speaking in 2017 about the collection “coming back” to Quinhagak, Mike Smith explained that:

I think it's going to be great. I mean, you'll give more local artists the opportunity to...like my grandpa is always talking about making replicas of the artifacts, and I guess having the cleaned and preserved artifacts back in the lab will give more artists the opportunity to come and look at them, and get more inspiration on their artwork....And also, for the school. There's pretty much no history on Yup'ik...everything's all oral, except the ones that have been documented in the past 30, 40 years...It's going to be

really great to have artifacts [that] the school students can come by, and just appreciate, and kind of get the imagination of how our ancestors were living: what tools they were using to do this, what tools they were using to do that; how did they hunt this, how did they hunt that; how did they catch that, how did they catch this; and how did they make these. They won't be able to get that anywhere else. I mean, you probably would have to go all the way to the Smithsonian, or to Berlin, to see another collection like that. Yeah, I can see a lot of great opportunities coming out of that, the artifacts returning to Quinhagak.

The stunning archaeology from Nunalleq is a point of pride for many people in Quinhagak. As Lynn Church (2017) expressed, the site “kind of proves that, you know, the Yup'ik people adapted through the changing environments throughout the years, and we continue to be strong with that lifestyle.” In this sense, looking to the past provides a sense of hope and resilience for the future of this community.

Saying Something About Nunalleq

My own community-centered project led me to “see the social” at Nunalleq in ways I had not previously imagined. Although gender was an analytic anchor from the outset, and an intersectional perspective led me to look for identity categories such as age, status, and village or regional affiliation, I did not expect that Yup'ik personhood writ large would eclipse these other forms of identity. Being a Yup'ik person in alignment with “big picture” concepts such as *ella* and *ellarpak* requires one to strengthen their mind, regulate their body, and center the wellbeing of the family and community through action, intention, and care. These rules apply to people across identity categories, but in different ways, depending on their state of being. When combined, concepts of “personhood” and “state of being” provide a powerful lens for viewing Yup'ik archaeological contexts, because the obligations surrounding these aspects of identity were enacted through the material world. Gender, age, status, and forms of familial, village, and regional affiliation are all relevant in Yup'ik sociality, but they cannot be compartmentalized. Thus, a Yup'ik community-based gender archaeology is really about

a matrix of identities (including gender) which all relate back to a person's actions and trajectory within their community.

Evidence from Nunalleq suggests that at least some community members were adorning their faces with labrets, tattoos, and nose beads. These adornment forms are complex to interpret, but historically, we know that these signaled gender, status, and regional affiliation. As outward-facing signifiers, facial adornments may have also played a role in communicating the wearer's state of being related to these other aspects of identity. Adornments such as labrets and tattoos are embodied forms of expression, becoming part of the wearer's face (though for labrets, the display could be temporary or intermittent). An individual body's state of being was important information, with implications for wellbeing beyond the individual. Yup'ik teachings suggest that people needed to regulate their bodies and properly announce this regulation. Facial adornments may have played a role in these community-centered choices.

Subsistence has long been a locus of research on gender roles in Yup'ik communities. Although idealized gender identities are enacted through subsistence labor, successful subsistence practice is more about "getting things done well and quickly" than the specific gender identities of the people involved in the "doing." Even so, subsistence serves as a central educational forum for teaching new generations how to be Yup'ik, part of which involves the expert subsistence knowledge of gendered elders. Such forms of teaching and learning are an important way that Yup'ik people perform their gender identities. Uluat from Nunalleq cannot be uncritically assigned to female users; what they represent is related to idealized Yup'ik femininity as a whole. Focusing on age-based dynamics in subsistence teaching and learning reveals that children were likely using uluat at Nunalleq, perhaps mirroring those subsistence learning practices that are absolutely essential in Quinhagak life today. More than just reflecting aspects of gender and age, uluat point to Yup'ik personhood as action-based and enmeshed in networks of collective practice and community obligation.

Family is a central joy and concern for Quinhagak residents today, and is imagined as such for the ancestors at Nunalleq. Qaraliq markings appearing primarily on

bentwood vessels (but also on other artifact forms) are evocative of family affiliation across space and time. But family in Yup'ik contexts is expansive in numerous ways, and such markings likely reference a complex symbolic system linking kinship to animal iconography, social status, and village and regional levels of affiliation. When individual owners and users are considered, qaraliq markings take on new dimensions of meaning, given use contexts for the bentwood vessels on which many are found. Qaraliq demonstrate how individual and collective aspects of identity intersect in the Yup'ik material world, reflecting the multifaceted nature of personhood.

When I began this project, I imagined that facial adornment objects, uluat, and qaraliq markings represented nested levels of Yup'ik identity starting with the individual body (facial adornment), then moving to the family collective (uluat), and ending with broad regional kinship networks (qaraliq). At the conclusion of research, I see that my original conception was inverted. Objects and practices of facial adornment, while intrinsically intimate and related to individual bodies, actually broadcast a person's identity to the largest group of people: the village public, but also people outside of the village who need to identify friends or enemies based on regional affiliation. Uluat are utilized primarily in the family subsistence context, but are also very individualized objects, their shape and form contingent on the hand of the user. The greatest variety of qaraliq are found on bentwood vessels, many of which would have been for restricted personal use in the qasgi or household. While the markings likely relate to expansive forms of kinship affiliation, their signature forms speak to identity at the individual level. Listening to Yup'ik voices helped me adjust my Westernized view of identity and affiliation and acknowledge the complexities of these object categories.

On Listening

As a central theme in this work, listening is at the heart of both the method and the content of my dissertation (Sloan 2020b, 104-105). Listening is integral to community-based archaeologies, decolonizing methods, and intersectional feminisms, and is also an intrinsically Yup'ik value related to forms of intergenerational teaching and

learning (Chapter II). Referencing the oratory of Quinhagak elders, Rearden and Fienup-Riordan (2013, xxviii) explained that “elders teach more than facts; they teach listeners how to learn.” Reflecting on the particular challenges and pleasures of listening in Quinhagak is an important self-reflexive practice at the conclusion of this research.

As many a cultural anthropologist will attest, listening back to one’s own voice in audio interviews is an exercise in mortification. In listening to my interview sessions from 2015, 2017, and 2019, I was struck by how my tenor and tempo changed throughout the course of research. During pilot interviews, I was still learning the meter of Quinhagak speech, and was often quick to chime in during pauses that I now recognize as normal parts of Yup’ik storytelling rhythm. My listening methods improved in 2017 (having learned something from the 2015 recordings), and as the season went on, and I grew accustomed to letting silences linger and quieting my own interruptions. Listening well is a skill, and an important one to develop in order to really hear and understand what one’s informants are saying. I claim no expertise to this end, and still hear new things all the time when listening back to my interview data.

Also informative are moments where Quinhagak residents expressed frustration with me when I wasn’t listening well, or when I asked the wrong questions. For example, in my 2017 object-centered interview with John Fox, we looked at a zoomorphic figure that John identified as a dolphin. “You mean beluga?” I responded, lazily falling back on an archaeological interpretation. No, John insisted, he meant what he said: “dolphin.” I had done a poor job of listening and honoring John’s positionality as the person with interpretive authority in this context. In my 2015 interview with Grace Hill— one of the first I ever did— I recall her ambivalence regarding the questions I asked about gender identities. Following Grace’s lead, we ended up taking about the importance of teaching Yugtun (the Yup’ik language) to children, a topic much more aligned with her feelings about what was important in contemporary Quinhagak. We later became friends, and I interviewed Grace three times over the course of the research project. In some cases, relationships took awhile to develop, suggesting the importance of longitudinal listening.

Equally significant were moments of inversion in the typical research dynamic. Certain interactions served as “a-ha” moments where the value of listening and the ethnocentricity of conventional social science became apparent. For example, when Grace Anaver graciously showed me her artifact collection, her stewardship was inspiring (see Chapter V)—this was a local form of heritage preservation, and one equally valuable to that of the archaeology practiced at the Nunalleq Culture and Archaeology Center. In 2017, I remember being struck by a comment John Smith made during casual conversation in the Red Building where he explained that traditional Yup’ik shamans were doing “scientific research” when they transformed into animals, as this allowed them to observe the experiences of other beings first-hand. During John Fox’s 2017 object-centered interview, there is a moment where he begins asking *me* questions about the artifacts, rather than me asking him: “what do *you* see?” he asks, and I tentatively answer. All of these moments served as “checks” on my authority as a researcher in this community, reminding me that the tables can and should turn, and, indeed, that was the point of the research method.

Multiple forms of listening informed this project. First, I listened to Quinhagak residents to identify which overall aspects of social identity were important to them. This was followed by more tailored questions and more detailed listening, spotlighting certain concepts that arose from the initial work. My listening was not exclusive to the Quinhagak community, and I consulted ethnographic and archaeological sources throughout the research process, which affected the types of questions I asked and how I asked them. Listening to the constraints of Nunalleq’s archaeological data (*sensu* Wylie 1992) was also required, as my goal was to connect local knowledges to existing archaeological patterns. There was a balance to this listening, with each source providing new information that fed into further queries.

The *order* of this listening was a crucial component of the project. Rather than beginning with the archaeology, I began with the community, listening first to Quinhagak perspectives on social life, and only afterwards determining my archaeological research questions. My intent in this was to learn “the social from the cosmologies that inform it,

rather than beginning with a gendered reading of cosmologies” (Lugones 2014, 16). Instead of assuming that a gender-based perspective on Nunalleq sociality would be relevant to community beliefs and interests, I attempted to “learn the social” from Yup’ik knowledge-bearers, and only then identify how such renderings could fit into an archaeological framework. As demonstrated in this dissertation, the “listening first” model affects the outcomes of research.

New Directions

A core argument of this work is that a hyper-local perspective on culture is significant to ensuring an ethical archaeology (Sloan 2020b). Community-based archaeologies provide a framework for such approaches, and argue that archaeology’s continued relevance is tied up in our ability to serve stakeholder communities well. While crucial from ethical and decolonizing perspectives, localized approaches also result in better science. Attention to local cultural iterations helps us get around many of the challenges for symbolic interpretation outlined by Robb (1998), although this method does not attend well to temporal differences between contemporary and past cultural forms. In the case of Quinhagak, the deep connectedness between the modern-day Yup’ik community and the ancestors at Nunalleq means that local interpretations are relevant to understanding the site. Such meaningful connection between the present and the past will not be true in all times and for all places, but I suggest that it may be more frequently than we have recognized.

This is particularly true for studies centering gender and social identity, both of which are bound-up in culture such that they cannot be excised. We cannot and should not approach gender as anything other than a culturally-situated and historically-contingent phenomenon. Indigenous feminisms and feminisms authored by women of color attend to group-specific gender experiences and histories, critiquing mainstream feminisms for glossing these to the detriment of community empowerment. Local authorship is significant, particularly if our goals are those of equity, inclusion, and autonomy. The most appropriate social theory for interpreting any cultural form will thus

always be that of the cultural group in question. An interpretation of gender, identity, and social life at Nunalleq must be refracted through Yup'ik theory and bolstered by Quinhagak voices in order to approach (imperfectly) the goals of decolonizing and community-based archaeology.

The perspectives and desires of the communities we seek to serve are what matter most in this type of research, from start to finish. We can enact this in interpretation, as well as in project designs that tangibly benefit stakeholders. In many ways, the Nunalleq Archeology Project has set a commendable example for future collaborations between Indigenous communities and archaeologists. This dissertation research strives to contribute to that legacy by providing a specifically Quinhagak-based Yup'ik perspective on social identity, kinship, gender, and belonging.

APPENDIX

LIST OF INTERVIEW PARTICIPANTS BY YEAR AND INTERVIEW TYPE

	Name	Year	Interview type
1	John N. Fox	2015	pilot
2	Mike Smith	2015	pilot
3	Grace Hill	2015	pilot
4	Pauline Matthew	2015	pilot
5	Louisa Kuku	2015	pilot
6	Jamie Small	2015	pilot
7	Annie Cleveland	2015	pilot
8	Ferdricka Carter	2015	pilot
9	Fannie Johnson	2015	pilot
10	Emma White	2015	pilot
11	Bav'illa Small	2015	pilot
12	John Smith	2015	pilot
13	George Pleasant	2015	pilot
14	John Foster	2015	pilot
15	Lorena Ford	2015	pilot
16	Edward "Sammy" Mark	2017	subsistence learning
17	Evelyn Jones	2017	subsistence learning
18	John O. Mark	2017	subsistence learning
19	John Teddy Roberts	2017	subsistence learning
20	Emily Friendly	2017	subsistence learning
21	Willard & Mary Church	2017	subsistence learning
22	Annie Cleveland	2017	subsistence learning
23	Jim Barthelman	2017	subsistence learning

	Name	Year	Interview type
24	Lynn Church	2017	subsistence learning
25	Wade Church	2017	subsistence learning
26	Julia Hill	2017	subsistence learning
27	Joshua Cleveland	2017	subsistence learning
28	Jimmy Anaver	2017	subsistence learning
29	Warren Jones	2017	subsistence learning
30	Mike Smith	2017	subsistence learning
31	Annie Cleveland	2017	spatial
32	John Smith	2017	spatial
33	Grace Hill	2017	spatial
34	Jimmy Anaver	2017	spatial
35	Grace Hill & Julia Hill	2017	spatial
36	Annie Cleveland	2017	object-centered
37	Grace Pleasant & Jamie Small	2017	object-centered
38	John Fox	2017	object-centered
39	Joshua Cleveland, Jimmy Anaver, & John Smith	2017	object-centered
40	Julia Hill, Grace Hill, & Pauline Matthew	2017	object-centered
41	Martha & Frank Matthew	2017	object-centered
42	Pauline Beebe & Anna Roberts	2017	object-centered
43	Willard Church	2019	follow-up
44	Mike Smith & John Smith	2019	follow-up
45	Grace Anaver	2019	follow-up

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