

THESIS AND DISSERTATION ABSTRACTS

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This issue includes eight thesis and dissertation abstracts from Alaskan, Austrian, Canadian, Michigan, and Texan universities. Four of the abstracts describe archaeological research, three describe cultural anthropological research, and one details indigenous studies research. The archaeological research examines early Holocene use of the Central Alaska Range, the effects of bison mobility on prehistoric human subsistence in interior Alaska, the application of anthropological and ethnographic research for underwater archaeology, and the role of volcanism in the occupation of the middle Susitna River valley in Alaska. The cultural anthropological dissertations address social construction of mining technology in Fairbanks during the early 1900s, the impacts of regulations on Yup'ik subsistence in Southwest Alaska, and Jewish identity in Alaska. The indigenous studies dissertation examines Inupiaq values and how cross-generational transmission of these values occurs.

PREHISTORIC LANDSCAPE USE IN THE CENTRAL ALASKA RANGE

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Ph.D. dissertation, 2016, Department of Anthropology,
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ABSTRACT

The mountainous upland landscapes of central Alaska play an important role in understanding key issues in Beringian archaeology, including human adaptation to new landscapes, changes in landscape use in response to environmental change, and factors driving lithic assemblage variability. There are three important research issues concerning hunter-gatherer upland use: (1) the timing of upland settlement, (2) changes in upland land-use strategies over time, and (3) the influence of upland activities on central Alaskan lithic assemblage variability. This study addresses these topics through (1) pollen analysis of a peat core from the upper Susitna River basin to provide local environmental context for human adaptation, (2) locating and investigating previously unknown archaeological sites in the upper Susitna basin, (3) archaeological testing of

new and previously recorded sites in the upper Susitna basin, and (4) analysis of lithic assemblages from these sites as well as previously documented sites in the upper Susitna basin.

This study found that humans first occupied the upper Susitna basin in the early Holocene, by 11,000–10,500 cal BP. This is at least 2000 years after the end of full glacial conditions, and 1000 years after first evidence of landscape recovery. Following the initial occupation, there is evidence for human use of the upper Susitna basin from the early through late Holocene. Initial early Holocene use appears to have been ephemeral, consisting of short-term logistical forays by mobile hunter-gatherers provisioned with lithic raw materials necessary for subsistence activities. Human activity in the upper Susitna basin intensified in the middle and late Holocene as modern vegetation patterns became established, when hunter-gatherers occupied the upper Susitna basin in a low-mobility land-use system, provisioning upland base camps with the lithic raw material necessary for subsistence activities, and foraging out to logistical resource extraction camps in the uplands of the upper Susitna basin. There are preliminary indications that vegetation may have been affected by Holocene tephra

fall, and evidence for a hiatus in human occupation of the upper Susitna region during the middle Holocene, but it is unclear whether this was directly related to tephra deposition, or broader climate instability during the Neoglacial Period. A subtle shift in site location in the late Holocene may be tied to changing caribou hunting techniques. Throughout the Holocene, bifacial hunting weaponry was favored for upland subsistence activities.

A RECONSTRUCTION OF STEPPE BISON MOBILITY IN THE YUKON–TANANA UPLANDS AND IMPLICATIONS FOR PREHISTORIC HUMAN BEHAVIOR

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M.A. thesis, 2015, Department of Anthropology,
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ABSTRACT

This study seeks to characterize steppe bison (*Bison priscus*) behavioral ecology in interior Alaska during the Pleistocene for the purpose of understanding how bison may have moved about the landscape on a seasonal basis and how this behavior could have influenced prehistoric human settlement and subsistence patterns. Steppe bison were present in Alaska and other circumpolar regions during the Pleistocene but became extinct during the late Holocene. Archaeological evidence from the Tanana River Basin in interior Alaska indicates that bison were an important component of human subsistence economies for at least 10,000 years, but aspects of steppe bison behavioral ecology including location of habitat area, seasonal movement patterns, and responses to environmental change remain largely unexplored in Alaskan archaeology or paleoecology.

This study applies strontium, oxygen, and carbon isotopic analyses to 14 sequentially-sampled and AMS radiocarbon dated steppe bison teeth from two locales in the Yukon–Tanana Uplands in order to reconstruct steppe bison behavior on a seasonal basis. This study is the first of its kind for any prehistoric species in Alaska and the results indicate that steppe bison did not migrate great distances, but instead, moved between different ecotones seasonally, spending summers in higher elevation regions and winters in lower elevation regions. The results also indicate that steppe bison had greater mobility during periods of warmer climate, including Marine Isotope Stage 3 (MIS3) and during the Late Pleistocene.

Bison would have represented a large-bodied and predictable source of food for prehistoric peoples, and these results suggest that human land-use patterns likely incorporated the use of upland regions during the summer and fall, and lowland regions during the winter and early spring. Additionally, the results suggest that bison movement on the landscape would have been more predictable during the Late Pleistocene than during the Holocene. As such, settlement and subsistence patterns may have shifted from a more residually-organized pattern during the Late Pleistocene to greater logistical mobility during the Holocene as bison population became more mobile.

SOCIAL CONSTRUCTION OF TECHNOLOGY IN THE WORKPLACE: LODE MINING IN THE FAIRBANKS MINING DISTRICT, ALASKA 1902–1942

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M.A. thesis, 2016, Department of Anthropology, University
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Online at <http://pqdtopen.proquest.com/pubnum/10141261.html>

ABSTRACT

This thesis examines the social construction of technological practice of the Fairbanks Mining District (1902–1942) in order to enrich an understanding of the relationships among miners, mining endeavors, and cultures of work. Framing the study are two theoretical approaches: sociotechnical systems and chaînes opératoires. A regional analysis was conducted using archaeological data gathered as a part of a hazard mitigation study of abandoned mining lands. These data are combined with architectural reconstruction drawings, census data, geological reports, and archival materials to posit connections within the district, discern patterns, and examine how these changed over time. This study revealed that people's relationships in the district were diverse and dynamic, going far beyond simple class hierarchies of labor or capital. A preference for California-style milling practices and mill architecture are clear, despite detractors like the inappropriateness for an Alaska climate or the mill's relative efficiency, indicating that preference ruled over efficiency.

**ANTHROPOLOGICAL ARCHAEOLOGY
UNDERWATER: HUNTING ARCHITECTURE
AND FORAGING LIFEWAYS BENEATH THE
GREAT LAKES**

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Ph.D. dissertation, 2015, Department of Anthropology,
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ABSTRACT

Hunter-gatherers are foundational to anthropology. Ethnographic accounts of foragers have been essential in building classic anthropological theories of human evolution, kinship, social organization, and religion. From these studies, a normative view of foragers as simple, highly mobile, egalitarian band societies with limited or no property/ownership, emerged and continues to be pervasive in the discipline.

This larger issue frames the central problems addressed in this dissertation. It concerns hunter-gatherer societies and how they are effected by hunting architecture, such as drive lanes, animal corrals, and fishing weirs. These comparable built elements are found across time, space, and cultures because they are conditioned by similar traits in animal behavior. Subsistence strategies adopting such hunting features present a fundamental shift in exploitation by actively modifying the landscape (i.e. niche construction) to increase the yield and predictability of natural resources. It is argued that the creation and use of hunting architecture is among the most significant subsistence innovations in prehistory prior to the origins of agriculture; as similar to large-scale food production, the adoption of hunting architecture has demonstrable social and economic repercussions.

This dissertation investigates the global phenomenon of hunting architecture by drawing on a regional case study—caribou hunting in the Great Lakes, where some of the oldest hunting structures (9380–8830 cal yr BP) have been submerged beneath Lake Huron. The preservation of a virtually unmodified, culturally engineered landscape underwater is an ideal laboratory for investigating broader issues. New underwater research conducted for this dissertation provides an unprecedented view of forager societies and hunting architecture in the past, problematizing our normative characterization of prehistoric hunter-gatherers.

Ultimately, this dissertation makes contributions to three core areas: the local archaeological problem of Great Lakes caribou hunters, the theoretical anthropological

problem of hunting architecture and forager lifeways, and lastly, the global problem of conducting inundated archaeology. It provides a model for anthropological archaeology underwater and demonstrates that submerged prehistoric research can contribute to anthropology's most significant questions.

**HOLOCENE VOLCANISM AND HUMAN
OCCUPATION IN THE MIDDLE SUSITNA
RIVER VALLEY, ALASKA**

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M.A. thesis, 2016, Department of Anthropology,
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ABSTRACT

Archaeological and stratigraphic evidence from the middle Susitna River Valley, Alaska, reveals a rich record of human occupation during the Holocene, punctuated by volcanic ash deposits locally referred to as the Devil, Watana, and Oshetna tephra. Deposition of tephra in the middle Susitna River Valley had the potential to affect subsistence resources and lifeways of prehistoric peoples; however, ambiguities remain in dating both tephra deposits and cultural occupations, and in characterization of the tephra deposits. In addition, there has been little formal consideration of how deposition of tephra may have affected prehistoric hunter-gatherers using the middle Susitna River Valley (mSRV) during the Holocene and this research seeks to fill that gap.

Electron probe microanalysis is used to geochemically characterize the middle Susitna River Valley tephra, enabling correlation to reference tephra from Hayes Volcano and aiding in determining the number of volcanic events present in the stratigraphic record of the middle Susitna River Valley. Assimilation of existing radiocarbon dates from multiple sources with new AMS radiocarbon dates produced as part of this study allows for estimating the timing of tephra deposition and evaluating the timing of cultural occupation of the area with greater precision. Characteristics of archaeological assemblages bounded by tephra deposits are also evaluated relative to existing frameworks for understanding prehistoric hunter-gatherer behavior in interior Alaska. Interpretation is aided by consideration of other tephra depositional events and their environmental and ecological effects.

Results suggest that at least four tephra depositional events took place in the middle Susitna River Valley. The

Devil tephra was deposited between 1625–1825 cal yr BP (calibrated years before present). The Watana tephra, which correlate to the Hayes Volcano tephra set H, were deposited between 3360–4400 cal yr BP, with the upper and lower portions of this tephra deposited either in rapid succession or separated in time by only a few hundred years. The Oshetna tephra was deposited between 6570–7970 cal yr BP. While the Devil, upper and lower Watana tephra represent discrete volcanic events, the Oshetna tephra has multiple glass compositions and therefore it is unclear whether this tephra represents an eruption with a heterogeneous composition or multiple discrete tephra falls compounded in the mSRV. Potential hiatuses in cultural occupation of the mSRV occur following deposition of these tephra, but characteristics of archaeological assemblages in the mSRV are in accordance with general transitions in central interior Alaskan archaeology. Information from other volcanic events suggests that tephra deposition in the middle Susitna River Valley would have affected resource procurement in the area and therefore likely contributed to cultural hiatuses, especially following deposition of the Watana tephra. This project has clarified the Holocene stratigraphic sequence of the middle Susitna River valley, Alaska, and provided a more complete context for interpretation of the archaeological record.

REGULATORY IMPACTS ON A YUP'IK FISH CAMP IN SOUTHWEST ALASKA

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Online at <http://hdl.handle.net/2429/59022>

ABSTRACT

Yup'ik fishers on the Nushagak River of Southwest Alaska harvest salmon for both subsistence and commercial purposes, however their cultural protocol and formal resource management principles are unrecognized by the State of Alaska. Drawing from two summers of ethnographic research and experience as an Alaska Department of Fish & Game (ADF&G) anthropologist, I examine one state regulation preventing drift gillnetting for subsistence purposes. The analysis reveals that the State of Alaska is currently preventing cultural adaptation on the Nushagak River despite Yup'ik communities maintaining sustainable harvest levels for millennia. Changes in river conditions, namely the location of sandbars and channels, in addition

to warming water temperatures, necessitate the application of the traditional harvest method, drift gillnetting, to meet the harvest goals of Yup'ik fishers at the Lewis Point fish camp on the Nushagak River. The Alaska Board of Fisheries has maintained that drifting only be employed in the commercial fishery, not the subsistence fishery, despite policy dictating a subsistence priority over other consumptive uses. While failing to meet the subsistence priority codified in its own policy, the State of Alaska also fails to provide a meaningful role to the tribes in the decision-making domain of resource management. Yup'ik fishing is guided by a cultural ethos known as *yuyaraq*, roughly translated to “the real way of life,” which provides a formal management institution that maintains continuity with the past while providing harvest protocol and principles for the present. The incorporation of Yup'ik intellectual traditions and cultural principles is necessary to provide the tribe a “meaningful role” in the natural resource management of Alaska.

IÑUPIAT ILITQUSIAT: INNER VIEWS OF OUR IÑUPIAQ VALUES

Charles Sean Asiqtuq Topkok

Ph.D. dissertation, 2015, Indigenous Studies,
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Online at https://scholarworks.alaska.edu/bitstream/handle/11122/6405/Topkok_uaf_0006E_10425.pdf?sequence=1

ABSTRACT

Iñupiat Ilitqusiat: Inner Views of Our Iñupiaq Values examines how Iñupiat pass down elements of our cultural heritage to future generations. The research is community-driven by the Pavva Iñupiaq Dancers of Fairbanks, families with Iñupiaq children in their household, and other Iñupiat worldwide. My doctoral research addresses how we view each Iñupiat Ilitqusiat (Iñupiaq values), how our Iñupiat Ilitqusiat have been passed down, and how we pass down our Iñupiaq cultural heritage to our future cultural-bearers. Participants talk about our Iñupiat Ilitqusiat to acknowledge that we are Iñupiat wherever we live. I assert that in order to conduct culturally appropriate research with Iñupiaq people, it is imperative to observe cultural protocols and values, to equally include Indigenous narrative history and Western literature in the review process, and to observe Iñupiaq methods and methodology when gathering data. I examined and applied the ways my an-

cestors have gathered and presented data, formalizing for academia an Inupiat way of conducting research. I have conducted 17 group interviews corresponding to the 17 Inupiat Ilitqusiat. In my findings, I acknowledge that our Inupiat values help define our heritage. They are embedded in our lives and in our stories. They are in our spirit, passed down to us through our ancestors. Each Inupiat Ilitqusiat converges with each other when we examine how each cultural value applies to our lives. We need to continue talking about our cultural values in every village to ensure our descendants live their cultural heritage.

THE FROZEN CHOSEN—THE CONSTRUCTION AND MAINTENANCE OF JEWISH IDENTITY IN ALASKA

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ABSTRACT

The aim of this thesis is to explore Jewish identity under the conditions of remoteness. Focusing on the question of how Jewish identity is constructed and maintained under such conditions, this thesis presents findings regarding the example of the approximately 6,000 Jewish people living in different locations in Alaska, approximately 81% of them in the biggest town of Anchorage. How is Jewish identity constructed in a place as remote as Alaska? How is it then maintained despite the difficulties that come with life in a remote area? And does the Holocaust play a role in its maintenance?

These were the main questions guiding this thesis all based on my research of three weeks at different locations in Alaska in May 2015. Since there is not much literature to be found on this specific topic the presented findings of the case study in Alaska were essential for developing answers to my research questions. These findings are regarded in the light of theories on (collective) identity, (symbolic) ethnicity, Jewish identity, diasporas, remoteness, and the influence of the Holocaust on Jewish identity. The case study contains a portrayal and analysis of a diverse set of aspects that arose during my research exploring the current practices and mindsets of the Jewish communities of Alaska.