

THESIS AND DISSERTATION ABSTRACTS

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This issue includes eight thesis and dissertation abstracts from universities in Alaska, Texas, and Canada. Five of the abstracts describe archaeological research, two describe cultural anthropological research, and one describes biological anthropological research. The archaeological research addresses lithic technology, paleoethnobotany, and zooarchaeology. The cultural anthropological dissertations address migration and artist-environment interaction. The biological anthropological thesis examines fragmented and commingled human remains from Chirikof Island. Readers will note that my thesis abstract is included here. It has taken me a while to finish, because life does not always go as planned. For those of you pursuing a degree and things are not going as you imagined, I implore you to stick with it. The education you get and the degree you receive is worth the time and energy you invest.

Contact Monty Rogers to submit an abstract of a recently completed thesis or dissertation that deals with topics of interest to *AJA* readers.

FUNCTIONAL COMPARISONS BETWEEN FORMAL AND INFORMAL TOOLS SAMPLED FROM THE NENANA AND THE DENALI ASSEMBLAGES OF THE DRY CREEK SITE

Patrick Hall

M.A. thesis, 2015, Department of Anthropology,
University of Alaska Fairbanks

ABSTRACT

This research involved low-powered microscopic analysis of use-wear patterns on the utilized edges of formal and informal tools sampled from the Nenana component (C1) and the Denali component (C2) of the Dry Creek Site. Dry Creek is one of the type sites for the Nenana Complex, which is often contrasted with the Denali Complex in Late Pleistocene archaeological studies of central Alaska (12,000–10,000 BP). There are twice as many

unifacial scrapers than bifacial tools in the C1 formal tool assemblage. The C1 worked lithic assemblage contains a relatively high ratio of unifacially worked endscrapers and side scrapers over bifacial knives and projectile points. The technological makeup of the formal tools sampled from the Denali component is characterized by the manufacture and use of a higher number of bifacial knives and projectile points. The presence of microblades within C2 and the absence of microblades in C1 are often cited as the most significant technological difference between these two tool kits. The analysis presented here suggests that with or without microblades, the Nenana and Denali components are different tool kits. However, differences in utilization signatures between formal bifacial knives and scrapers indicate that technological variability within C1 and C2 at Dry Creek may largely be shaped by early hunting and butchering activities associated with the Denali sample of tools, versus later stage butchering and processing activities associated with the Nenana sample.

PALEOETHNOBOTANY IN INTERIOR ALASKA

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M.A. thesis, 2014, Department of Anthropology,
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ABSTRACT

Vegetation and plant resources can impact forager mobility and subsistence strategies. However, misconceptions about the preservation of organics in subarctic archaeological contexts and underestimations of the importance of plant resources to foraging societies limit paleoethnobotanical research in high-latitude environments. This research draws on concepts from human behavioral ecology to address questions relating to site seasonality, plant resource use, land use, and deposition and taphonomy. The model developed in this thesis outlines expectations of seasonal archaeobotanical assemblages for Late Pleistocene and Holocene sites in interior Alaska. I consider these expectations in light of plant macroremains found in anthropogenic features from Components 1 and 3 (approximately 13,300 and 11,500 cal yr BP, respectively) at the Upward Sun River site, located in central Alaska.

Site-specific methods include bulk sampling of feature matrix in the field and wet-sieving matrix in the laboratory to collect organic remains. Analytical measures of density, diversity, and ubiquity tie together the model expectations and the results from Upward Sun River. The dominance of common bearberry in the Component 1 archaeobotanical assemblage meets the expectations of a late summer or fall occupation. This suggests that site occupants may have focused on mitigating the risk of starvation in winter months by foraging for seasonally predictable and storable resources. The variability in results from the Component 3 features could relate to longer-term occupations that extended from mid-summer to early fall, in which site occupants foraged for locally available and predictable plant resources such as blueberry or low-bush cranberry species.

In this thesis, I argue that large mammal resources were a key component in Late Pleistocene and Holocene subsistence strategies. However, foragers were flexible in their behavior and also targeted small mammals, fish, waterfowl, and plant resources in response to environmental conditions and cultural preferences. The results illustrate the long-standing use of culturally and economically important plant resources in interior Alaska and draw at-

tention to aspects of human behavior that are under-conceptualized in northern archaeology, such as the gender division of labor, domestic behavior, and potential impacts of plant resource exploitation on mobility and land use.

TO COME AND GO: TRANSNATIONAL LIFE BETWEEN MEXICO AND ALASKA

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Ph.D. dissertation, 2015, Department of Anthropology,
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Online at <https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0166125>

ABSTRACT

This dissertation examines the experiences of place and patterns of transnational mobility of three generations of people who have been living between Acuitzio del Canje, Michoacán, Mexico, and Anchorage, Alaska, USA, for several decades. These people hold dual U.S.–Mexican citizenship or U.S. permanent residency and are able to move across the continent in a way that many Mexican migrants cannot. Based on twelve months of ethnographic research in both Acuitzio and Anchorage, and ten years of engagement with people in these locations, I analyze the experience of *Acuitzences* (people from Acuitzio) at several levels: as they encounter frictions in their movements between Michoacán and Alaska; the practices of multigenerational family units who gain traction over time to build lives in both Anchorage and Acuitzio; the uneven and situated habits that generate a transnational class formation; and the ways in which Mexicans in Alaska reconceptualize their senses of place by developing transnational identities out of the symbols and mechanisms of both nation-states. In showing how distance is key to the experience of Mexican migrant-immigrants in Alaska, this research also contributes to theorizations of the relevance of distance in the creation of spatialized differences. My analysis reveals that over time, *Acuitzences* in Alaska orient their lives to both locations as they live, work, and imagine their futures across the continent. *Acuitzences* in Alaska have created a transnational social field and orient themselves more to the field as a whole than to any one location in it. For most of them, Acuitzio, Anchorage, and the experience of mobility between the two places are necessary to feel at home in the world. These findings contribute to the anthropological research on mobility, citizenship, transnational

migration, and the production of space, and bring the spatially bounded fields of circumpolar studies and Latin American studies together. Based on this, I advocate for a transnational approach to theory and policy that embraces the multiple trajectories that construct places. Despite policy restrictions to migration, the lives of transnational Acuitzences who *come and go* show how the United States and Mexico are profoundly coproduced geographies.

**THE EFFECTS OF FRAGMENTATION
ON THE INFORMATION POTENTIAL OF
HUMAN REMAINS: AN EXAMINATION
OF PREHISTORIC AND HISTORIC REMAINS
RECOVERED FROM CHIRIKOF ISLAND,
ALASKA**

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

Skeletal elements collected from land managed by the U.S. Fish and Wildlife Service at four sites on Chirikof Island between 1962 and 1963 were examined using gross morphological methods to determine biological affinity, to collect data for future scientific research, and to examine the effects of fragmentation on information availability. Five associated individuals, eight isolated crania, and over 200 unassociated commingled and fragmented elements revealed a minimum of fifty-eight individuals. Cranial and mandibular characteristics indicated a biological affinity of Arctic or Subarctic Eskimo for 85% of the associated remains or isolated crania and 5% of the 182 information-bearing commingled elements. Seven of the crania presented mild to extreme lambdoid deformation. This was more informative regarding cultural affinity as intentional deformation is absent from all areas of Alaska except for protohistoric and early historic populations of Koniag of Kodiak Island (700 BP through AD 1800). The effect of fragmentation on information availability is substantial as intact crania yielded the most data and the commingled remains yielded the least data. Based on these results, it is argued that collections of commingled remains in poor condition should only be analyzed for the minimum number of individuals. Age, sex, and biological affinity should be determined only if complete crania are present.

**ETHNOGRAPHY, ANALOGY, AND
ARCTIC ARCHAEOFAUNAS: ASSESSING
THE LIMITS OF ZOOARCHAEOLOGICAL
INTERPRETATION**

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

The use of analogy to infer past lifeways from archaeological material is integral to many types of archaeological investigation. There are many sources for analogy, but the ones that offer some of the richest interpretations use ethnographic and ethnohistoric records to understand archaeological materials and their patterns. The use of these documentary records has been particularly beneficial in places where contemporary people can be linked to their archaeological ancestors through material culture using the direct-historical approach. However, the use of documentary sources in constructing past lifeways has been critiqued, with questions raised about the use of a synchronic, subjective record of a rapidly changing historical present to infer the normally fragmentary and palimpsestic archaeological material. This study aims to clarify the use of the documentary record in interpreting dwelling activities from the archaeofaunal record. By testing which ethnographically and ethnohistorically documented practices are visible archaeozoologically, archaeologists can identify activities, practices, and behaviours that can be accurately interpreted from the archaeological record using the documentary record.

The Arctic is an ideal location to study the use of analogy in the archaeological record because it has both a detailed documentary record and a well-preserved archaeological record. This study uses the direct-historical method to develop archaeofaunal expectations from the documentary record. Expectations for archaeozoological material were created to test for multiple stages of dwelling use: primary activities drawn directly from the documentary record, contemporary activities potentially invisible in the documentary record, and post-depositional activities. Archaeofaunal materials from a fourteenth-century Thule Inuit semisubterranean dwelling at Cape Espenberg, Alaska, were used to test these expectations. The strongest patterns that emerged were those relating to the primary activities directly reconstructed from the documentary

record, specifically those relating to food storage, preparation, and consumption. Although this is a single study, it indicates that archaeofaunal patterns can help differentiate between activity areas in houses, and that activities that relate to domestic subsistence practices are similar in the early Thule period and the historic period. More broadly, it also suggests that documentary records can be used to accurately interpret archaeofaunal patterns relating to food storage, preparation, and consumption.

THE ROLE OF QUARTZ IN THE LITHIC TECHNOLOGY OF THE WESTERN UPPER COOK INLET ANCESTRAL DENA'INA

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

This thesis examines the ways in which ancestral Dena'ina Athabascans, who once inhabited the *Ch'u'itnu* Archaeological District of Alaska, incorporated quartz into multiple aspects of their lithic technology. The *Ch'u'itnu* Archaeological District is in western Upper Cook Inlet, north of the community of Tyonek, an area in which quartz was available in the glacial till, along river and creek banks, and the Cook Inlet shoreline as a raw material for stone tools. Research methods included documenting qualitative and quantitative attributes of débitage, splintered pieces and cores, groundstone tools, flaked tools, other lithic artifacts, and evidence of thermal alteration. Results show that 87 percent ($n = 1,677$) of the 1930 lithic artifacts comprising the *Ch'u'itnu* Archaeological District lithic assemblage were made of quartz, and that débitage was the most common artifact type. Results indicate that the ancestral Dena'ina who once occupied the *Ch'u'itnu* Archaeological District used quartz throughout their lithic technology, which included tools and boiling stones, in a process by which thermal alteration blurred the lines between distinct artifact types.

VISUAL ARTISTS EXPERIENCING NATURE: EXAMINING HUMAN-ENVIRONMENT RELATIONSHIPS

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ABSTRACT

Anthropology has a long history collaborating with artists to understand their artwork. However, little research exists in the discipline that focuses on artists as a group, their creative process, and what may influence that process. In particular, how artists use nature and place has not been studied; instead, anthropology has generally considered nature and place as merely a backdrop for culture rather than for its impact on cultural expression. Identification of diverse aspects of the interdependence of ecological and social systems can inform our understanding of how people address issues of environmental concern. Managers, scientists, creative people, and others working at the nexus of disciplines, management needs, and ecological and social systems can facilitate this understanding through knowledge sharing. In my research I examined how two groups of visual artists process their interaction with the environment through what I term “experiencing with” nature and how this may influence them as artists.

I employed phenomenological inquiry methods and interdisciplinary analysis to investigate the ways in which artists develop a sense of experiencing with nature and a sense of place. I developed an experiencing formula framework representing relationships between variables involved in the act of experiencing in order to analyze artists' narratives and actions as a way to examine their perceptions of their experiences with nature. The analysis made evident six primary categories of findings: artists' sense of experiencing with nature, their purpose of experiencing, their process of experiencing, their conceptual definitions of nature, their access to nature, and how they experienced nature through the artist residency programs. I propose the experiencing formula framework may be suitable for describing human-environment relationships beyond the boundaries of artists and nature.

The artists' experiences were individual and influenced them to varying degrees. They experienced nature

with purpose and encountered both tension and inspiration while gathering resources for their work. They were not so concerned with defining nature as seeking to tell their story of place through their sense of experiencing to communicate their experiences with nature through their works. Experiencing with nature provided them with a language for expressing themselves. Nature was a place for journey and exploration for the artists.

**LINDA'S POINT AND THE VILLAGE SITE:
A NEW LOOK AT THE CHINDADN COMPLEX
AND ARCHAEOLOGICAL RECORD AT
HEALY LAKE, ALASKA**

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Ph.D. dissertation, 2015, Center for the Study of the
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ABSTRACT

Interior Alaska's Healy Lake archaeological locality contains a cultural sequence spanning 13,500 years, with some of the oldest known human occupations in Alaska. This dissertation is composed of three investigations presenting new data on the prehistoric archaeology of Linda's Point and the Village site at Healy Lake. Analyses of curated and newly excavated lithic assemblages have allowed a reassessment of culture history and new assessments of lithic technological organization at Healy Lake and the Alaska interior.

The first investigation presents a general report for the Linda's Point site, excavated from 2011–2013. Detailed

recording has clearly separated the lowest cultural occupations, dating to 13,000–11,000 cal BP and associated with a thick paleosol. They contain hearths, debitage, and small triangular points similar to those seen at the Village site. Upper silt deposits contain a variety of lithic tool types among a dense scatter of debitage and bone fragments spanning a wide time range. Linda's Point appears to have been used as a habitation site throughout its history.

The second study presents a technological analysis of toolstone selection and use at Healy Lake, assessing assemblage composition, diversity, and lithic reduction streams at each site. The earliest components show strong similarities with a few differences suggesting longer-term habitation at the Village site. Assemblages show a shift in the Holocene towards primary reduction and use of lower-quality but readily available local material, suggesting longer occupation times and reduced overall mobility. Local reduction is most prevalent at Linda's Point, indicating potential embedded local resource procurement.

The third study presents a technological analysis and description of Chindadn bifaces from early archaeological sites of interior Alaska, dating 12,000 cal BP and older. Convex-based bifaces are unique for informal reduction techniques and minimal evidence of use. Triangular and subtriangular bifaces show diverse reduction characteristics and low rates of hafting wear, suggestive of generalized point tips designed to conserve raw materials in Beringian climates. Concave-based bifaces show intensive flaking, haft element breakage, and abrasion, placing them outside the range of Chindadn biface technology.