



Contents lists available at ScienceDirect

Quaternary International

journal homepage: www.elsevier.com/locate/quaint

The peopling of eastern Beringia and its archaeological complexities

Brian T. Wygal

Adelphi University, Department of Anthropology, Garden City, NY, USA

ARTICLE INFO

Article history:
Available online xxx

Keywords:
Archaeology
Lithic studies
Peopling of the Americas
Eastern Beringia

ABSTRACT

Debates over meaningful archaeological units, typologies, or “technocomplexes” have a lengthy history in archaeology and the issue is particularly convoluted in eastern Beringia. Categorizing the early prehistoric tool industries of the Pleistocene/Holocene transition is pertinent to understanding the colonization of eastern Beringia and ultimately the Americas. Yet, Alaska archaeologists continue to disagree on a unified culture history. The primary point of contention surrounds the presence or absence of microblade technology in central Alaska and the meaning of the Nenana and Denali complexes. While some interpret the former as a unique manifestation representing a separate migratory population, others disagree; and, the Denali complex has become a catchall category for a variety of artifact types leading to questions over its conceptual validity. This assessment tests specific questions pertinent to the relationship between prehistoric tool use and ecotones in an attempt to explain the presence or absence of particular artifact types and land use strategies through time. It also reflects on issues caused by repeated occupations, palimpsest assemblages, and other taphonomic processes that influence archaeological consensus. Results indicate separate phases in the initial colonization of Alaska and form a testable hypothesis based on functional land use properties associated with the Denali complex era in a way that distinguishes it from other early technologies in the region. The approach contributes to a longstanding discussion over subjectivity among archaeological categories and explains assemblage variability in eastern Beringia with widespread implications for interpreting the initial peopling of the Americas.

© 2016 Elsevier Ltd and INQUA. All rights reserved.

1. Introduction

The First Americans entered the western hemisphere from Asia via Beringia sometime before 14,100 cal BP and likely originated from multiple progenitors (Goebel, 2004). During this period, some scientists argue for a Beringian Standstill Model wherein the initial migrants incubated within Beringia for many generations (Tamm et al., 2007; Scott et al., this volume) before ice retreat was sufficient for southern migrations (Goebel et al., 2008: 1498; Dixon, 2013: 58–60). Recent genetic research supports this hypothesis (Raghavan et al., 2015) and a “standstill model” makes sense given the observed complexities associated with tool kit variability in central Alaska. However, the time scale for such events remains unresolved, complicating our ability to reach a unified culture history with disputes over the difference

between the Nenana and Denali complexes of central Alaska as well as inconsistent use of these typologies (Powers and Hoffecker, 1989; Bever, 2001; Dumond, 2001; Odess and Shirar, 2007; Goebel, 2011; Holmes, 2011; Potter, 2011; Heidenreich, 2012). The longstanding debate serves as an ideal case study into the subjectivity of artifact typology (Dibble, 1995; Hörr et al., 2014).

In this paper I define the modern topographic setting for important site discoveries followed by an analysis of the presence or absence of microblade technology by focusing on land use measured principally by elevation. I consider specifically where microblade technology was produced, used, and was absent among Denali complex occupations. It is also important to address how the Denali complex pertains to other late Pleistocene industries in the region, specifically the Diuktai and Nenana complexes (Fig. 1). To accomplish this, the following questions are tested. Did tool use vary between the Tanana valley and greater Broad Pass region; or, did assemblages vary by elevation? I then discuss the answers to these questions by investigating anomalous sites within the current

E-mail address: bwygala@adelphi.edu.

<http://dx.doi.org/10.1016/j.quaint.2016.09.024>

1040-6182/© 2016 Elsevier Ltd and INQUA. All rights reserved.

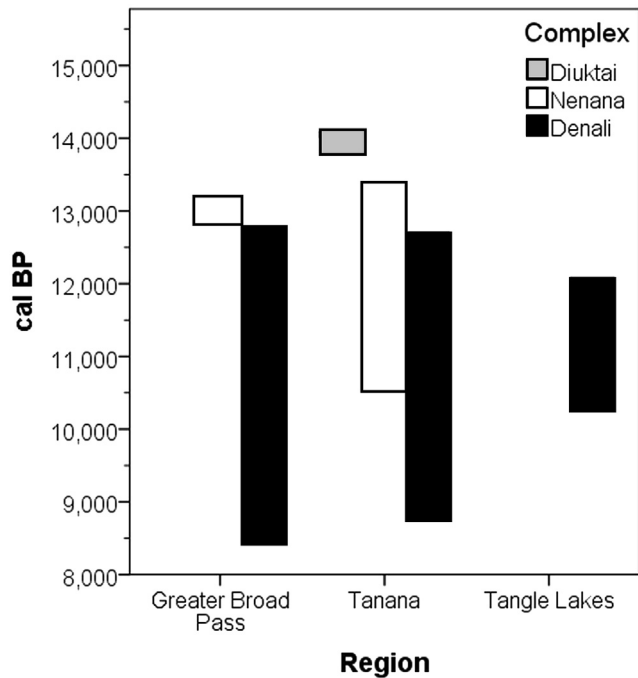


Fig. 1. Chronology of early archaeological complexes by region in central Alaska (N = 70). Note the time between arrival of Diuktai at Swan Point in the middle Tanana valley and the simultaneous appearance of the Denali more than 1000 years later. Also important is the overlap of suspected Nenana with Denali complexes in the middle Tanana valley.

typologies. The results should inspire further research in previously underexplored ecozones to resolve the wider classification debate over the initial colonization of eastern Beringia.

1.1. Diuktai complex

The earliest known occupations of eastern Beringia occurred in central Alaska prior to the Younger Dryas and included two distinct techno-complexes the Diuktai and Nenana complexes (Fig. 2). Diuktai-like microblade cores fashioned in the Yubetsu technique (Gómez-Coutouly, 2016: 26) dated between 14,150 and 13,870 cal BP have been found only at Swan Point culture zone 4 (CZ4) in the middle Tanana valley. Diuktai technology is most often associated with Upper Paleolithic assemblages from northeastern Siberia and widely considered ancestral to the Denali complex. Faunal remains from the lowest component at Swan Point indicate mammoth, Pleistocene horse, and waterfowl were among prey dispatched by this initial wave of human exploration and hunting in central Alaska (Holmes, 2011: 179, 184).

1.2. Nenana complex

The Nenana complex consists of small teardrop shaped bifacial points and larger bifacial knives, end and side scrapers, retouched blades, cortical backed knives, unifacial planes, denticulates, graters, and notches (Hoffecker and Elias, 2007: 149; Goebel, 2011: 203). Originally discovered at Dry Creek component 1 (C1), the typology was further defined at nearby Moose Creek and Walker Road (Powers and Hoffecker, 1989: 278; Goebel, 2011: 199). Once viewed as a likely source for the Clovis tradition further south (Goebel et al., 1991), a recent reanalysis highlights the relative expedient nature of the industry generated by provisioning specific

places rather than individuals. This suggests a fundamentally different approach to technological organization than is apparent in either the Clovis or Denali complexes and supports the Nenana complex as a standalone concept (Goebel, 2011: 212).

Originally, the Nenana complex was considered a “local designation” limited to the Nenana and perhaps Teklanika valleys of the North Alaska Range foothills (Powers and Hoffecker, 1989: 283; Goebel and Buvit, 2011: 14). However, others attribute several early components from the Tanana valley at sites like Broken Mammoth CZ4, Chugwater C1, Mead CZ4, Little John, and Healy Lake to the Nenana complex (Holmes, 2001; Yesner, 2001; Easton et al., 2011; Potter et al., 2014) based on triangular/teardrop shaped points originally called “Chindadn” (Cook, 1969, 1996: 326) and recovered from some but not all of these components (Fig. 3). Recent work at the Linda’s Point site on Healy Lake (Younie and Gillispie, 2016) supports the presence of a technology reminiscent of the Nenana complex in the middle Tanana valley prior to the appearance of the Denali complex. Adding these Tanana components to the list of potential Nenana complex occupations, as some scholars have suggested (Yesner, 1996: 258, 270; Goebel, 2004: 355; Goebel and Buvit, 2011: 16), revises dates for the technology to 13,400–11,500 cal BP in central Alaska. Even this expanded view of the Nenana complex demonstrates a rather limited land use strategy with no known diagnostic assemblages south of the central Alaska Range or above 520 m asl.

1.3. Denali complex

Fredrick H. West (1967: 360; 1975: 76; 1981) defined the Denali complex in central Alaska as an industry featuring microblades made from multifaceted wedge-shaped microblade cores and core tablets, specially prepared cores for large blade production, a variety of lanceolate to lenticular bifacial projectile points, bifacial biconvex knives, flat-topped end scrapers, burins, and burin spalls (Fig. 4). West (1975: 77–79) reported many Denali complex sites in the Tangle Lakes region along the terminal Pleistocene lakeshore. Radiocarbon dates, while often disputed, suggested the Denali complex was active in the region 11,800–9000 cal BP. Dry Creek C2 in the Nenana valley provided the earliest secure dates on Denali complex assemblages between 12,500 and 11,600 cal BP in layers overlying the older Nenana assemblages (Powers and Hoffecker, 1989: 270; Hoffecker and Elias, 2007: 147). More recent work contributed two additional hearth ages ranging between 11,070 and 10,560 cal BP from Dry Creek C2 (Graf et al., 2015: 678). An early Holocene expansion of the Denali complex spread into northern and southern Alaska (Ackerman, 1992; Mason et al., 2001; Wygal and Goebel, 2012) and it continued into the middle Holocene as the “late Denali complex” (Dixon, 1985; Mobley, 1991). The late Denali complex, like other middle Holocene technologies with microblade components, remains poorly defined (Esdale, 2008). The success of the Denali complex colonization of eastern Beringia is evident by the number and distribution of sites throughout central Alaska (Fig. 5a and b)—a migration carried as far south as the Alaska Peninsula and southeast Alaska.

1.4. Toolkit variability in central Alaska (14,500–8500 cal BP)

Originally proposed as tentative classifications (Powers and Hoffecker, 1989: 283), the Nenana and Denali complexes are engrained in the lexicon of Alaska archaeology despite inconsistent designations and other anomalies (Potter, 2011: 215). The relationship of the Denali complex (with microblade technology) to the Nenana complex (expedient triangular bifacial points or knives and

Download English Version:

<https://daneshyari.com/en/article/7450665>

Download Persian Version:

<https://daneshyari.com/article/7450665>

[Daneshyari.com](https://daneshyari.com)