From Mesa To Monte Verde
April 28, 2011

A Power Point Presentation about a projectile point style being employed as a cultural and chronologic diagnostic over an extensive geographical range and the interesting picture/possibilities this application presents.

Mike Kunz wrote and gave this presentation at the 38th annual meeting of the Alaska Anthropological Association (March 9-12, 2011).

Tony Baker, John Garrett and Joshua Ream contributed images of the Clovis, El Jobo, and Haskett points.
Slide 2: National Geographic Article

This graphic is from a December 2000 National Geographic magazine segment entitled “The Search For The First Americans”. That summer one of their writers and a photographer spent a few days with us at Mesa gathering information. They spent time with and talked to other Paleoindian archaeologists around the country, in particular Dennis Stanford (the Solutrean connection) of the Smithsonian, which isn’t far from the National Geographic offices in D.C. What got published was of course National Geographic’s interpretation and assessment of the information they obtained. By and large, at the time, I thought they did sort of OK, they got the germ of the ideas anyway. Our main point was that at the end of the last Ice Age in North America there seemed to be two cultural entities of roughly equal antiquity present which were represented in the archaeological record by distinctive stone tools, e.g. projectile points: one hallmarked by thick-bodied unfluted, lanceolate projectile points and the other by thin-bodied, lanceolate projectile points. As to the origin of these cultural entities, as I recall there wasn’t much agreement. However, that was a dozen years ago and since then we’ve obtained significantly more information that can be incorporated into this idea, and that’s what I’m going to address today.
The Mesa Site was discovered in 1978 with excavation beginning that year and continuing through 1980. That was followed by an eight year hiatus with excavation resuming in 1989 and continuing through 1999. Radiocarbon dates from Mesa suggest two periods of occupation, 11,660 - 11,190 RCYBP and 10,400 - 9800 RCYBP.
It wasn't until the mid 1990s that we began to get a handle on the Mesa Complex and realized that several other previously excavated/dated sites, Putu/Bedwell in the Sagavanirktok Valley and Hilltop in the Atigun River Gorge, 250 kilometers to the east of Mesa, were also Mesa Complex sites.
In 1993 & 1994 Rick Reanier, Michael Bever and I undertook a reexamination of the original excavation notes and conducted excavations at Hilltop and Putu/Bedwell recovering additional cultural material and C14 samples that when assayed returned dates of 10,300 and 10,000 RCYBP at Hilltop and 10,400 RCYBP at Bedwell. The Bedwell locality lies atop the knob while the Putu locality lies several hundred feet lower on the knob's southern shoulder. Discovered and initially excavated by Herb Alexander in 1970, he originally referred to the lower locality as Putu and gave no name to the locality atop the knob. However, following the boating accident death of colleague Stephen F. Bedwell, Alexander named the upper locality in his honor.
Mesa projectile points are a medium to large, thick-bodied, lanceolate form, with a convex/flat base (unless the base has been damaged or reworked). The point gradually expands from the base to its widest extent, which usually occurs at about two thirds of its length. Heavy edge grinding is usually present from the base to approximately the widest extent of the point. The point is roughed-out by percussion flaking and finished by robust horizontally opposed pressure flaking. Flake removal terminates along the centerline of the point, creating a lenticular/diamond cross section.
Slide 7: Mesa/Sluiceway Point Comparison

The Irwin Sluiceway site lies about 125 kilometers west of Mesa. It was discovered by Bob Gal in 1992 and he and Dennis Stanford conducted excavations there in 1994 and 1998. The site produced an artifact assemblage that is nearly identical technologically to Mesa, the primary difference being the size of the projectile points - as Dennis said when he first told me about the material, "the projectile points look like Mesa Points on steroids". The site is the type site for the Sluiceway Complex. Radiocarbon dates for the site cluster around 10,000 RCYBP.
Jeff Rasic began excavation at Tuluaq Hill in 1999, a large Sluiceway site 250km west of Mesa. Radiocarbon dates for the site cluster at 11,190 RCYBP. The Sluiceway Complex radiocarbon chronology based on dates from the Sluiceway and Tuluaq Hill sites mirrors that of the Mesa Complex suggesting a regional occupational hiatus between ca. 11,190 and 10,000 RCYBP. Because of the almost identical technology and chronology Mesa and Sluiceway are thought to be manifestations of the same cultural group.
The Tuluaq Hill excavation area is on the top of a hill. On the left extreme of the hill several caribou trails are visible. On the Caribou Crossing site numerous caribou trails are visible indicating that thousands of caribou travel across this locale annually.
Sluiceway projectile points are manufactured in the same manner as Mesa projectile points and have the same shape and attributes. The only real difference is that Sluiceway points are on average about a third larger than Mesa points.
Over the last 30 years or so a number of Mesa and Sluiceway locales have been identified in the general area of the northern Brooks Range. Practically no excavation has been undertaken at any of these locales but there is no reason to expect they do not date within the same general time frame as the sites already dated.
For 50 years following its documented association with Pleistocene megafauna, primarily mammoth, Clovis reigned supreme as the earliest morphologically consistent, geographically widespread, cultural entity in the Western Hemisphere. As of now I don't think there are any states except Alaska and Hawaii, that haven't produced at least one Clovis Point. Although there were pre-Clovis contenders from time to time, most quickly emulsified themselves in the pre-Clovis decay curve. The black line depicts the geographic extent of Clovis, the yellow line the Clovis heartland. Folsom, in my mind an outgrowth of Clovis, followed as the second most ancient archaeological culture but its geographic distribution and temporal endurance were considerably less. The red line roughly portrays the geographic extent of Folsom.
In the far west - Columbia Plateau and Great Basin - by the middle of the last century it had become evident that while Clovis was represented in the region, most large late Pleistocene age sites also contained stemmed and lanceolate projectile points. Points of this general description comprise what is called the Western Stemmed tradition (WST). However, since most of these sites were surface manifestations it was impossible to develop a chronology other than using the associated Clovis points as temporal markers. One of the WST point types is Haskett and the early 1960s discovery of the type site near American Falls Idaho provided a good archaeological context for the point which can be described as very similar to Mesa and Sluiceway points. A few years later, radiocarbon dates of 10,100 and 9800 RCYBP were obtained for Haskett points at Redfish Overhang in Idaho. At the Sentinel Gap site in Washington, Haskett points are associated with radiocarbon dates that range from 10,680 to 10,000 RCYBP. A number of Great Basin surface sites suggest the Haskett point type is roughly coeval with Clovis and at Connelly Cave no. 4B in the Fort Rock Basin in central Oregon, Haskett points are associated with radiocarbon dates of 11,200 and 10,600 RCYBP.
Haskett projectile points are the only lanceolate type of the WST. They are large, thick-bodied, heavily edge-ground, with a lenticular cross section with the widest point on the blade occurring at about two-thirds of its overall length. They are finished by robust pressure flaking and the bases are generally convex.
Excavation in the Paisley Caves was originally conducted by Luther Cressman in the 1930s. Material from those excavations indicated extensive use of the caves over a considerable time depth which hinted at a very early occupation. Recent excavations have corroborated the human use of the caves during the late Pleistocene.
At Paisley Caves in south central Oregon it appears that human occupation first occurred around 12,300 RCYBP based on radiocarbon dates obtained from human-altered bones of Pleistocene megafauna, animal and human coprolites, and cultural charcoal.
Agate Basin projectile points are unfluted lanceolate forms that are very similar to Mesa points in size and morphology. They are finely flaked, heavily edge ground, have convex bases and are lenticular in cross section.
The lanceolate fluted point sequence ends with Folsom and the subsequent Paleoindian tradition cultures are represented in the archaeological record primarily by unfluted lanceolate projectile points. The earliest example of these is Agate Basin. It is interesting to note that at two large sites, Hell Gap and the Agate Basin type site, both of which display reasonably good cultural stratigraphy, there is evidence of contemporaneity between Folsom and Agate Basin. At one of the Hell Gap locales a Folsom level is overlain by a Agate Basin level which is in turn, overlain by another Folsom level. At the Agate Basin site (Brewster site/Area 3) radiocarbon dates for Folsom and Agate Basin overlap. These circumstances suggest that Folsom technology may have been replaced by Agate Basin technology, rather than Agate Basin evolving, in place, out of Folsom. Although there are not a lot of radiocarbon dates for Agate Basin, western Agate Basin sites appear to be older than those to the east suggesting a west to east movement and a possible genesis from Haskett.
South American Sites
Taima-Taima and Monte Verde
Slide 18b: Close Up of the Taima-Taima Site

Located in the State of Falcon in Venezuela.
Tourists on the way to Taima-Taima - covered pavilion. This site is the crown jewel of Venezuelan prehistory and gets thousands of visitors every year.
El Jobo projectile point associated with butchered mastodon remains at Taima-Taima. Radiocarbon dates from soil and twigs indicate the site was occupied 13,500 - 12,500 RCYBP. There is some debate regarding the association between the cultural material and the dates.

In Situ El Jobo Projectile Point
El Jobo projectile points are heavily edge ground unfluted lanceolate forms similar to Mesa, Sluiceway, and Haskett.
Slide 22: Close Up of the Monte Verde Site
Late Pleistocene occupation of the site took place between 12,800 & 11,800 RCYBP. However, there is some disagreement regarding the association between the strata which produced these dates and the cultural material.
Slide 24: Comparison of all projectile points - shape/age

All are: relatively large, thick bodied, well made, heavily edge-ground, unfluted lanceolate forms, with convex bases (if not it’s because the base has been damaged or reworked) with the blade expanding from the base to a point beyond half its length, re-sharpening of broken points is extremely common. All except Agate Basin are as old or older than Clovis. It is interesting that at this time, the oldest sites associated with these points are in South America with antiquity of sites incrementally decreasing northward to the Arctic. This seems odd to me as I think the weight of evidence indicates Alaska as being the point of entry for humans into the New World. In my opinion this suggests several possibilities; evidence that would clarify the situation remains undiscovered and/or lies beneath the coastal waters of Alaska and the Northwest Coast where it currently is inaccessible; and/or the associations between the radiocarbon dates and the cultural manifestations at the South American sites are in error or, God forbid, people actually were in South America first.
References

Ahler, S.A.

Alexander, H.L.

Beck, C., and G.T. Jones

Bedwell, S.F.

Bever, M.R.

Butler, R.B.

Cruxent, J.M., and I. Rouse
Dillehay, T.D.  

Frison, G.C., and D.J. Stanford  

Jenkins, D.L.  


Jenkins D.L., L. Davis, T. Stafford, and E. Willerslev  

Kunz, M.L.  

Kunz, M.L., and R.E. Reanier  


Kunz, M. L., M. R. Bever, and C. M. Adkins  
Kunz M.L., and T. Baker  

Larson, M.L., M. Kornfeld, and G.C. Frison, editors  

Oschenius, C., and R. Gruhn, editors  

Rasic, J.T.  


Reanier, R.E.  

Sargeant, K.E.  

Smith, J.  

Willig, J.A.  

Willig, J.A., and M.C. Aikens  