Western Stemmed Paleo-Indian Projectile Confusion
(For the Central Great Basin)

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Introduction

A tremendous amount of confusion exists over stemmed Paleo projectile point types from the Central Great Basin. Researchers have focused on understanding chronological sequences of projectile morphologies as a function of available radio-carbon dates. This concept is critical to understanding the peopling of the Great Basin, but often flawed when point definitions are used that are ambiguous, overlapping or contradictory. Oftentimes authors repeatedly change or evolve definitions (new authors or type definitions based on some *apparent* discriminating feature or re-defining something that was already defined.) Novices tend to err in identifications based either on misleading photographs or a lack of understanding of basic technological aspects or manufacturing processes that are necessary to define a "type". Being open to new definitions is welcome, but it must be based on some specific observable, continuous and repeatable aspect such as technology, regional distribution, age, etc. This is always open to debate, including here. Flaking technology must also be considered such that it can be quantified visually, or result in some measurable physical aspect such as width/thickness ratios or cross-section (plano-plano vs plano-convex vs convex-convex, etc.) Here I make an attempt, as briefly as possible, to provide some background and useable information specific to this topic for all the early stemmed points of the Central Great Basin.

Projectile Point Type-Names

Definitions have been given to Central Great Basin Stemmed Paleo points in popular literature for nearly 100 years including the following:

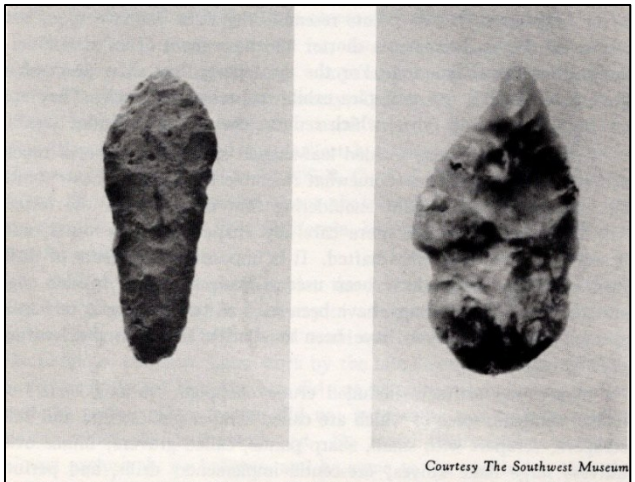
a. Lake Mojave/Mohave
b. Silver Lake
c. Haskett
d. Cougar Mountain
e. Parman
f. Lind Coulee
g. Windust

Many authors have tried to define categories or supersets in an attempt to generalize stemmed points from the late Pleistocene / Early Holocene in the far-western US. Recognition of the association between the relics left by these people and the lacustrine landscape of the Great Basin led to the term WPLT, or Western Pluvial Lakes Tradition (Bedwell, 1970). This term has been used to refer to any of the early stemmed projectile forms as a short-hand reference even though the term was referring to the cultural period just prior to the Holocene. Later, the valuable work by Willig and Aikens (1988) introduced the term Western Stemmed or "WST" to refer in general to any stemmed projectile of that time period in the West.

The Western Stemmed Point

The original stemmed paleo point type definitions for the far west were the Lake Mohave and Silver Lake. From Wormington quoting Charles Amsden from 1937, along with the images of the original type points in figure 1:

"Projectile points are of two types. The first, to which the name Lake Mohave has been given consists of points almost leaf-shaped in form, but with long tapering stems, very slightly shouldered, and somewhat rounded at the base. They range in length from one and three-quarters to three inches. Some are flaked entirely by the percussion method, some have a pressure retouch. The second is the Silver Lake point. These points resemble the Lake Mohave type, but in general they are somewhat shorter and have more definite shouldering and less basal tapering. For the most part they show percussion flaking, although a few examples exhibit a pressure retouch" (Wormington, 1957, p. 161).



Courtesy The Southwest Museum

FIG. 54—Points from Lake Mohave. Left, Lake Mohave type. Right, Silver Lake type.

Figure 1 Lake Mojave and Silver Lake points from Wormington

In the early 1970s, Thomas Layton defined the Cougar Mountain and Parman series of projectiles he studied from Oregon and Northern Nevada (Thomas Layton (1970, 1972) with the following definition:

> *Cougar Mountain points are lanceolate in form and possess large blades with sloping shoulders and long stems (see Figure 1.2). Stem margins are heavily ground or blunted for their entire length and bases may or may not be ground. Cross-sections are lenticular to diamond-shaped (Layton 1970).*

Layton originally defined six separate Parman types. Later this was refined to points with either round or square bases (Rosencrance 2019). These definitions did not consider the Lake Mohave or Silver Lake terms previously used. Adding to the confusion, figure 2 from Rosencrance (2019, page 12) shows a Parman (G-left) and a Lake Mojave (H-right). The two appear indistinguishable aside from overall size, which is a very unreliable metric for typing early stemmed points.

Figure 2 Lake Mojave vs Parman Confusion

Rosencrance goes on to say there is only one recognized Parman point, between 3 and 7 cm long with stems that are proportionally shorter than blade (2019 p. 11). This seems to exclude many points that should be included (see Parman discussion below).

The Lind Coulee type was defined by Richard Daugherty (Daugherty 1956). which originally included 3 variations. According to Daugherty the Lind Coulee Type 1 has a tapering stem, rounded shoulders and convex base. They were made with pressure and percussion flaking that in some cases went completely across the face and in other cases opposing flakes met at the mid-line. Type 2 has sharper lateral shoulders. Type 3 has more pronounced shoulders. All varieties have stems that are proportionately long or short. They are all considered the same today (Beck and Jones 2009). This didn't really add anything from the original Lake Mohave definition however (long or short tapering stems, pressure

or percussion, thick or thin, shoulders of any degree) and doesn't provide much useful information for typology. Fast-forwarding to Loren Davis's work at Cooper's Ferry, points identified as Lind Coulee appear much thinner and more delicate as compared to most Central Great Basin WST points (Figure 3 from Davis et al 2019). Ultimately, if the Cooper's Ferry points are indeed Lind Coulee, a better definition is needed. In any case, early stemmed points from the Great Basin are easily categorizable without the Lind Coulee moniker. Points similar to the Cooper's Ferry points are not found in the Central Great Basin.

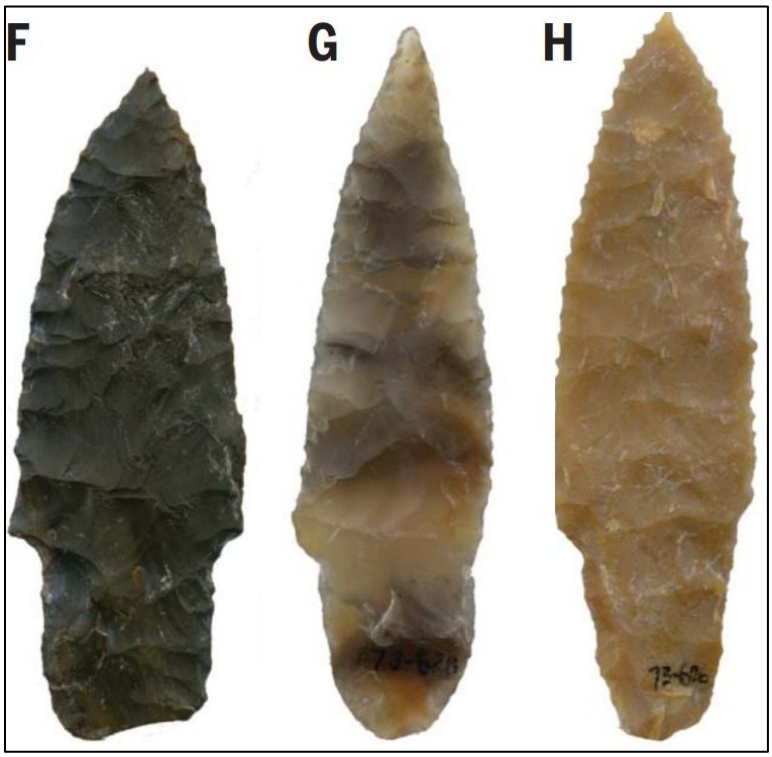


Figure 3 Cooper's Ferry Stemmed Points

In the 1960s, the Haskett point was defined by Butler with two varieties (Butler, 1965). According to Butler, the key discriminator for Haskett is they do not have shoulders. The type 2 is more bi-pointed than type 1 (proximal and distal halves are similar). Problems inherent with the "shouldering" concept are two-fold; a) shouldering can be pronounced or very subtle as in figure 4, and b) shouldering can be the result of point rejuvenation (figure 5).

Figure 4 Very Large Haskett point with subtle Shoulders

Figure 5 Haskett Points Shoulders from Re-sharpening

Up to this point, a variety of authors have tried to apply definitions to stemmed projectiles based on wildly overlapping descriptions. This issue was recognized by Willig & Aikens in 1988 who state:

> *"There are considerable limitations with current WST typological schemes. These problems can be traced to the varied definitions of point styles created by different researchers working in different regions at different times. Most definitions were created on ad hoc basis using 2D shape as the primary defining variable. This has caused much confusion and inconsistent use of nomenclature"*

Despite the years of research since then, the problem still remains as readers try to follow the available literature. This is exemplified by the Buhl Woman biface confusion. The Buhl biface (figure 6 from https://alchetron.com/Buhl-Woman and http://lithiccastinglab.com/cast-page/2003augustwindustpointbuhl.htm) was originally defined as a Windust point (Green et al. 1998; Jazwa et al. 2021). Smith, et al. refer to the Buhl biface as a Parman (Smith et al. 2023 p. 197), while Rosencrance and others identified it as a Lind Coulee (Rosencrance 2019, p. 112) even though the Lind Coulee type was previously defined as a type confined to the Columbia Plateau, several hundred miles from the Buhl site.

Figure 6 Buhl Woman Biface

If one were to follow all this literature, these stemmed points can be large or small, shouldered or shoulder-less. Shoulders can be pronounced or gentle. They can be thin or thick, percussion or pressure flaked, have stems longer than the blades or blades longer than the stems and stems can be parallel or tapering.

Then there are complications associated with points that appear to be re-worked from one type to another, or at least have attributes of multiple "types" due to some mis-understood functionality or morphological evolution (Beck and Jones, 2009, p. 126). This seems to be an unnecessary complication to the debate. The distal end of a re-worked Haskett point is shown below in figure 7. This clearly shows evidence of multiple flaking techniques. The stem is typically flaked to be thick and lenticular, presumably for the hafting strategy. The re-sharpened distal end has what could be considered overshot thinning flakes from both faces that meet on the same opposite edge. These point

makers, obviously understood the different techniques and knew how to use them for the intended purpose. That does not mean this was a Haskett point resharpened into a Lake Mojave, or anything else of the sort.

Figure 7 Resharpened Distal Haskett

Simplified Typology for the Central Great Basin

For the Central Great Basin, I propose a simpler approach to Western Stemmed point categories where all WST points fall into one of four types, Haskett, Lake Mojave, Silver Lake and Parman:

1. **Haskett:** The Haskett point is a very thick-stemmed point. The Cougar Mountain "type" only exists to categorize when a Haskett point has shoulders. Shoulders come in all degrees however. Haskett points can be very large or very small. The underlying technology is the same for all. Indeed, the stems are indistinguishable (Rosencrance 2019, p10). Overall size is unlikely to be a type discriminator as points that appear in every

Figure 8 Small Haskett Points

other way to be Haskett are sometimes very small, see figure 8. Figure 9 also shows a variety of Haskett points from the Central Great Basin showing a diversity in size. Figure 4 (above) is over 7 inches long.

Figure 9 Haskett Points from the Central Great Basin

Comparing the cross-sectional thickness between Haskett and Lake Mojave or Parman points is highlighted by the basal fragments in figures 10 and 11. The three points in the center of figure 11 are Haskett. The two on top and two on bottom should be classified as either Lake Mojave or Parman points.

Figure 10 Plano cross-section Lake Mojave Stems

Figure 11 Profiles of Haskett vs. Lake Mojave

2. **Lake Mojave:** Like the Haskett point, Lake Mohave points (figure 12) have tapering rounded stems but are manufactured differently. The Lake Mojave is flaked to have a much flatter plano-plano cross-section in the stem and the blade areas. This is an important distinction from Haskett in that it potentially represents a different hafting method. Regardless, a much different mental template and flaking technique was used to make these points.

Figure 12 Lake Mojave Points

3. **Silver Lake:** The Silver Lake point has a rounded and indented stem as originally defined in the 1930s. Examples are shown in figure 13. Generally, percussion flaked with occasional across-the-face flaking, Silver Lakes are common in sites across the Great Basin.

Figure 13 Silver Lake Points

4. **Parman:** Possibly the most common WST point found in the Central Great Basin is peculiar in that it has a parallel-sided, “tongue-shaped" stem. The stems can be long in relation to the blade end but can also be relatively short as can be seen in figure 14 below. Stem shape is a discriminator; stem length is not as they occur together with a variety of stem lengths. These points should be given the Parman name. These points frequently have the “chisel tip” feature, presumably for some tool or scoring function. This is a distinction I make from most literature on the subject. Lake Mojave points show the chisel tip feature much less often than the non-tapering stemmed Parman points. They are commonly beveled and generally have a plano/plano cross-section with percussion flakes that commonly travel well past the mid-point unless extensive resharpening exists. The Buhl Woman biface fits into this category. Oftentimes it is difficult to separate Parman points from Lake Mojave points, especially if the stem shape has been altered from rejuvenation.

Figure 14 Large Parman Points

Other early points are sometimes encountered in the Central Great Basin that do not fit in the above categories. Rare examples of square based points with ground stems sometimes show up in early contexts. They are typically fragmented and therefore present difficulties in typing. It is however possible they represent a southern-most extent of Windust. Hopefully in time examples will be discovered that shed light on this mystery. Another exceptionally rare early point is the Angostura. In regions to the east these points are generally considered early archaic. They have extensively ground edges. Figure 15 shows an Angostura point from Central Nevada made from local material. Their distribution seems a bit more random and not always associated with the lacustrine environments of the WST points. Angostura points likely represent a migrant group that did not manifest in the Central Great Basin for any duration. This point would fit in perfectly on the Plains of Oklahoma or Texas. Thes points in the Great Basin are very commonly mistaken for Humboldt points and sometimes referred to generically as “foliate” points.

Figure 15 Central Great Basin Angostura

Summary

Western Stemmed points have been found in every valley in the Central Great Basin. They represent a mysterious period in American pre-history. Debates continue on their age and where they fit into the chronology of the far-West. Using a common set of type definitions for comparison represents a challenge for multiple researchers working in the same area. This commentary is not intended to solve that problem, rather it may hopefully provide some insight and assistance in sorting out differences for novices and to highlight the folly of relying on historically different sources for the identification of these early western points, which invariably lead to suspect conclusions. Point forms follow the habit patterns of the manufacturers, which highlights the cultural tendencies. These habit patterns are driven more by the underlying manufacturing techniques (flaking, hafting strategies, etc.) and intended use, rather than the degree of shouldering, overall size or the relative size of the stems to the working blades, which can all be affected by rejuvenation. The archaeological world has made all this unnecessarily complicated. Mysteries remain however and more will be learned in the future. This commentary focusses on the Central Great Basin. Looking to the Northern Great Basin, a much larger variety of “localized” styles exist which adds complexity to the subject. It is also recognized there is a pattern of greater reliance on pressure flaking further north in the Great Basin. This can be seen on the Buhl Biface and many others. The stemmed points found at the very low levels at Cooper’s Ferry are also much more finely flaked than early stemmed points of the Central Great Basin. Regional variation on all these stemmed points seem to exist even within the Great Basin area.

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