Bipoints Before Clovis

Americas' oldest known artist may have been an Ice Age hunter in what is now Vero Beach, Florida, it is a 13,000-year-old bone etching.
(Purdy, et al. 2011, Purdy 2012, and Smithsonian Institution, Washington, DC)

BIPOINTS BEFORE CLOVIS

Trans-Oceanic Migrations and Settlement of Prehistoric Americas

Wm Jack Hranicky RPA

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Bipoints Before Clovis: Trans-Oceanic Migrations and Settlement of Prehistoric Americas

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Dedicated to:

George Carter – It's Earlier Than You Think.

According to Carter (1980) for the Americas:

> *My claims concerning the antiquity of men have been far out of step with the field – 100,000 years, not 10,000 years…*

Preface

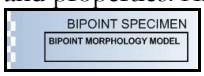
This publication discusses and illustrates world-wide bipoint technology. They are presented in their historical contexts and presented with their physical attributes. The major focus is U.S. bipoints of which two bipoints have Before Clovis dates. This bipoint technology as found on the eastern U.S. Atlantic coastal plain has varying dates from 50,000 years to European Contact and the U.S. Pacific coast with dates to 18,000 years with Alaska supporting a 35,000 year date. For both U.S. coasts, there were major emigrational events around 16,000 years; and the bipoint was part of it. In presenting this prehistory, the Virginia Cinmar bipoint (22,760 YBP) and the Florida Marion County bipoint (16,400 YBP) are illustrated and discussed.

Also, the text briefly discusses homo sapiens sapiens' evolution with the techno-cultural development of the bipoint and blades, and presents a high-level overview of human migrations over the entire planet. European, Asian, and African Paleolithic technologies are presented in a relationship to Western Hemisphere's first hominid settlements. Western Hemisphere entry points and times are discussed. An environmental perspective on cause/effect from glaciations is argued as the primary reason for (de- and re-) populating continents. The Western Hemisphere's climatical effects, such as the Younger-Dryas and ocean currents, are discussed. Cross-Atlantic and circum-Pacific technologies are illustrated suggesting continuous connectivity among Old and New World populations. A suggested Clovis ancestry and timeline are presented, but with suggested problems.

The author in the 1980s suggested that humans were in Virginia 16,000 years ago and, naturally, few archaeologists even considered this possibility. This date was based on artifact typologies, which stand today as representing considerable antiquity in the Middle Atlantic area. Now with early dates from Cactus Hill and Saltville in Virginia, the concept of ***early man*** has new meanings in the East.

With good/bad dates for extremely early sites in the New World being common place (for one 36,000 years example, see Watanake, et al. (2003)), the prehistory picture is left open to everyone who wants to forecast a historic calendar. With this perspective, the following discussion provides insights to the Asia-Euro-Africa connection for the Americas.

A Bipoint Morphology Model (BMM) is argued which includes basic attributes and properties. And, classic bipoints are marked with this symbol.



The bipoint is a legacy implement from the Old World that is found through time/space all over America. The bipoint is defined and basic manufacturing processes are presented along with bipoint properties, shape/form, resharpening, and cultural associations. This publication illustrates numerous bipoints from the Atlan-

tic and Pacific coasts (and within the U.S.) and presents some of their inferred chronologies which are the oldest in North America. Several morphologies between American and Iberian bipoints are compared. It concludes that a Solutrean occupation did occur on the U.S. Atlantic coastal plain.

Once the bipoint was established on the East Coast, it spread westward to join up with the bipoints that were introduced on the West Coast. The bipoint is found in the U.S. from the Paleoindian era through to the Woodland era. This publication reports bipoints dates on the Atlantic coast from 35,000 to Alaska at 10,000 years.

This study represents 35 years of collecting bipoint data and photographs. Numerous papers were submitted to journals which argued the bipoint as a single technology that precedes Clovis in the Americas; these papers were rejected by numerous journal editors. This technology was brought into the New World when the first Americans entered it. Bipoints were manufactured and continued … after non-European Contact.

This publication follows Clarke's (1968) ***Analytical Archaeology*** where he comments:

> *...in the belief that the future of archaeology depends upon the further clarification of its concepts in order that powerful, modern techniques may be employed to the utmost capacity of their potential.*

Even though his publication is over the so-called magic 30 years old in archaeology, Clarke's publication still has an affect on world-wide archaeology. This and other, older publications have their merit in archaeology, especially classics that started the discipline. And importantly, Don Crabtree once told the author: *there are just so many ways to make stone tools.*

In other words, flintknapping is the process of transferring energy from the hand into stone; with a simple 50 mm knife, civilization was created. The bipoint was only one of thousands of different tools used by early humans.

While not bipoint technology per se, this publication attempts to suggest and define the origins of the Clovis lanceolate technology. This biface lanceolate technology is suggested as originating among the European Mousterians 60,000+ years ago.

Alan Bryan's (1965) ***Paleo-American Prehistory*** was the first publication to identify a bipoint tradition in the Western world which he considered as a prior-to-Clovis technology. His early work is continued here.

Finally, this publication assumes a lithic tool continuum for all humanity. Technology produced the first material culture in human history. While non-material aspects of society, such as social, political, and religious practices, were developed before the discovery of technology, numerous forms of this lithic technology were transferred to the New World and become the major focus in American archaeological analysis of human history.

Wm Jack Hranicky RPA

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And special thanks to Dennis Stanford and Bruce Bradley for their driving efforts in bipoint studies. These archaeologists greatly influenced this publication.

Author's Biography is: Jack Hranicky at Wikipedia.

www.bipoints.com

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The term pre-Clovis is a misnomer in American archaeology. The term implies that before (all) lithic technology leads to Clovis technology. This technology assumption is completely false; all Before-Clovis technologies have various time spans, distributions, and/or completely disappear prior to Clovis. Or, they remain in the background of Clovis. If archaeologists continue arguing that Clovis is the principal technology with no antecedents, their picture and interpretation of prehistory are very misleading. Therefore, terms such as Early Man, Paleo-Amerind, Early American, Expanded Paleoindian, or pre-Clovis are found in the literature and have little validity today. The preferred term is Before Clovis and, for the present, the term has no beginning date in the U.S. This era ends with the advent of Clovis pointmaking.

BIPOINT FACTORS
1 – Bipoints are found worldwide
2 – Bipoints are found throughout late Paleolithic human history
3 – Earliest date for the bipont is 75,000 years in southern Africa
4 – Bipoints are the oldest continually-made tool in human history
5 – Bipoints are among the oldest stone tool made in the U.S.
6 – Bipoints are a dual pointed knife
7 – Bipoints were resharpened until expended and then discarded
8 – Bipoints were introduced to the U.S. at 35,000 years
9 – Bipoints were introduced to South America 30,000 years
10 – V-shaped stem of a bipoint dates to the Old World Acheulian age
11 – Resharpening bipoints conforms to Old World bipoint methods
12 – Early U.S. bipoints are made off a flake using high-quality flaking
13 – Resharpened and expended bipoints are difficult to classify
14 – Bipoints have multiple morphologies
15 – Bipoints are not the first tool class introduced in the Americas
16 – Bipoints have associated microtools which make up the bipoint toolkit
17 – Bipoint's platform end is the hafting end
18 – Folsom toolmakers produced the best U.S. bipoints.

Earliest Reference to the Source of American Indians … they arrived by boat.
I conclude then, that it is likely the first came to the Indies (*New World*) was by shipwracke and temest of wether **(Jose de Acosta 1599).**

From Wikipedia (2011):

The Solutrean Hypothesis builds on similarities between the Solutrean industry and the later Clovis culture / Clovis points of North America, and suggests that people with Solutrean tool-technology crossed the Ice Age Atlantic by moving along the pack ice edge, using survival skills similar to that of modern Eskimo people. The migrants arrived in northeastern North America and served as the donor culture for what eventually developed into Clovis tool-making technology. Archaeologists Dennis Stanford and Bruce Bradley suggest that the Clovis point derived from the points of the Solutrean culture of southern France (19,000 BP) through the Cactus Hill points of Virginia (16,000 years ago) to the Clovis point.[1][2] This would mean that people would have had to move from the Bay of Biscay across the edge of the Atlantic ice sheet to North America. Supporters of this hypothesis believe it would have been feasible using traditional Eskimo techniques still in use today,[1] while others argue that the conditions at the time would not have made such a journey likely.[3]

1. "Stone Age Columbus - Programme Summary". BBC. March 2004, http://www.bbc.co.uk/science/horizon/2002/columbus.shtml. Retrieved 2010-12-10.
2. The North Atlantic ice-edge corridor: a possible Palaeolithic route to the New World. Bruce Bradley and Dennis Stanford. World Archaeology 2004, Vol. 36(4): 459 – 478.
3. Westley, Kieran; Justin Dix "The Solutrean Atlantic Hypothesis: A View from the Ocean" *Journal of the North Atlantic* 2008, 1:85–98

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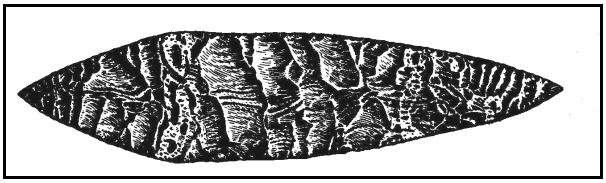


French Solutrean Bipoint (After: Sollas 1924).

Question: Why isn't the bipoint (willow-leaf) found in Clovis contexts? See Postword at the end of this publication. But, there is a paleo-elongated preform and knife.

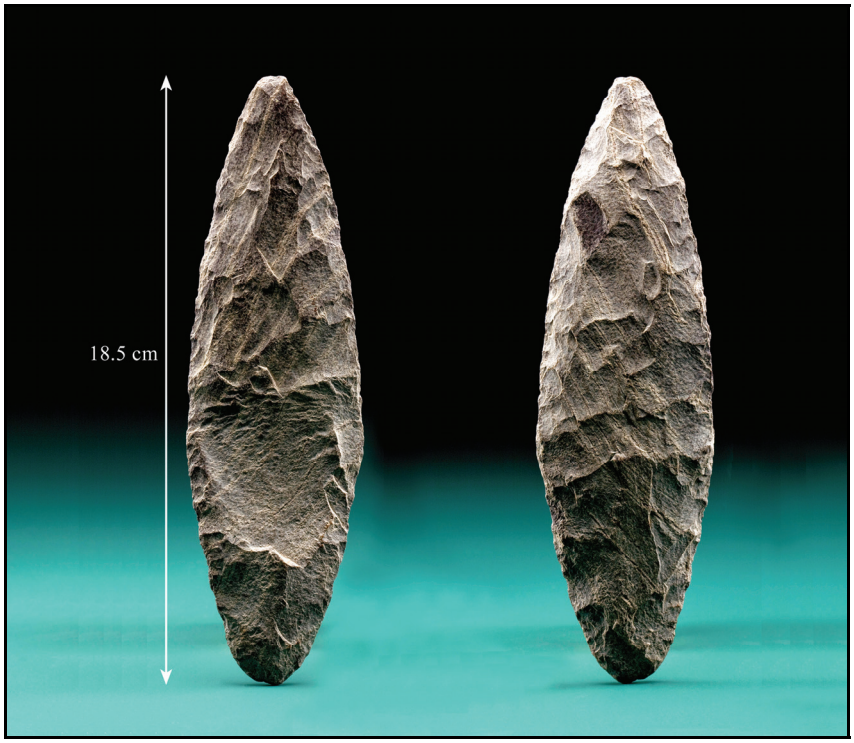
The Marion County, Florida Bipoint

A surface find in Florida has produced a date of 16,400 +/- 325 YBP. It compares favorably with French Solutrean small bipoints; this bipoint is the second bipoint specimen found on the Atlantic coast with a Before Clovis date. Note its bold, thin flake scars which is an attribute of Solutrean toolmaking.

Ocala Chert Bipoint, Marion County, Florida
(L = 72, W = 37, T = 12 mm, R = 23.35, E = 1.95, g = 27, M = 5YR8/1, g = 27).

The Virginia Cinmar Bipoint

The Cinmar bipoint was dredged up in 1970 by Capt. Thurston Shawn from the waters off shore from Hampton, Virginia. It is named after the captain's ship. It came up with a mastodon skull which provided the radiocarbon date of 22,760 +/- 90 RCYBP (UCIAMS-53545). The depth of the find was from 38-40 fathoms in the Atlantic. Note its bold, thin flake scars which is an attribute of Solutrean toolmaking. And, it has non-invasive retouching along its distal margins resulted from resharpening dulled edges.



Rhyolite, Cinmar Bipoint, Off-Shore Virginia
(L =188 mm, W = 54 mm, T = 6 mm, R = 20.88, E = 3.48).
Photograph courtesy: Dennis Stanford and Bruce Bradley (Smithsonian Institution)

1 – Introduction

This section provides a basic bipoint overview, including definition, concepts, archaeological operating rules, tool organization, tool design, and terminology. A homo sapiens sapiens summary is discussed. A bipoint timeline is presented which introduces the bipoint legacy proposition. Basic bipoint metrics and methods are suggested as analytical approaches to the study of bipoints.

<u>Lithic Technology</u> is a single, pan-human continuum[1] that starts at Olduvai Gorge and ends with the metal age. Once hominid primates learned to manufacture tools, they became human -- the toolmaking species. Most stone tools are simply legacies of earlier forms. Human prehistory has specific chronicles based on recording and classifying cultural materials by archaeologists which are based specific usage of selected parts of the continuum.

Bipoints Before Clovis surveys the bipoint as this technology is found through time and space around the world. The bipoint's history of its technological origins, first distributions, and its *coming* to the Americas are discussed. It is defined and numerous examples of its various morphologies are illustrated. A discussion argues how the bipoint was transported around the world. As a catalog on Western Hemisphere bipoints, this publication shows the geographic range and cultural chronologies for them. An environmental study shows possible causes for human long-range ocean migrations. The boat is argued as the principal form of transportation for these migrating populations, and they carried lithic technology with them. Dates are provided for bipoints with an emphasis on the Solutrean cross-Atlantic movements bringing the bipoint to the U.S. Does this introduction of bipoints lead to Clovis; an answer is suggested. Or, does it lead to a single American bipoint technology and bypasses Clovis altogether?

The bipoint implies a before Clovis technology in the U.S. that continues to Contact. And, the idea of early bipoints on the North and South American continent has been extensively studied over 50 years ago by Alan L. Bryan (1918-2010) who published his finding in ***Paleo-American Prehistory***. His publication was used as a starting reference for this publication which, overall, suggests the highest frequency of bipoints is the western U.S.

►This bipoint book provides:

- Overview of Mousterian, Solutrean, and Magdalenian technologies
- Illustrates bipoint examples from all over the world

[1] A lithic technology continuum follows a cultural transition philosophy (see Champs and Chauhan 2011).

- Defines the bipoint, including its resharpened forms
- Describes manufacturing methods used for making bipoints
- Presents a timeline for bipoint chronology
- Argues cross-ocean migrations into the Americas
- Provides 100+ bipoint examples from numerous U.S. states
- Presents world-wide environment conditions for bipoint prehistoric users
- Illustrates major bipoint finds in the U.S., such as the Cinmar, Norfolk, Suffolk, and Marion County bipoints
- Argues origins for Early Americans at 50,000 years ago
- Provides information on mammoth-associated bipoints.

The idea of Before Clovis[2] (commonly called pre-Clovis) has had a rather apprehensive acceptance in American archaeology. As a cultural time period, professional archaeology has numerous problems with it, namely Clovis is viewed as a single population making a fluted lanceolate projectile point. Evidence is presented that argues people were in North America prior to Clovis and producing a knife that is called the bipoint and making other microtools. The American lithic technological time period covers 50,000 years before present to Contact. As presented in this publication, the bipoint is argued as having an Eurasia-wide distribution by 75,000 Years-Calibrated Before Present (YBP) which includes Africa.

Further, this publication argues that bipoint technology is neither a blade or biface technology. It is a third technology that can simply be called bipoint technology, or perhaps…a world-wide laurel-leaf tradition.

As viewed here for American archaeology, 16 problems occur in presenting a bipoint theoretical orientation in American prehistoric archaeology:

- **First** – professional archaeologists are projectile point oriented; if an established point type is not found on a site, then the site is classified as a lithic scatter and is usually written off.
- **Second** – for most archaeologists, Clovis is the ground floor in American prehistory…period.
- **Third** – if Before Clovis exists, archaeologists then argue that all technology leads to Clovis technology.
- **Fourth** – archaeologists do not know what to look for in any Before Clovis age landscapes, namely sites and lithic tools.

[2] Numerous journal editors from Maine to Florida refused to publish parts of this publication; the Clovis police have struck again. And, there is an elite group of ivory tower professors and museum archaeologists that present a single viewpoint on Clovis origins and technology; it can be called the Clovis Club – members only.

- **Fifth** – some archaeologists fail to recognize that lithic technology is a single continuum within the single human community.
- **Sixth** – archaeologists fail to recognize resharpened and expended tools that were products of major tool categories.
- **Seventh** – most archaeologists do not consider stone tools a world-wide lithic pan-human continuum.
- **Eighth** – many archaeologists do not know prehistoric tool identifications, especially Old World forms.
- **Ninth** – numerous archaeologists fail to look outside their state and U.S. boundaries for comparative evidences. They treat archaeology as microgeographical investigations.
- **Tenth** – some archaeologists do not accept human occupation in the U.S. prior to Clovis.
- **Eleven** – most archaeologists do not recognize Before Clovis tools, and these tools are written off as non-classifiable.
- **Twelve** – most archaeologists are not looking for *who* invented the bipoint and where?
- **Thirteen** – bipoints must be analyzed theoretically based on ancestry, not empirically on what is found.[3]
- **Fourteen** – most archaeologists do not accept all lithic toolmaking as a single stone-breaking process.
- **Fifteen** – most archaeologists do not accept that the blademaking process is the key for early American prehistory.
- **Sixteen** – the bipoint shares two technologies – biface and blades. The profession does not see the bipoint as an independent industry.

Defining Lithics

Often referred to as material culture, lithic-made objects occur throughout human prehistory – only to be identified and classified as archaeological objects. Humans produced macro- and micro-tools of which the latter group is the concern. These lithic micro-implements can be divided into large groups of:

- Bifaces
- Bipoints
- Blades (Unifaces).

Figure 1-1 shows the basic process of stone toolmaking and their divisions in archaeology. The initial form of any human modified stone object is its state from

[3] Hypothesis: bipoints are a technological continuum that has a world-wide distribution. As with classifying bifaces as a culture marker (Clarkson 2002), it is difficult to classify bipoints.

which any type of lithic artifact can be subsequently made and used in a prehistoric society. The figure presents a high-level classification in archaeology, of which the bipoint is only one technology category. It is called its state or preparatory form (Hranicky 2004) and has the following definition:

> **The *state* for bipoints is a bifacially – or unifacially flaked-reduced piece or stone object that has dual pointed or rounded ends and an overall elongated shape. This object can be sub-flaked into the classic bipoint (laurel-leaf) form or as a preform which numerous microtools can be manufactured. State refers to an initially modified stone object or its preparatory form. These states are then transformed into a bipoint.**

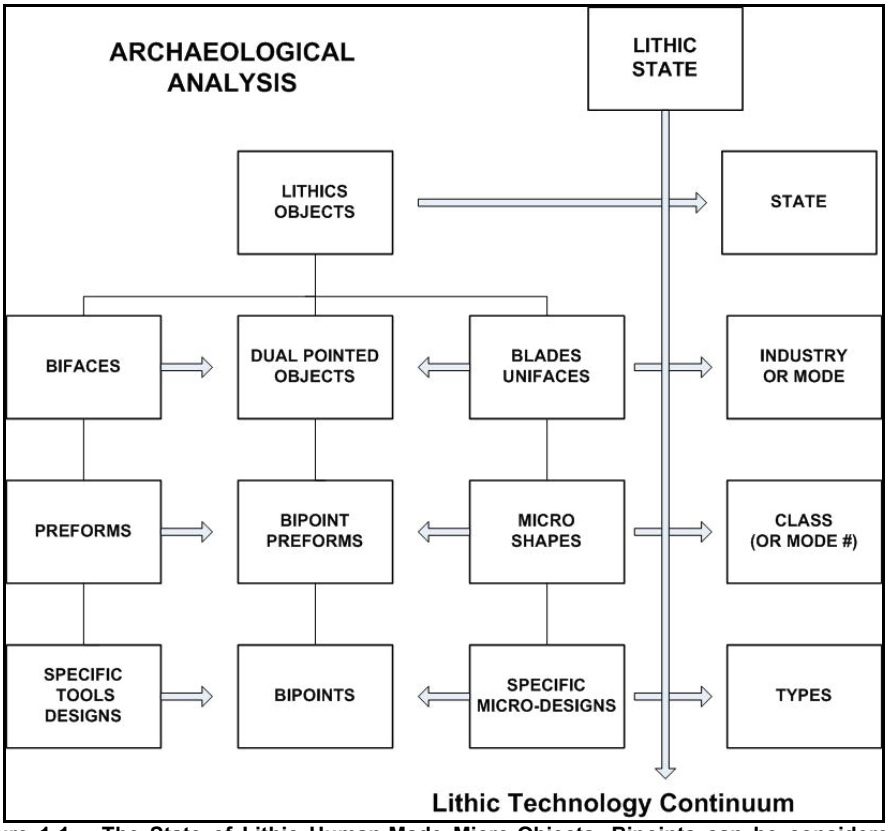


Figure 1-1 – The State of Lithic Human-Made Micro-Objects. Bipoints can be considered a middle-of-the-road in prehistoric lithic technology's continuum.

Note: the following state examples are all made from the same lithic material, Ocala chert, and are from the same general area of northern Florida. However, their age varies by thousands of years. These same state forms can be found in other stone tool-areas around the U.S. The idea of a state form is suggested, especially for bifacially-made bipoints.

Additionally, this object can be used simply as a large knife, chopper, etc. as in hominid's first toolkit. Once this tool from is further modified, its original state is difficult to determine archaeologically. The process is from state which is transformed into a bipoint. This initial stage can be considered as a preform; however, the stone toolmaking process can be considered as analytically constituting:

- **State** (Preparatory form) – a specific set of primitives as concepts (see Appendix A) that goes into the manufacture of a bipoint; its first struck form. State can also refer to the generalized form of a bipoint.
- **Mode**[4] – the constructive nature by the flintknapper in the design of a bipoint; mode implies a heritage of the state form and general function.
- **Industry** – a specific set of tool designs based on the knapper's mental template and intended functions within a society
- **Class** (Work object) – a specific set of tools based on a consistent design for a specific function
- **Type** (Tools) – a specific set of tool designs within a class
- **Artifact** – an entity showing a legacy of the above conditions.

While the above categories vary in usage among archaeologists, especially between Old and New Worlds, a basic tool organization based on an archaeological analysis generally does have some consistency across the discipline (Hranicky 2004). From flakes to blades to bifaces, American archaeology tends to be site-specific and projectile point-orientated; thus, terminology varies from archaeologists to archaeologists. A higher level is needed for any tool category.

Once a toolmaker breaks a first (primary) piece of stone, his/her intentions can constitute the manufacture of an infinite number of tool forms. As suggested, this initial form is called the state in making a bipoint. Four biface state examples are shown which are numbered for identification purposes. Each specimen has long axis which clearly defines its state. Figures 1-2 and 1-3 show two bipoint states that have different functions, neither of which would be called the classic bipoint as discussed here. Figure 1-4 shows a state bipoint. Figure 1-5 shows the elongated state. All their states are bipoints; however, functions and knapping intentions are different. Note the high R factors for the preform specimens. The R factor is discussed below. As each specimen's knapping state approaches its intended tool structure, the R factor becomes smaller. This sample is for biface reduction, blade (large flake/spall) is entirely different; however, the R factor is the same. The argument: there are several ways to manufacture a bipoint. The basic methods are neither a biface nor blade reduction; they can be either technique. These methods in the U.S.

[4] Mode is a technology division initiated by Clark (1969). The term is used here as the behavioral intentions of the bipointmaker's form and usage. Mode is used as the artifact form that is produced from a state's initial form.. It involves the maker's mental template of the intended tool. See Appendix A.

have a chronological history; an analyses which is not attempted in the publication, other than on a high level of bipointmaking. These physical or structural differences are note throughout the text.

If lithic technology is treated as a continuum, then, once it is transferred to the Western Hemisphere, it becomes common to all cultures, such as Clovis, Maya, Adena, etc. The question is still: the ***where/when*** did hominids bring lithic technology into the Americas.

Preparatory Biface State Forms

State One Example:

Figure 1-2 – Ocala Chert, Bipoint State, Northern Florida (L = 157, W = 65, T = 21 mm, R = 50.72, E = 2.41, g = 236, M = 10YR8/1). It represents a possible perform for the reduction into a bipoint. Its date is 2045 YBP.

State Two Example:

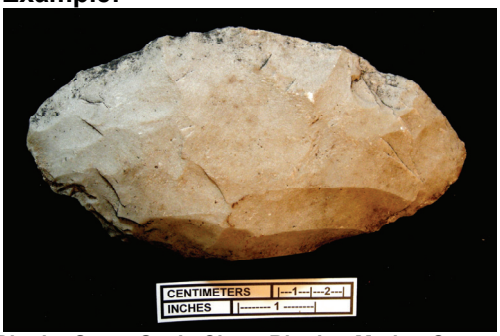


Figure 1-3 – Bipoint State, Ocala Chert, Bipoint, Marion County, Florida (L = 142, W = 76, T = 21 mm, R = 39.23, g = 245, M = 7.5YR6/2). It was used as knife. Its date is 2010 YBP.

Note: The degree of analytical separation for these artifacts is a mater of semantics. They date to Clovis (or earlier). For an example, State One is found on the Phil Straton Cumberland site (as in Gramly 2012).

State Three Example:

Figure 1-4 – Ocala Chert, Bipoint, Lamont, Florida (L = 162, W = 64, T = 18 mm, R = 45.56, E = 2.53, g = 181)

State Four Example:

Figure 1-5 – Elongated Bipoint State, Ocala Chert, Dade County, Florida, L = 185, W = 48, T = 24 mm, R = 90.61, E = 3.85, g = 217). For many archaeologists, this specimen is simply a long biface. Its legacy may suggest something else.

State Five: Ovate Biface; State Six: Tear-Shaped Biface, etc.

These forms can be identified as a state in bipoint technology. For U.S. prehistory, they account for all forms of the bipoint. Even blade-made bipoints have these states.

Bryan (1978) comments on bifaces:

The old idea of the biface could then (his book) be seen from a new perspective. Rather than a rough hand-held implement of general utility, it was conceived of a preform for producing a strong, sharp projectile point (or a combination knife/projectile point) with a specific shape, which could be fitted securely onto a shaft. As different people had by that time developed different techniques for hafting their bone and wooden or minimally retouched flake points onto their projectiles, ultimately several distinctive forms of bifacially flaked stone projectile points (i.e., bulled-shaped, willow leaf-