

## Abstract

The objectives for this research project are to investigate the "Solutrean Hypothesis", which is often overlooked within the field of Anthropology, as well as by the general population as a whole. A summary of the model as well as evidence used to support and to challenge this model are presented. This model and the associated evidence used to support and to challenge the Solutrean Hypothesis are presented. This poster examines the published evidence for the peopling of the Americas and evaluates various models. Through this examination the intention is to gain a broader view on ancient humans and their capabilities to migrate vast distances. This will include a better understanding of the potential technologies they could have used to cross the North Atlantic Ocean.

## Introduction

### *The Peopling of the New World*

The origin of the indigenous peoples of the Americas has been a topic that has stumped many scholars since the first European explorers had returned to Europe with news of the New World, a world that was inhabited by a multitude of humans that were exotic and previously unknown to Europeans.

One widely accepted theory is that the indigenous peoples of the Americas first arrived in North America via the land bridge that connected what is modern day Alaska and Siberia (Figure 1). There are a few other theories but these are generally disputed because of the lack of supporting evidence.

One of the main theories that goes against the land bridge theory is the Solutrean Hypothesis. This hypothesis, when simply put, states that humanity's origins in the Americas is a group of ancient peoples who lived in Europe and settled in North America, and later Mesoamerica and South America, following an ice ridge that traversed what is known as the North Atlantic (Figure 2). This crossing would have been accomplished by a variety of methods, such as walking across glacial ice and/or using small watercraft and ice flows when the people encountered water.

As the Solutrean Hypothesis has not been around for a long time, there is a relatively small amount of research has been done versus on other models. The model is also widely criticised by academics because the majority of anthropologists and archaeologists agree that the Americas were populated by means of the land bridge in what is now known as the Bering Strait.

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## Iberia Not Siberia!

The Solutrean hypothesis was first officially proposed in 1998 by Dennis Stanford of the Smithsonian Institution, and Bruce Bradley of University of Exeter. Their argument (Stanford and Bradley 2013) is based largely on lithic assemblage that date to a pre-Clovis era, and most importantly which share many qualities with those created by the Solutrean people of Europe (specifically Iberia).

The difference between the Clovis and Solutrean points is that the Clovis point has a distinctly concave base and a "flute"; a flute is a channel-like space that runs vertically from the base, and is often found on both sides of the lithic (Figures 3 and 4).

Although Clovis points are found all over the United States, there seems to be a concentration of Solutrean-like lithic technologies along the north-eastern side of the United States. Two archaeological sites that are used in support of the Solutrean Hypothesis are the Cactus Hill site of southwestern Virginia, and the Meadowcroft Rockshelter of Pennsylvania. Both of these sites contain lithics that resemble Solutrean points, and are dated to being roughly 19,000 years old. This would mean that a pre-Clovis group of people had inhabited those areas.

It is speculated that the Solutreans of modern day Iberia traveled along the Atlantic ice ridge by walking across ice sheets, and using watercraft made from animal skins that would be similar to the boats that Inuit and other polar peoples used in the past in order to cross the Atlantic.



Figure 3. Solutrean Points (LCL 2008a).



Figure 4. Clovis Points (LCL 2008b).

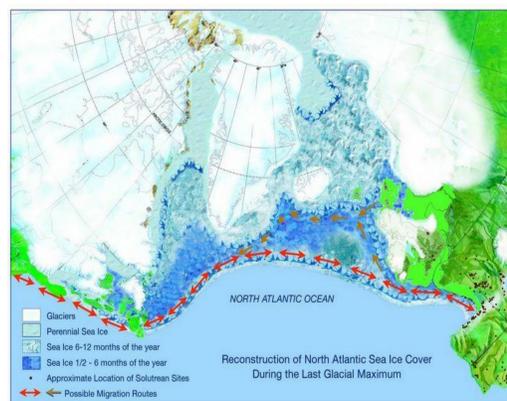


Figure 2. North Atlantic Ice Ridge with Proposed Route from Europe to North America (AZA n.d.).

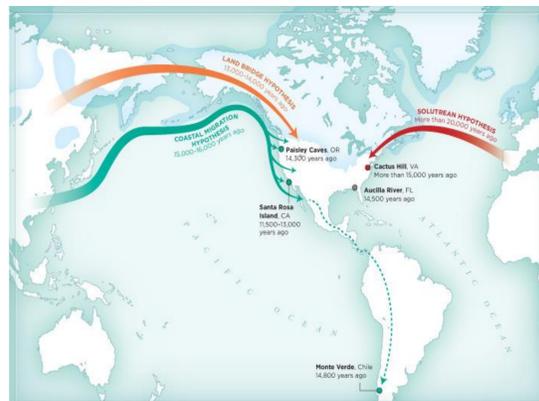


Figure 1. Popular Migration Routes (DOL 2015).

## Clovis First!

This position argues that Clovis peoples were the first culture in North America and that they arrived via the Beringia land bridge; it is the most commonly accepted answer to the question of "How did all these pre-European-contact people arrive in the Americas?" Research by Westley and Dix (2008) focuses on the "Last Glacial Maximum", which is a term that describes the height of the last glacial period), and if there had indeed been an ice ridge that assisted the Solutrean peoples in their proposed westward journey. Westley and Dix (2008) found that there is a problem with the very geological features in which the Solutrean Hypothesis has been formed around, which is that the human migration along this route would have been extremely difficult if not impossible. Westley and Dix (2008) conclude that humans travelling along the ice ridge would have come into contact with many problems, such as the lack of sustainable sea-ice in some areas along the ridge. This would make travelling on the ice difficult, because of having to traverse large, open water channels, which in turn would have drove the Solutreans northwards in search of ice to cross. Westley and Dix (2008) also note that wind directions at the time would have most likely been blowing east-ward, rather than towards the west, providing a challenge to the possibility of Solutrean peoples travelling across open water via sailing boats or water craft that rely on a rowing technique.

## Discussion

### *Problems with the Solutrean Hypothesis*

The problem with the Solutrean hypothesis is that there are too many criticisms because there is just simply too little data that can give researchers clear and evident information to prove that the Solutrean Hypothesis could have occurred. Questions that remain include: why did the Solutreans migrate in the first place? What technological proof is there that would provide evidence of their capability in the use of seafaring technologies, such as boats that were capable of crossing the frigid, open waters of the Atlantic if they had encountered open water channels in the ice ridge, or if they were "island hopping" along the ice ridge? As well as did they have an understanding to practice maritime subsistence techniques that enabled them to survive along their migration journey across what is now the Atlantic Ocean? Another major is that a lot of areas in which the Solutreans could have made landfall could possibly be underwater due to the melting of the glaciers at the end of the last ice age. Because we are in an inter-glacial period, our world that we inhabit today has much more water on the planet than it would have had ~20,000 years ago.

## Conclusions

After examining the Solutrean Hypothesis as an alternate model for human migration and humanity's origins in the Americas, it has been found that even though there is a possibility that it might be true one can only speculate as to if it is valid. Until there is more discoveries of sites, newer technology that provides more accurate dating, or more genetic connections, the Solutrean hypothesis will simply remain as a hypothesis.

But the important lesson that this hypothesis brings to light is that even if ancient Western Europeans migrated to the Americas and were the ancestors of North Americas indigenous peoples, there is the possibility that we may never know, and that we must always keep an open mind when it comes to the ancient past.

## References

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