## Origins of the bow and arrow history essay



Technology has given power to man. The ability to hunt more efficiently, gather and live has all been improved by the innovations of man. At first man's tools were given by nature in their natural form. Rocks and branches can be considered one of the first tools used by Man. After some time and understanding of the resources given. Man was able to manipulate the tools given to provide a more narrow and specific use. For example, the flaking of rocks created sharper edges for cutting. After some time and creation of new tools, man finally invented the bow and arrow. However, the origins and distribution of the bow and arrow can be guite complex. It seems that the origin can be traced back to several locations around the earth and at different times. However, I will only be researching on the origins of the Bow in North America. The origins and studies on the arrow will be brief, but the context of this paper will focus more on the bow. The contents of this paper include the definition and types of bows, the origin locations and distribution of the bows, issues and problems when tracing the bow, and a few case studies that describe how this issue has been applied in the field of archeology.

The bow can be simply defined four ways. These definitions are based on the different types that were found when researching the origins of the bow and arrow. The first is the bow consists of a single strip of material that is flexible which was commonly wood (bowR4). This bow definition is the most basic and can be concluded to be the first bow ever created. Second, " The bow may consist of two or more materials attached throughout the entire length of the stave so as to form in effect a single piece," (bowR4). This is as if to attach two different pieces of material to create the arch needed. Also these

bows can be wood that has a layer of sinew around it, multiple layers of wood, horn used with sinew, or multiple types of wood combined (bowR4). This is a more innovated way of thinking to inventing a bow. Thirdly, " The stave may be wrapped with a tough substance such as sinew or rattan, or attached by wrappings to a sinew cable the length of the stave," (bowR4). Lastly, the bow can be defined by using several segments to piece bound together (bowR4). All these bows are defined in the context of how they were discovered. Describing the types of bows is helpful when archeologists discover and classify found artifacts. However, there are many types of bows.

Specifically speaking in the region of North America the types found are the self-bow, composite bow, backed bow and compound bow. However, these types can also be found in other regions around the world. The self-bow is a plain piece of wood that is flexible (bowR4). This is the most common bow found throughout North America. Also we have the composite bow which can be defined as a " shaft of which embodies a laminated construction involving more than one type of material such as wood, sinew, and horn, or two woods of different property. Includes the Sinew-linked Bow consisting of a strip of wood and a layer of sinew," (bowR4). The backed bow is a bow that is wrapped in sinew or other elastic material to prevent splitting or breaking of the wood (bowR4). These types are the most basic and common bows when discussing the origins of the archery.

The first instance and distribution of bows in North America was studied by Mason who established four areas in which the bow types were distributed. https://assignbuster.com/origins-of-the-bow-and-arrow-history-essay/ What was found was the hard-wood bow, which has a classified type of selfbow, was distributed in the region of east of the Rocky Mountains and south of the Hudson Bay (bowR4). This is one of the simplest bows found and has a much wider range than all the other bows researched. This bow type was also found on the southern border of the Rocky Mountains where it crosses paths with the compound bow (bowR4). The composite bow was found to be in the Northeastern Eskimo and the Siouan tribes (bowR4). The Siouan tribe is also known as the Sioux and they were located in the northern central region of United States. Extending across the Sierra Mountain range and the British Columbia on both slopes is the area where the sinew-lined bow is found (bowr4). Lastly we can find the sinew-corded bow area. When discussing the sinew typed bows Mason is referencing to the composite bow type (bowr4). Mason finds three different types in Alaska (bowr4). These types can be argued to be adopted or invented. The first is the South Alaskan, second, the Arctic type and lastly the Western type (bowr4). These types are distinguished differently by their size and form. To see a more visual description of the distribution of the bow types a man named Longman mapped out the world distribution of bows.

The study of the North American distribution of bows was mapped out by Longman (Bowr4). He showed a distribution of the types of bows in North America, by displaying the bow type diffusion across the map. Below is a picture depicting the distribution of different types of bows based on Longman's research and facts found after his research (bowR4). This is a good resource when researching the distribution of bows and the areas in which they originated. As you can see the plain bow was widespread over

most of North America, specifically running all the way up through Southern North America peaking into what today is known as Canada. There are three different types of composite bows that are described in the picture above, the composite with a closed backing of molded sinews, plain with form allied to composite and the composite with free backing of thongs (bowr4). Northern North America used only the composite free of thong backings, as shown in the picture. However, there is a mix of nearly all four types of bows in the Central Western area of North America. This brings up a question of if the bow type were traded among other tribes or perhaps adopted. The second map shown in the picture above depicts the bow areas in which they were found. This also shows a region where many types of bows were mixed concluding that bow types were adopted and the bow evolved. The most basic type of bow found in North America is the plain wooded bow which consisted of a plain stick (bowr4). The other types of bows used the plain bows architecture and evolved the structure to create a more specific and better use for the bow.

Another study brought up the question of how and when the bow and arrow was adopted in Eastern North America (bowEasternAmerica). It is commonly accepted that the bow was diffused into the East from the north and west during the late Middle Woodland or early Late Woodland period (bowEasternAmerica). This can be narrowed to a time between 1 CE to about 1000 CE. The concept that the bow was adopted from the north and west was unclear to a specific origin. However, researchers found that the bow and arrow diffused specifically from northeast Asia as well as burial mounds and pottery (bowEasternAmerica). This goes against saying that the bow was invented in North America. However, there is not enough evidence to prove against it. The bow and arrow adoption into North America is assumed since the Mesolithic is proven to have the earliest evidence of bow creation (bowEasternAmerica). The earliest bow evidence in North America started in the north and was spread throughout all of North America (bowEasternAmerica). The evidence that was provided to prove of this spread and adoption was supported by projectile points.

The arrow is considered to be darts that are shortened in length (bowEasternAmerica). It is also well known that the arrow did not replace the dart. This is important because when discovering projectile points one is needed to understand the difference of a dart point and an arrow point which is distinguishable by size. Here is a picture detailing the frequency of the projectile points, their time periods, where they were found and how many were found (bowEasternAmerica). The different shapes and designs are given by the middle columns labeled, for example as A, K, Seq, GvB and GvC (bowEasternAmerica). All of these projectile point types are distinguishable in size and shape. The characteristics of these points usually have a pointed tip with notches on the other end for appending to another material like wood. The discovery of these projectile points suggests the use of the bow and its adoption.

Another study questions the origins of the bow and arrow in North America specifically in the region of the Great Basin. Gary Webster states that " the origin and dating of the bow and arrow in the Great Basin has been a key issue in a recent debate concerning a cultural hiatus between Archaic and Fremont." To assist in the answer to this debate projectile points that are https://assignbuster.com/origins-of-the-bow-and-arrow-history-essay/

relationship between the Fremont and Archaic cultures which is also in debate (bowr3). With much debate the dating to the origin of the bow and arrow is assumed to be around 1500 B. P. (bowr3). Researchers have said there is a small link in the argument around the dating of the bow and arrow however, the evidence to date the bow and arrow to an earlier time is insufficient. The evidence from the Dry Creek Rockshelter, which is located in Idaho along the western Rocky Mountains, include 13 layers of excavation and is dated between 4000B. P. to 1400 B. P. (bowr3). The excavated site shows a distribution of projectile points which aid in the dating of the bow and arrow. There are a number of arrow and dart points found in this site. The arrow points found were of different types and are defined in the Rose Spring-Eastgate complex (bowr3). From the recovered projectile points it is concluded that there is overlapping of arrow and dart points. The oldest arrow points found are to be dated to 3300 B. P. (bowr3). After much time the largest amount of arrow points found date between 2400 and 1950 B. P. (bowr3). This evidence proves that the bow and arrow did not originate in 1500 B. P., but rather in an earlier time. It is also clear that from this research the bow and arrow did not replace the dart and is evident that bow and arrow was not a dominant weapon till around 1700 B. P. (bowr3). This evidence proves the origin of the bow and arrow in the Great Basin around 2500 B. P. However, it is still in question whether the bow and arrow was adopted by another culture in this region.

The study on the adoption of the bow and arrow in eastern North America is reviewed by Michael Nassaney and Kendra Pyle. The debate within this study is distinguishing the difference between arrow and dart points. " A quantitative analysis of point form and qualitative reconstructions of bifacial reduction trajectories from Plum Bayou culture sites in central Arkansas indicate that arrow points were abruptly adopted and became widespread about A. D. 600, " (bowr6).