## Chariots and their impact on civilization

<u>Science</u>



Chariots were the first horse drawn vehicle. The first known use of chariots began in the Eurasian Steppes sometime before 2000 BCE. Since horses originated from this area, and the invention of the wheel was introduced around 3100 BCE, the Eurasian Steppes were an ideal location to begin implementing the use of chariots. Before chariots, horses were not as widely used as other animals such as the ox, donkeys and mules were for transportation. Riding horses still had not become common place yet. Armies across the known world at the time were interested in moving quickly through the battlefield and animals such as ox and donkeys were too slow to be able to accomplish this. Chariots became a staple of well financed armies because they would allow for a speedy method of transportation across the battlefield where the chariot would have one driver and one bowman or spearmen. They became the first real war machine to ever have been made. As time went on, chariot technology improved. Chariots became sturdier and

with the addition of blades on the wheels, they become a deadlier weapon. Chariots also had symbolic meaning which can be seen in the stone carvings of ancient world leaders such as the pharaohs of Egypt and the Greek gods such as Apollo, who was believed to have pulled the Sun over the horizon on his chariot every day. Chariots conveyed a message of strength and glory which was important to the hyper masculine societies back then.

Before chariots, there was no real way to move across a battlefield as effectively. Ox and donkeys were inefficient and slow, and the horses around 2500 BCE were smaller and therefore much less powerful than they are today. For these reasons, armies of the past were unable to create efficient cavalries. By moving the load from on top of the horses to instead behind them, humans were able to effectively use their strength. This made chariots the next best thing since they allowed for quick movement across the field and were deadly due to moving archers being able to cover more ground than if they had simply run across the field. The story of the chariot begins with the domestication of the horse in the Eurasian Steppes around 2500 BCE. Horses were originally used as a food source and their ability to move far distances was not understood at this point. Prior to the domestication of the horse, the steppe had learned about the wheel from the Middle East. However, simply attaching a cart on a wheel is not as easy as it seems. The technology for spokes was crucial for the chariot. Spokes allowed to minimize the weight of the wheel while ensuring that the load that wheel was holding would not cause the wheel to break. With these three technologies, chariots were able to first be built in the Eurasian steppes. Their usefulness was quite apparent to those who saw them, and thus from the Eurasian Steppes, the chariot was spread to places such as Korea and Ireland. Economies of that time, like modern economies, relied on the military strength of the country.

The first civilizations to have chariots were at a major advantage to civilizations that did not have chariots. For example, the Indo-Aryans who descended upon modern day Afghanistan, Pakistan, and northern India were originally from the Eurasian Steppe countries of Russia and Kazakhstan. Researchers believe that only after the invention of the chariot did the Indo-Aryans leave their Steppes for the northern region of South East Asia. The chariots allowed them to move en-masse great distances quicker and gave them a tactical advantage when they faced local forces in those areas. A less

military economic advantage is that it simply let people move both goods and information quicker. These two reasons alone can cause great economic advantages over those who did not have this technology. Now, humans did not have to rely only on human strength to move things, they could rely on the strength of horses who were much stronger. The prevailing economy at the time allowed for chariots to thrive because the lack of other fast vehicular transportation. Horses, out of all beasts of burden were the fastest. However, their backs were still not strong enough to hold the weight of grown human and this severely limited the ways that they could be used. Chariots allowed for horses to be used even if it was not as convenient as sitting on a horse might be in certain conditions. Also, as mentioned earlier, the fact that chariots allowed for much faster units to move across the battlefield and terrorize their opponents who sometimes had never seen a chariot. One last reason is that chariots were a sign of a strength in many civilizations. This meant that many rulers commissioned many different types of chariots to be built for their armies as well as even better furnished ones ornate with expensive metals and jewels to symbolize their strength as a ruler and their opulent wealth.

Today, chariots are not in use. Chariots became obsolete as a military technology and as a useful means for transportation around the 1st century AD. By that time, horses had been selectively bred enough that they were now large and strong enough to hold the weight of a fully grown human and additional weight without damaging the horse's spine. This allowed for armies to start making cavalry and allowed for horse riders to sit on the horse rather than stay standing on a bumpy chariot. By sitting on the horse, it also allowed for more control over the horse which was very crucial in battle since it allowed for nimbler movements. Riding the horse was also cheaper since you no longer needed to buy an additional chariot and could now just ride the horse with a saddle which was not as expensive. Therefore, due to it being cheaper and easier to ride a horse, chariots were replaced and became obsolete. However, the cultural significance of the chariot remained and sports such as chariot racing survived over 500 years after their demise.