The International Conference on Interdisciplinary Humanities and Communication Studies
DOI: 10.54254/2753-7048/5/20220654

Research on Climate Affects for Human Activities to Change during Different Time of Earth

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Abstract: Nowadays, climate change, such as global warming influences humans' activities very much. Many people choose to relocate for a variety of reasons, including extreme weather or unsuitable surviving conditions. The ancient people had other issues with climate that only belonged to their era and had particularities to be investigated. A massive number of climatologists or meteorologists have already put forward plenty of exploration on this kind of topic. They have determined that there is a profound relationship between climate change (temperature change) and human development. Specifically, this essay is going to talk about changing climates through billions of years and human migration and behaviors during these times. People faced a situation in paleoclimate, for example, 50,000,000 years ago that was different from the recent one, so why can humans survive in that environment and how did humans evolve from the ancient species are still unknown. How did they deal with the cold weather? The final answer is that people were strongly influenced by the Little Ice Age; dynasties perished and were quickly rebuilt; large-scale events such as the Hunting Wizard happened; and also, there are still many influences that have lasted until today. Humans cannot live without the climate, and more and more climate changes will happen soon.

Keywords: Climate change, human activity, little ice age, paleoclimate

1. Introduction

The most essential concept of this essay is the word "climate." This is a simple definition of climate. Climate refers to a long-term weather pattern in a specific area. When a region's weather patterns have been tracked for at least 30 years, they will be defined as the climate for that region. However, as the climate has the ability to nurture thousands of new types of creatures, it can also lead to the extinction of dinosaurs [1]. Humans have lived on the Earth since six million years ago. Following this, the modern form of humans only existed for about 200,000 years after the time of evolution. Experts estimate that the oldest civilization is about 6,000 years old. During these long periods of time, climate affect human activities to on one side, increase the scale of human society or decrease the life of human in a large number. For example, it forced humans to migrate from one area to another, causing them to have various civilizations from looking at the dressing styles in different periods of time, such as China, Egypt, or Europe. There is a large quantity of dissertations that study, for example, how the climate changed the natural landscape and how agriculture affected

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human life later. "There are many ideas about the role of the environment in human evolution." Plenty of articles talk about many aspects. However, many essays discussed the statement confirming the truth of little old people's existence. Only a few people would like to develop more on the deeper influence of these colder climate on human beings. This research can help people to directly know who human live with climate along years.

2. Period of Paleoclimate

2.1 Paleoclimate

Paleoclimatology is to obtain the data that is preserved in rocks, sediments, tree rings, and many other terrains. Because scientists can use the climate models they create from paleoclimate to predict future climates, scientists can use information from thousands or millions of years ago to project possible future climates.

2.2 Evolution of Human

When the last ice age happened 20,000 years ago, the glacier covered North America, Europe, South America, and many areas of Asia at high latitude. During the Quaternary Ice Age, ancient humans evolved faster than ever. Australopithecus was one of the "processes" of the modern human species. Some scientists believe that modern humans evolved from one branch of Australopithecus. They lived for 3–4 million years from now. Fortunately, before the ice age, the early human species developed their society and evolved over millions of years. This species settled their habitats around the trees because they used their arms and hands more. However, the research shows that Australopithecus already had the ability to walk on two feet due to their inward-turning leg bones. Until the commencement of the Ice Age, Australopithecus was able to evolve as Homo erectus. On the one hand, the ancient human species may have evolved faster as a result of the ice age, in my opinion. Many scientists believe that during the ice age, human fur faded to only a small amount in the skin. Then, human ancestors would face a significant issue: how to resist the cold with no body hair anymore. Religious people believe that their gods gifted "fire" to humans; modern people investigate how ancient people gained fire. However, it is undoubtedly true that the ice age accelerated human evolution because of their improved intelligence, body structure developments, and innovation skills. The ice age benefits human society by allowing it to advance far ahead of other species and successfully evolve to fight natural enemies.

2.3 Migration of Human

According to many researchers around the world, the main point of human evolution was due to the paleoclimate effect and its unstable fluctuations.

The third ice age was the only ice age that the ancient ancestors of humans experienced. Yuanmou in China, who appeared since 2-3 million years ago, ended in about 10-20 thousand years go. Their site was located near an ancient lake, and they always lived in areas of grasslands, bushlands, and forests. Specifically, archaeologists found them in Yunnan basins; there are also Nihewan basins in other parts of China. According to the research, the most common misconception about the quaternary ice age is that it occurred on a large scale and lasted for millions of years. According to the research, the most common misconception about the quaternary ice age is that it occurred on a large scale and lasted for millions of years. Influence all the continents and decrease the temperature causing ice formed in a massive amount, quaternary ice age undoubtedly has been one of the reasons for human migration.

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Some people who are unfamiliar with this phenomenon initially wondered how humans could easily migrate to other continents from their current identities on Earth. Prior to the arrival of the Quaternary Ice Age, ancient human species had already used methods to overcome the cold and freeze weather and climate situation, and had migrated to other continents or lower land latitudes. This succumbed to frozen ice, which was caused by lower temperatures, which resulted in a drop in sea level and the exposure of areas that have now sunk under water. "Land bridges form between continents, such as the currently submerged connector across the Bering Strait between Asia and North America. "The land bridges allow animals and humans to migrate from one landmass to another." Therefore, humans can easily transport to the area where we think there are islands or gaps between the two lands. If it is possible, buried human traces of life can be found. For example, the sea between Japan and South Korea is where we can find evidence of ancient human habitat. Taiwan became an island and was isolated from the main land of China after the latest ice age, when the land bridges disappeared about 5,000 years ago.

The human just mentioned above might be the one who immigrated to Taiwan Island and developed more there after their evolution [2].

3. Little Ice Age

The little ice age is the period of cooling in a great number of regions which happened since approximately early 14th century to mid-19th century. During this period, Earth's temperature declined considerably degrees, leading a low amount of food and resources for human to survive. It was a catastrophe for the whole society around the world, which population, for example in China, decreased sharply even the authority may perish due to the horrible weather.

3.1 China

According to the research by Chu Kochen, he united the records from ancient books, such as Qi Min Yao Shu, and history events which happened in different region of China to illustrate the decline of temperature and what this caused during the little ice age.

One point which can be compared to show the difference of climate and how little ice age influence the human lifestyle, is their clothing. Except measuring from the plantation of trees in China over time, clothing can also depict some views of climate influence.

In the period of Tang Dynasty, not only because the temperature but also due to the peace society and economic thrive (this also linked with stable climate, this paper will talk about the reason later), clothing industry developed presidentially brilliant. Tang dynasty existed from year 618 to 907. The climate showed a warm trend. Even the cold areas in China today, like Beijing or inner Mongolia, they had higher temperature and longer growing season [3]. As the graph shows:

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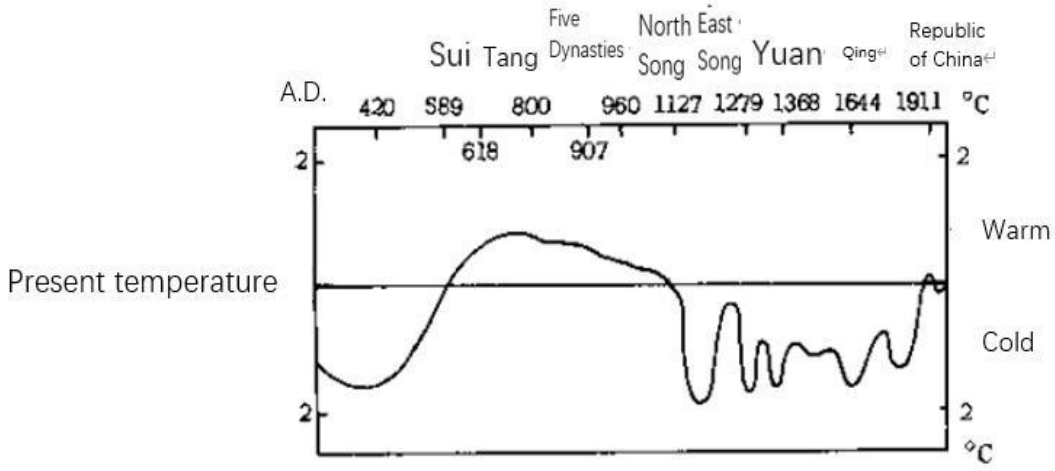


Figure 1: Temperature changes in China over the past five thousand years.

Since Sui Dynasty and until North Song Dynasty, the temperature is high above the "current temperature". This essay was finished in the 20th century and the facilities which author used were insufficient. Even though, there should be some mistakes for this graph, but it played the role of relating climate closely with Chinese society.

Whatever male or female, people always wore clothing with less cloth, silky and cool fabric. High temperature constituted a highly developed society and international trades. Agriculture was benefit due to faster growing of the crops, and population increased in a very fast speed. People always had the clothes such as:



Figure 2: The cloth of Tang Dynasty woman [4].

Nevertheless, until the time of Song dynasty, people wear more and adding clothes to resist the cold. As the graph Figure 1 depicts, there was a drop of temperature since the beginning of South Song Dynasty. People called it little ice age. However, the temperature influenced Ming Dynasty the most. Based on Chu Kochen's data, the largest social unrest periods in the history of China are always closely related with the four little ice ages. Fourth Little Ice Age was the closest to modern

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time and it also caused mighty threats to human beings and the existence of civilizations. In the late Ming Dynasty, about 120,000,000 people of Han nationality decreased for more than one half of the original, which were only more than 50 million existed in the early Qing Dynasty. Even the cities around tropic of Cancer also encountered strange weather. Guangdong also experienced snowy frequently [5].

3.2 Europe

On the other side of Earth, the reflection of the emergence of extreme weather was serious religion issues in Europe. Witch hunt and persecution on Jewish continuously happen and it was the most critical and oppressive time for these two kinds of event. The same things occurred in both western society and east areas: diseases and pandemic were rampant and out of control. “From the 14th through the 18th century, witches were believed to repudiate Jesus Christ, to worship the Devil and make pacts with him, to employ demons to accomplish magical deeds, and to desecrate the crucifix and the consecrated bread and wine of the Eucharist. They often had “familiar spirits” in the form of animals; and that they kidnapped and murdered children for the purpose of eating them or rendering their fat for magical ointments.”

It can be said that the extreme climate since the end of the Middle Ages has consistently brought Europe heavier and more significant disasters. The eruption of people’s negative emotions due to the gradually collapsing medieval system, including a lack of safety and trust between each other, caused them to believe more in the offenses of wizards. Before official confirmation, any accident could be depicted as a wizard's crime. Unfortunately, governments may also support ordinary citizens [6] [7] [8].

4. Conclusion

Decreased temperatures caused social chaos and a scarcity of resources around the world. It is one of the keys of history. The climate will influence the activities of human beings, from our homes to live in to our jobs to do to the traditions that need to be inherited. At the same time, human activity is highly associated with climate. Since the climate has remained constant for years and humans have evolved in response to climate change, Human movements cause more climate change later on, particularly from the Age of Navigation to the Industrial Revolution. Finding more case studies to prove my thoughts is necessary.

This essay has many problems and is insufficient. It should develop more, make the research deeper, and find more examples to illustrate. However, it only provides a few data points and has weak demonstrations about the topic. There are far more points, which should be mentioned and emphasized, that remain undeveloped. So, many aspects still need to be improved.

It will be more to be developed for the research on modern climate. Human affect climate so much in the recent two to three hundreds of years. Deforestation, rising sea levels, loss of biodiversity, and many other issues are all always valuable to investigate. Furthermore, according to many scientists' recent publications, there may be an ice age in the following years due to the actions of the sun. The reasons for this happening, the scales and types of impacts, and the consequences are all waiting for more people to be concerned and take new actions.

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DOI: 10.54254/2753-7048/5/20220654

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