An Exploration of Domestic Cats’ Domestication History in Ancient Egypt and China

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\textbf{Abstract:} Domestic cats are common pets in today's society and have received love from people all over the world. In world history, there are so many records of domestic cats in various cultures. During the long domestication history, the role and status of the domestic cat in human society have changed a lot and many literary and artistic works have been done for it. Among the various records, Ancient Egypt and China are both characterized by early domestication origins and rich historical records. At the same time, despite the similarities in the role played by the domestic cat in both cultures, there are many differences. These differences, similarities, and concrete reasons not only reflect the many historical similarities and differences between the two cultures, but also reflect the influence of different social contexts on the domestication process of animals, which is a topic worthy of discussion in anthropology, sociology, and genetics.

\textbf{Keywords:} Domestic cat, Domestication, Origin, Culture

1. \textbf{Introduction}

The domestic cat, also called Felis catus, belongs to the feline carnivora groups, a kind of eutheria in mammalia, chordata. As a common household pet in modern society, the domestic cat has been a part of people's lives for thousands of years and is inseparable from human society.

Domestic cats can be pets who bring pleasure to human, but they were more often used as helpers to help catch rodents in pre-industrial times. Because rodent activity can pose a serious threat to human property and even safety, humans kept domestic cats in many places where rodent activity needed to be effectively reduced or removed. For example, keeping domestic cats on ships could effectively prevent rodents from infesting the ships. Therefore, domestic cats were almost always kept on large ships in ancient times, and there was also a tradition of ship cats in almost all navies.

This paper explores the origins and domestication history of the domestic cat in Ancient Egypt and China, and examines the differences in the status and role of the domestic cat in the two ancient cultures and the cultural and artistic works on the domestic cat by comparing them through a literature review. The reasons for domesticating the domestic cat differed between the two cultures, with Ancient Egypt being motivated more by religious beliefs, while China was motivated by the cat's ability to catch mice. This also led to a difference in the status of the domestic cat in the two cultures, with the Ancient Egyptians clearly placing far more importance on the domestic cat than the Chinese.
However, despite the different motives for domestication and the status accorded to the domestic cat in both cultures, the domestic cat served to reduce the rodent infestation of human property in both cultures, and both gradually evolved into a pet role to some extent.

2. The domestication history of the domestic cat in Ancient Egypt

As the first region to domesticate domestic cats, archaeologists generally believe that the process dates back to the First Dynasty of Egypt in 3000 BC. It is assumed that cats were initially protected in the countryside for their rat hunting behavior until they were domesticated as domestic cats during the 18th Dynasty in Egypt (1358 BC).

The Egyptians regarded the cat as a sacred animal and gave it a high status. The cat was nocturnal, its courtship was direct and passionate, and it caught rodents and thus protected human food. These characteristics corresponded to Bastet, the goddess of the Moon from the ancient Egyptian myth. Therefore, Egyptians depicted Bastet as a human with a cat-shaped head as a symbol of the moon goddess.

In the New Kingdom period (1553-1085 BC), the male cat was even seen as a symbol of Ra, the sun god. The painting “Book of the Dead”, Ancient Egypt’s book created for the dead, depicted a cat as an incarnation of the sun god representing light and truth, swinging his sword at Apep, the serpent demon who symbolizes darkness and evil [1]. The reverence of the cat in Ancient Egyptian culture is evident from the fact that the sun god Ra was almost always the most important god in Ancient Egyptian culture for millennia.

The domestic cat was also considered to be a symbol of fertility in Ancient Egypt, probably because it was a prolific litter. According to surviving hieroglyphics, the moon goddess Bastet was considered to be the mother of the pharaohs and the protector of female fertility. Next to the figure of the goddess with the head of a cat, the Egyptians would sometimes create a group of kittens to signify the expectation and prayer for fertility. Because of the feline's status in Ancient Egypt, many domestic cats were mumified after death, coated with spices, and placed in special coffins.

Domestic cats were domesticated in Ancient Egypt for a long time, but people in neighboring southern Europe and North Africa had never seen or even heard of them for a long time. The reason for this is that the Egyptians' reverence for cats led to the fact that they were strictly forbidden to export in Ancient Egypt. It is recorded that a Greek who traded regularly with Ancient Egypt stumbled upon a novel animal in Ancient Egypt and heard accounts of its ability to catch rats. The Greeks at this time relied heavily on owls to combat rat infestation, so he immediately reported the news to the Greek king. The Greek king spared no expense in trying to buy back a cat for use in rat hunting, but the Egyptian king steadfastly refused. In order to achieve his goal of bringing the cat to Greece, the Greek king even went so far as to arrange for spies to travel to Ancient Egypt to catch the cat, but his attempt was soon discovered by the Egyptians. The Egyptian king made it a rule that all thieves who stole cats were sentenced to death, and even the keepers of lost cats were severely punished [2].

As countries grew closer and relations became increasingly friendly, Ancient Egyptian cats were still exported to other countries through commercial trade. The remains and sculptures of domestic cats excavated in the European region can all serve as historical proof of the spread of domestic cats in Ancient Egypt.

It is worth noting that the last period of Ancient Egyptian history is also closely linked to cats. In 525 B.C., the Persian Empire launched an attack on Ancient Egypt under the leadership of Cambyses II. Knowing the Egyptians' respect for cats, Cambyses II painted the image of the moon goddess Bastet on the shields of Persian soldiers [3] and used cats to deflect arrows shot at Persian soldiers, even using them as throwing objects.

Cambyses II's psychological warfare destroyed the Egyptians' psychological lines of defense and eventually won the war as well, known as The Pelusium War, the first recorded psychological warfare
in human history. It is said that at the end of the war, Cambyses II threw cats onto the defeated Egyptians’ faces to humiliate them for sacrificing their country for fear of the animals' safety.

3. The domestication history of the domestic cat in China

Under the leadership of Professor Hu Yaowu, a team of researchers from the Key Laboratory of Vertebrate Evolution and Human Origins of the Chinese Academy of Sciences has used several methods to study a group of cat bones from the Quanhu Village site in Shaanxi. Carbon and hydrogen stable isotope analyses of humans, cats, and rats from the Quanhu Village site showed that they all ingested some amount of C4 plants. Corn plants were widely cultivated at the time, and if a cat ingested a higher proportion of corn-based food than meat-based food, it is likely that the cat had a close relationship with human society, such as being fed by humans for a long period of time or regularly foraging on human leftovers [4]. These results suggest that the indigenous domestication of wild cats in China can be traced back to 5,300 years ago.

The earliest record of the domestication of domestic cats in China that can be verified is Han Yi, from the Greater Odes of "The Books of Songs", which said, “There are bears, fierce fighters, cats and tigers.” It is worth noting, however, that the cats are placed alongside beasts such as bears and tigers, representing the fact that cats at that time were still wild animals that would be quite threatening to people when encountered in the wild, rather than domesticated animals that could help people catch rats after domestication. The earliest record of domestication is in Yang Quan of “Han Feizi” at warring state period, "Attracting mice with cats and flies with ice, no matter how clever you are, you can't achieve your goal". In the Western Han period (202 B.C.-8 A.D.), the Jiao Te Sheng from “Book of Rites” said, "The ancient people used everything for the certain purposes. They kept cats because cats could help hunt voles". [5] From these records, it can be seen that the cat had gradually been domesticated from a beast like the bear and tiger to a domestic cat that lived in symbiosis with humans, and the cat's role in catching mice may have been the main reason for its domestication by the ancient Chinese.

With the domestication progressing, the Chinese did not regard the cat as a god as the Egyptians did, but the cat’s role was not limited to catching mice, but also appeared widely as a pet. Chinese records of how to select a pet cat can be traced back to the book “Pi Ya” by Lu Tian of the Northern Song Dynasty, "Cats have several colors such as yellow, black and white, with fox-shape body, tiger-shape face, soft hair and sharp teeth. Those with the long tail, short waist, gold- or silver-color eyes and multi-edged upper jaw are considered great."

The role of the domestic cat in ancient China is best exemplified in the writing of the poet Lu You (13 November 1125 - 26 January 1210) of the Song Dynasty. In Lu You's famous work, “Work in a Great Storm on the Fourth of November”, he writes, “I lay propped up in the lonely and desolate country, not feeling sad for my situation, thinking of defending the border for my country. As the night was drawing to a close, I lay in bed and heard the sound of the wind and rain. I dreamt in a daze that I was riding my armored war horse across the frozen river to the northern battleground”. This shows that the domestic cat was a good pet for the ancient Chinese, and could keep people company through many tedious hours. In another work, “My Cat”, Lu You writes, 'With the price of a bag of salt, I welcomed a kitten, who took good care of thousands of books in my study. I am sorry because my family is poor and my reward is very poor. When it is cold, there is no warm and comfortable mat under it, and there is often no fish in the food". From this, we can analyze and draw three conclusions about the domestic cat in ancient China. Firstly, domestic cats could be purchased at very low prices, and this shows that the status of the domestic cat in ancient China was very different from its status in Ancient Egypt where the price of a mere bag of salt one could buy a domestic cat, which was considered a god by the Egyptians. Secondly, the main function of the ancient domestic cat was to catch mice, which is consistent with the above inference. Thirdly, the Song Dynasty's writings contain
many descriptions of the domestic cat's preference for fish, whereas similar accounts rarely appear in previous literature, thus showing that the domestic cat's diet changed significantly during the process of domestication.

4. Summary and outlook

This paper has summarized and compared the domestication history of the domestic cat in Ancient Egypt and China from the perspective of role, status and relevant historical events by means of a literature search. Due to the lack of literature on the genetics of the domestication of the domestic cat, the discussion in this paper is more limited to the historical and cultural perspective. From the above comparison, it can be seen that both Ancient Egyptian and Chinese domestic cats were initially domesticated for their ability to catch mice, but their status was very different later on. In Ancient Egypt, the domestic cat had a higher status than even humans, whereas in China it was a common domestic animal and was even edible. In Guangdong, there is a famous dish called “fight between dragon and tiger”, made from the meat of snakes and cats [6], which is an unexpected homage to the painting “Book of the Dead”. Nowadays, due to industrialization and the widespread use of rat poison, the domestic cat’s role as a rat catcher has been reduced and it is more often used as a pet to accompany humans in modern society.

As a witness to the development of human society, the domestic cat can be investigated through its biological information to study the dietary structure of different societies and the differences in social development in different periods. At the same time, genetic research on domestic cats is also useful for further optimizing the selection of domestic cats for breeding, research on zoonotic diseases and other research closely related to humans. Today's rapid advances in research methods mean that the analysis of the molecular biology of domestic cats will continue to improve, and will move further into the era of whole genomes and big data, allowing for the rapid accumulation of research material and more detailed, comprehensive and advanced advances.

References