# An Artifact Speaks • Artifact Information Sheet

Artifact Name: Silk (blue material)

Artifact Name: Art Silk (Artifical silk) (multicolored material)

Specimen Name: Silk cocoon

Culture/Religion Group: China

Reproduction? No.

# **Background Information:**

According to ancient legend, Empress Hsi Ling Shi, the wife of the Yellow Emperor (c. 3000 BCE), was sitting outside one day when a silkworm cocoon fell into her cup of hot tea. The heat dissolved the glue holding the cocoon together, revealing the shining thread. Recent archaeological evidence puts our earliest-known dates for sericulture (silk production) back as far as 7000 years ago.

The cocoons spun by caterpillars of the Bombyx species are the source of silk thread. The caterpillars live on the leaves of mulberry trees, eating furiously until it is time to spend 3-4 days cocoon-spinning. These tiny shelters consist of a single thread held together by glue, both created by the caterpillar. If the caterpillar is allowed to emerge from the cocoon, this thread will be broken and unusable for making cloth. Thus, the caterpillar must be killed inside the cocoon. This can be done by steaming or freezing. The cocoon is then put into hot water to dissolve the glue and the unraveled thread is wound. A single cocoon thread can reach to half a mile long. It takes 5 to 8 threads spun together to make a fiber strong enough to weave. It takes 111 cocoons to make a silk tie and 630 cocoons to provide the thread for a woman's blouse.

The early Chinese sold silk along trade routes that spread as far west as the Mediterranean Sea, routes that became known as the Silk Road (see Silk Road information below). The desire for silk goods was strong among the rich, and many wished to know how to create the fine cloth. Remarkably, the Chinese were able to keep the secret of silk-making to themselves for thousands of years.

In addition to cloth for clothing or as an item of trade, the Chinese used silk for musical instruments, fishing lines, and even a luxury material for paper. Silk was also used to pay taxes to the government and pay laborers for their work.

Artificial silk, often called "art silk," is a synthetic fiber made to resemble silk but is much less expensive to produce. Rayon and nylon are familiar types of art silk. The chart found at http://www.rebeccablood.net/domestic/fiber\_content\_tests.html gives some simple tests that will allow someone to tell the difference between real and artificial silks.

(continued)

### The Silk Road:

The following is label text from the Spurlock Museum's exhibit on East Asia, called *Crossroads: Invention, Exchange, Endurance*. This section of text discusses the Silk Road and some of the commodities traded on it.

# The Silk Road

In 138 BCE, Zhang Qian was sent by the Chinese emperor Wudi to set up a military alliance with the Yuezhi people of the Central Asian steppes. Twice captured and held against his will, the envoy did not return to China for 13 years. Although his mission had been unsuccessful, Zhang Qian was able to pass along great knowledge of the western regions. Additional expeditions were sent into this area and beyond. By the 2nd century CE a regular trade between China and the Roman Empire was solidified across a route today called the Silk Road.

The Silk Road was actually several routes winding through some of the earth's most inhospitable land. Settlements arose in many oasis areas, profiting from the passing caravans. The vast majority of the goods traded were passed from middleman to middleman, greatly increasing the cost of each item by the time it had reached the end of its journey.

## The Silk Road Moves to the Sea

Traveling the 4600-mile Silk Road was never completely safe, but in times of political unrest, trade was greatly affected by the increased danger. The decline of the land route resulted from the untrustworthiness of the road and the development of trade by sea. Ships were now stronger, more reliable, and guided by compasses. Although the sea route, which now included Southeast Asia, alleviated some of the negative aspects of the land route, such as political instability and the presence of middlemen, bad weather and pirates were new problems to be dealt with in sea travel.

#### Material Goods

Silk was only one type of merchandise carried along the Silk Road. Caravans traveling toward China carried gold, silver, ivory, precious stones, wool, and glass. From China came furs, porcelain, jade, bronze objects, lacquer, and iron.

All of these goods were moved by people from a widely diverse number of cultures and locations. Changan (now Xi'an), the capital of the Tang [dynasty] (618-907) and the eastern starting point of the route, developed into the largest and most cosmopolitan city in the world. By 742, the population had reached almost 2 million, including 5,000 foreigners. Many were missionaries, merchants, or pilgrims, but every other occupation was also represented.

# Spiritual Exchange

Of all the things exchanged along the Silk Road, the most significant was religion. Buddhism traveled from India to China along the road. Many settlers of the oases along the way converted to Buddhism as well, creating fascinating religious grottoes that provide much information about the people who inhabited the Silk Road at its height.

Christianity also entered the East over this famous route through a group called the Nestorian sect. Outlawed by the Roman church in 432 CE, sect members were driven eastward to northern Iran. Nestorian merchants brought the religion to China along with their merchandise and established the first Chinese Nestorian Church in 638. The sect remained strong until the 14th century.

# Porcelain (see porcelain information sheet)

# Opium

By the 18th century, European nations, and especially Britain, found themselves in chronic debt to China as a result of a trade deficit. The demand for Europe's manufactured goods was very small in comparison to the great demand for Chinese silk, tea, and porcelain. At first European payment for Chinese goods was made in silver brought back from the Americas. However, opium replaced silver once the British discovered that opium could be sold to China at a large profit. Opium, which had long been used as a narcotic drug to relieve or suppress pain, is the base for morphine, codeine, and heroin.

By 1729, 200 chests of opium were being imported into China annually. By 1838, the amount had risen to 40,000 chests. Despite repeated government orders prohibiting opium smoking and trading, opium addiction continued to afflict the Chinese, which led to the Opium Wars of the mid-19th century. In winning these wars, the Europeans won not only great political concessions, but also legalized the opium trade. Opium smoking and addiction were not successfully eradicated in China until the Chinese communists came to power in 1949.

# Sources:

- "History of Silk." History of Silk. Silkroad Foundation, 2000. Web. 27 May 2015.
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- "Silk." Encyclopædia Britannica. Encyclopædia Britannica Online. Encyclopædia Britannica Inc., 2015. Web. 27 May. 2015.