Bibliography

Athanasius Kirchner, China Monumentis, 1667.


Items:

The images used for tea and silk were images of items that I had, so there is no reference to either of them in my bibliography.

**Nasher Museum**

1973.50/64 Chinese
Round Covered Box
1260-1368
Chinese
Gift of Col. Van R. White

1973.50.111
Chinese
Ceremonial Blade
1028-256 BCE
Jade
Chinese
Gift of Col Van R. White

1973.50.8
Chinese
Ba Ji Xiang (Eight Buddhist Emblems)
Charger
1368-1644
Chinese, K’ang Hsi Period
Porcelain with cobalt blue underglaze
Gift of Col. Van R. White
Jade

Jade is a tough, glossy translucent mineral prized among the Chinese above gold and silver. It appears in several different colors, but primarily white and green. The Chinese use jade in rituals, in their equivalent of crown jewels, in burials, in ornaments and in everyday tools. In addition, jade is very culturally important, as it represents immortality and virtue and is used in many of their proverbs. For example, one line in the poem is 玉不琢不成器,人不学不成才, which means that “just as unpolished jade cannot become an ornament, an uneducated man will not attain his full potential.”

“Halt! Identify yourself!”

“I am Minghao, the leader of the caravan. We are a trade caravan under the employ of the merchant Weiyi in Peking. We have just returned from Almaliq in the lands of the Chagatai Khanate.”

“If that is the case, you must have passed through here on your way to Almaliq. Show us your papers

“Yes, we did pass through Lanzhou, about four and a half months ago. Please see this scroll with Weiyi’s seal authorizing us to travel, engage in trade, and use credit on his behalf. One of the sentries at the gate that we exited through signed the very end with the date of our departure.”

“Come forward and show me.”

After going through the sentry, we entered Lanzhou and made our way to Weiyi’s Lanzhou residence to rest. As we entered, the home’s luxury accommodations seemed especially opulent in comparison to the tents and trade posts that we had been staying at since we left Almaliq. We unloaded our jade from the camels, enjoyed some tea and baijiu and got our first good night’s sleep in months.

After waking up, we went into the city center. The hustle and bustle of people everywhere walking around on the streets, while chaotic, was a welcome reprieve from the vast steppe and deserts that we had traversed. We stepped into a small noodle shop and each ordered a bowl of Lanzhou’s signature lamian dish. We all ordered either beef or mutton, as no pork is available at any of the lamian restaurants. Even though lamian is a cheap and basic meal, because it was the first warm meal that we had in weeks, we enjoyed it more than even the finest cuisine available in Peking. We then went back to Weiyi’s residence, where we loaded the camels with the jade. We then headed out to the docks, where we would hand off the jade.

“Minghao! Over here!”

“Kaiwen, good to see you, it’s been a while. How is Weiyi?”

“He’s doing well, and he’s very happy with your negotiating skills! He has never before received such large quantities of high quality jade at the price that you managed to obtain.”

“Good to hear. Well, we better get going. With all the silk and porcelain you’ve brought me, we’re going to need to hire a larger group for the next caravan.”
Silk

Silk is a fiber obtained by unraveling the cocoons of the mulberry silkworm. For the longest time, silkworms were only domesticated in China. To the rest of the world, silk was both a mystery and a luxury. In fact, China closely guarded the secrets of silk production and prohibited the export of silkworms. However, the ban was not completely effective and sericulture eventually spread westward. Khotan was the first place outside of China to produce silk. Local legend has it that a Chinese princess who married the king of Khotan, which is now the land of the Chagatai Khanate, could not do without her silk and snuck silkworm eggs to Khotan in her headdress. Since then, we have gained the ability to produce silk back home in Venice. However, even though several other places have learned how to cultivate silkworms, the Chinese still produce the highest quality silk items.

“Hanmei, when you’re done sweeping the floor, why don’t you tend to the silkworms?”

“Yes mom!”

After sweeping the last of the dust on the ground, I pick up a large basket, secure it to my back and head out towards the mulberry trees. Collecting the mulberry leaves is by far the most boring and tedious step in the process of raising silkworms. Because of the silkworms’ voracious appetite, I need to fill up very large baskets full of mulberry leaves to feed all of them. In addition, the worms never stop eating, so I have to go pick leaves every day. While I am picking the leaves, there is nowhere to hide from the intense rays of the sun, which makes the hot, humid Suzhou summer even more unbearable.

Once I have finally finished picking leaves, I take them to our silkworm cultivation room at the back of the house. Before doing anything else, I head back into the main house to drink some refreshing cold water and wipe off the dirt and sweat from earlier. After returning to the silkworms, I spread out a generous amount of leaves on the table. Even so, I will need to come back at night and refill the table with more leaves. After dealing with the worms, I then turn my attention to some of the cocoons, which are at the perfect time to unwind into threads. However, before the cocoons can be unwound, they need to be boiled to get rid of the stickiness and to kill the silkworms before they eat through the cocoon. In another room adjacent to the silkworm room, I heat up a pot with some charcoal and allow the cocoons to thoroughly boil. Boiling the cocoons is by far the most uncomfortable part of the process, as I always feel nauseous, which is only exacerbated by the intense heat of the charcoal fire. Once that’s done, the entire family works together unspooling each cocoon individually. Once that is done, we can take the threads to the market to be sold to weavers.

Porcelain

Porcelain is made by heating certain types of clay in a kiln. To create designs on the porcelain, craftsmen apply a layer of glaze to the clay before heating. The glaze also creates a very lustrous surface on the glaze and makes the porcelain waterproof. The Chinese have figured out how to produce a remarkable variety of different colors and designs by modifying the materials used in the glaze, the amount of a particular material in the glaze, and the composition of the air in the kiln while firing. While there are
many places that produce porcelains of many different designs all over China, the blue and white
designs that are most popular in Europe are made in the town of Jingdezhen in Jiangxi. In fact,
Jingdezhen is so well known as the center of Chinese porcelain production that the town’s former name,
“Changnan,” is where the term “china” comes from. Another popular glaze is celadon, which is a similar
color to jade.

With the laborers returning from the mine with fresh kaolin clay, we can begin working on a fresh batch
of porcelain. The kaolin, when fired with a transparent glaze, turns into a pristine white porcelain that is
admired by all.

“Add the water to the clay and mix thoroughly. Once you’re done, bring it back to me.”

“Will do.”

Once the clay and water have mixed, the clay turns into a wet, moldable putty, which can then be
turned on a wheel into the shape of the item. As I turn the wheel, I use both my hands and tools to mold
a consistent, round shape in the clay. By the end, the clay has taken the preliminary shape and my hands
have turned into a cold, wet, sticky mess.

After I clean off my hands, I very carefully take some fine tools to the rough item to refine the shape to
perfection. With the shaping done, I turn my attention to the pigments. Because the amount of pigment
is as important to the final color as the type of pigment, it is important to get the exact right mixture of
different chemicals.

“The mixture is almost complete. Bring me the huihui qing and some more water.”

With the pigment mixture completed and liquefied, it can be applied to the item like paint. I grab a
brush, slowly and carefully an elaborate court scene in the middle and intricate geometric designs
surrounding it. Painting is slow and requires high concentration to do. By the end, even though I have
done no physical labor, I am breathing heavily, sweating, and exhausted.

With the design complete, I apply the transparent glaze and take the item to the kiln for firing. The
signature white and blue porcelain style of Jingdezhen only requires firing once, which is far more
convenient than most other types, which may require three or four firings.

When firing the item, even with the kiln closed off and standing on the far side of the room, the
immense heat emanating from the kiln makes the room almost feel like a giant kiln. Even so, I cannot
leave the room, as the firing requires constant attention to the amount and composition of the air inside
the kiln to produce just the right color and finish. After spending a full half day firing the item, we open
the kiln, and the item, which was previously a dull light greyish color, has now become a glistening white
and blue ware.
Tea leaves come from a shrub native to Southern China. However, if the tea plant is left to grow, it can eventually grow to the size of a tree. Tea has a bitter flavor, and after drinking it, one frequently feels invigorated with more energy. It was first used by the Chinese in medicinal brews, but is now primarily used as a regular beverage throughout the Far East. The difference in taste for the different varieties of tea, such as black, green, and oolong, comes from the difference in the processing the leaves. Different processing techniques include: withering, which involves drying the leaves on a rack in a warm room; rolling, which involves rolling batches of leaves into a ball; and fermenting, which involves keeping the leaves in a cool, damp environment. Although the tea plant is originally from the Yunnan and Sichuan areas of China in the Southwest, Fujian in the southeast has also become a major production center as tea plantations were established.

“Keep walking! We’ve still got quite a ways to go up the mountain.”

As we continued our trek up the mountain, I started wheezing and fall over on the ground. As a newly arrived laborer to the Chen family tea farm, I still have not gotten used to breathing at the high altitudes of the farm.

“Hey Niuyue, are you ok? What’s wrong?”

“I can’t breathe, and my head hurts. I don’t know if I can continue.”

“Don’t worry, I think that Zhaochu might have some medicine for altitude sickness with him. You’re not the first person who this is happened to.”

Zhaochu, our labor group’s supervisor, came over and took out some crushed reddish-brown root from his pouch.

“Add these to your gourd, and drink up. Then sit down for a bit, close your eyes, and just breathe.”

After clumsily spilling almost half of the crushed root, I manage to mix it with the water and quickly chugged half the gourd. The drink tasted both sweet and bitter. As I closed my eyes to breathe, a light, cool breeze blows by, wafting the fragrant scent of the tea leaves all around us.

After resting for a while, my symptoms miraculously disappeared, and I made the rest of the trek up the mountain. The rest of the group is already there working, and Overseer Zhaochu assigned me to tend to the plants at the bottom edge of the farm. Starting from one end of the field, I bend down to pull out the weeds, using a small shovel to get all the way down into the roots. Even with the breeze, the intensity of the sun beating down on me is making it unbearably hot. After pulling out a weed, I toss it into my basket so that it can be dried and used as fertilizer later. Having reached the other side of the field, I turn around and begin trimming the tea plants to keep them from growing too unwieldy and scarifying the ground to improve the soil.

“It’s sundown! Time to go back.”

With that, we begin the trek back down to the village.
Lacquer

Lacquer is produced by applying processed sap from a tree indigenous to China to a core, typically wood or bamboo, which is then cured in a warm and humid environment. Once the sap has dried, it produces an extremely hard and durable finish. Producing lacquer items is an extremely slow and tedious process because the sap is applied in up to 200 separate layers. Each layer must be allowed to completely harden before applying the next layer and the hardening process can take weeks. Lacquerware production is centered in the Sichuan region in the southwest as well as in Yangzhou in the southeast. In this particular example, the rich red color comes from a dye called cinnabar. Both the tree sap and the cinnabar are highly toxic to humans, which further increases the difficulty in producing lacquer. Due to both the labor intensity and the toxicity, production is very small scale. Confucian officials decried lacquer production as exemplary of excessive spending and a waste of effort, but did not have much impact on imperial patronage of lacquer works.

“Jingyi, come in, it is time to get to work!”

“The fresh sap has arrived?”

“Yeah. The stuff that has been curing in the yinshi is done as well, so we have everything we need.”

I finished the last of my morning tea and joined Kang as we went behind the building to the yinshi pits. As the laborers unearthed the items, a wave of heat and humidity emanated from the yinshi, which made the hot Yangzhou summer even more unbearable. We supervised them to make sure that they did not accidentally damage the wares. These items have already received 188 layers of lacquer, each very tediously applied, and no one wanted to have to start over again. The amount of money that we spent on the tree sap, the base, the cinnabar dye, and the coal/firewood to heat the yinshi was enormous, and we cannot afford to have all of that go to waste due to a stupid mistake by a careless laborer.

With the items removed from the yinshi, we took them inside into the workshop so that we could apply another layer of lacquer. Before starting, the other artisans and I applied a medicine to our hands and arms made from crushed shellfish. The shellfish medicine is absolutely crucial for all artisans working with the tree sap, as well as the people who extract the sap from the tree, because the sap causes an itchy and painful skin reaction.

Even though the shellfish medicine seems effective in preventing the skin reaction to the tree sap, the oldest artisans still all seem to get sick, particularly the ones who work with cinnabar. They all end up with a loss of sensation in their body, decaying muscles, and fading memory. Even so, there is no better job for me than this one, so I have no plans to do anything else, despite the risk.