Study on the Witchcraft Characteristics and Royal Power Symbols of Needle Carving Decoration of Lacquerware in Warring States Period of China*

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Abstract—Needle-carving technique of lacquerware is a method of carving patterns with needles and cones on the surface of dried lacquerware. As early as in the Warring States Period, needle-carving technique has been applied to the inscription and decoration of lacquerware, which has a far-reaching impact on the lacquerware carving of Han Dynasty and lacquerware art of later generations. Academic circles generally believe that lacquerware needle-carving techniques originate from bronze engraving. After sorting out ancient documents and existing objects of Warring States lacquerware, this research finds that the needle-carving techniques of lacquerware in the Warring States Period and the early pottery carving, jade carving, tortoise shell carving and bronze carving have some meanings of witchcraft; it is deduced that the needle-carving of lacquerware in the Warring States Period is the result of the interaction of various craft categories. As a kind of "behavior", the needle-carving technique of lacquerware in the Warring States Period retained the "witchcraft" characteristic of the early decoration, and was also the pursuit of establishing ritual system and distinguishing social classes at that time.

Keywords—lacquerware in Warring States Period; needle-carving; witchcraft; ritual system; eternity

I. INTRODUCTION

Needle-carving on lacquerware refers to a technique of using sharp tools to carve patterns on the surface of lacquerware. Based on the bamboo slips unearthed from Mawangdui Tomb in the Han Dynasty, Mr. Fu Jiyou called it "cone painting"①. Tao Zongyi in Yuan Dynasty called it "depicting with needles"②. In the book "Di Jing Jing Wu Lue", Liu Dong in Ming Dynasty written following inscription: "making characters with needles in Yongle Year of Ming Dynasty"③, when discussing the carved lacquerware. In Qing Dynasty, Li Dou also called it "depicting with needles" when recording the gold and silver inlay. In modern archaeological reports, the term "needle-carving"④ is widely used. It refers to the dark stripe of lacquerware in these reports. Mr. Wang Shixiang described the gold and silver inlay as "to carve out fine patterns with needles or knife tips on the cinnabar or black lacquer ground, and to make gold glue inside the patterns"⑤ in his "Notes on the Decoration of Lacquerware". To understand this, this paper still uses the term of "needle-carving".

II. ORIGIN OF NEEDLE-CARVING LACQUERWARE IN WARRING STATES PERIOD OF CHINA

In Yang Zongrong's Painting Materials of the Warring States Period and Shen Fuwen's History of Chinese Lacquer Art, there is a lacquer box with cloud pattern carved by needles in the Warring States Period⑥.

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TABLE I. NEEDLE-CARVED LACQUERWARE AND DECORATIONS IN THE WARRING STATES PERIOD

<table>
<thead>
<tr>
<th>Needle-carved lacquerware</th>
<th>year</th>
<th>site</th>
<th>needle-carved decorations</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>The low table with needle-carved cloud pattern and lacquer</td>
<td>Late Spring and Autumn Period to Early Warring States Period</td>
<td>tomb No. 1 of Liuchengqiao tombs in Hunan province.</td>
<td>needle-carved cloud pattern</td>
<td>1</td>
</tr>
<tr>
<td>lacquered suitcase</td>
<td>Early Warring States Period</td>
<td>Zenghouyi Tomb in Hubei province</td>
<td>needle-carved inscription &quot;雲錘之衣&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered cup</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>8</td>
</tr>
<tr>
<td>lacquered cup</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>25</td>
</tr>
<tr>
<td>lacquered cup M26:8</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered cup M37:3</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered box M2:8</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered box M1:8</td>
<td>Middle and Late Warring States Period</td>
<td>Qingchuan Tomb in Sichuan province</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered bowl M1:16</td>
<td>Middle and Late Warring States Period</td>
<td>Tomb No.21 of Zengjiagou tombs in Sichuan province.</td>
<td>needle-carved inscription &quot;[]&quot; and &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered box M16:1</td>
<td>Middle and Late Warring States Period</td>
<td>Zengjiagou tombs in Sichuan province.</td>
<td>needle-carved inscription &quot;[]&quot; and &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered cup M12:5</td>
<td>Middle and Late Warring States Period</td>
<td>Zengjiagou tombs in Sichuan province.</td>
<td>needle-carved inscription &quot;[]&quot; and &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered cup M16:2</td>
<td>Middle and Late Warring States Period</td>
<td>Zengjiagou tombs in Sichuan province.</td>
<td>needle-carved inscription &quot;[]&quot; and &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered cup</td>
<td>the later Warring States period</td>
<td>Tomb No.1 of Wangshan Bridge tombs in Hubei province</td>
<td>needle-carved inscription &quot;外杯&quot; or &quot;外外杯&quot;</td>
<td>30</td>
</tr>
<tr>
<td>lacquered box with red phoenix pattern</td>
<td>the later Warring States period</td>
<td>Tomb No.6 of Yangjiawan tombs in Hunan province.</td>
<td>needle-carved inscription &quot;[]&quot;</td>
<td>1</td>
</tr>
<tr>
<td>lacquered plat</td>
<td>the later Warring States period</td>
<td>Tomb No. 18 of Changtaiguan tombs in Henan province.</td>
<td>needle-carved Lozenge pattern</td>
<td>1</td>
</tr>
</tbody>
</table>

But Hou Dejun thought this lacquer box was an appliance in the early Western Han Dynasty. Fu Juyou said, "In the past half century, nearly 10,000 Warring States tombs and nearly 10,000 lacquerware have been excavated through scientific archaeology throughout the country, and no cone painting lacquerware of the Warring States Period has been found. The volumes I and II of the Complete Works of Chinese Lacquerware summarize the lacquerware craft before the Han Dynasty, without mentioning the discovery of cone painting lacquerware in archaeology. In the excavation report of the tomb of the Chu kingdom in Changsha reported 2048 tombs of the Chu kingdom in Changsha. A large number of lacquerware were unearthed, but none of them was cone painting lacquerware."

However, the archaeological data such as tomb No. 1 of Liuchengqiao tombs in Changsha, tomb No. M006 of Yangjiawan tombs in Changsha, and the inscribed wooden tablet of Qingchuan Tomb in Sichuan Province recorded unearthed objects of needle-carved lacquerware during the Warring States Period ("Table I"). Needle-carved lacquerware and needle-carved decorations unearthed from the tombs of the Warring States Period are listed below.

From "Table I", it can be seen that these carving patterns on the surface of most lacquer which unearthed from Warring States tombs are inscriptions, while those non-inscriptions lacquers are only the low table with needle-carved cloud pattern and lacquer in the Liucheng Bridge Tomb of the Chu kingdom in Changsha ("Table II"), and lacquer trays with needle-carved Lozenge pattern of the Changtaiguan Tomb in Xinyang, Henan ("Table II"). The low table with needle-carved cloud pattern and lacquer in the Liucheng Bridge Tomb is black lacquer on several sides of the body and cloud pattern on several sides, embossed with animal face decoration at both ends.

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TABLE II. NEEDLE-CARVED LACQUERWARE AND DECORATIONS FROM SPRING AND AUTUMN PERIOD TO WARRING STATES PERIOD

<table>
<thead>
<tr>
<th>Late Spring and Autumn Period to Early Warring States Period</th>
<th>Later Warring States period</th>
<th>Qin dynasty</th>
<th>Han dynasty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud pattern</td>
<td>Lozenge pattern</td>
<td>needle-carved inscription</td>
<td>Dragon and phoenix pattern</td>
</tr>
<tr>
<td>The low table with needle-carved cloud pattern and lacquer in the Liucheng Bridge Tomb of the Chu kingdom in Hunan province</td>
<td>The lacquer trays with needle-carved Lozenge pattern of the Changtaiguan Tomb in Henan province</td>
<td>The lacquered box of shuihudi tomb in Hubei province</td>
<td>The lacquered cup of Wuzuofeng tomb in Hubei province</td>
</tr>
</tbody>
</table>

From the perspective of lacquer cross-section, the lines are carved on the surface of lacquer to form depression decoration, and are not carved in wood, so it can be concluded as lacquer carving techniques. The low table with lacquer of Liucheng Bridge tomb is the oldest. There are four views about dating of its burial:

First, Archaeology of Shang and Zhou Dynasties determined that it was in the late Spring and Autumn Period. Second, Mr. Yu Weichao thought that it was in the early Warring States Period. Third, Mr. Guo Dewei believed that was in the mid Warring States Period. Fourth, Mr. Gao Zhixi predicated that was in the late Spring and Autumn Period or 5th century BC.

From the above viewpoints, that low table in the Liucheng Bridge tomb should be between the Spring and Autumn Period and the Warring States Period. Therefore, Mr. Fu Juyou’s assertion that there is no real object of the cone painting lacquerware of the Warring States Period cannot be established.

To sum up, the needle-carving technique of lacquerware in the Warring States period is mostly used to carve inscriptions, and its decorative technique is only to use sharp tools to carve pattern on the surface of the plain lacquer.

Most of these inscriptions are the names of craftsmen or workshops which reflect the system of Wu le Gong Ming, which means that manufacturer must engrave their names on their products in official-run handicraft workshops during the Warring States Period. This system still was used in the Han Dynasty. The inscription techniques were gradually replaced by writing with red lacquer or carving on the outer wall of copper buckles.

The lacquerware with needle-carving techniques was also unearthed from tombs in Qin and Han Dynasty. For example, the lacquered round box with painted cloud pattern excavated from Shuihudi tomb of the Qin Dynasty, Hubei Province. The lacquered box had needle-carved inscriptions on its inner and outer walls ("Table II"). Two lacquered cups of Wuzuofeng tomb in Hubei province also had needle-carved pattern which filled with gold powder. The cover is carved with dragons. The inside is carved with phoenixes, and the outside is carved with lofty peaks, flowing clouds, galloping leopards, cranes, jade rabbits, immortals, birds, etc. ("Table II").

III. THE RELATION BETWEEN CARVING DECORATION IN EARLY CHINA AND NEEDLE-CARVING TECHNIQUES OF WARRING STATES LACQUERWARE

At present, academia generally believes that the early needle-carved lacquerware techniques originated from bronze carving arts, such as Shen Fuwen's view: "the lines of pattern of clouds and thunders on the bronze ware in the Shang dynasty are fine. The composition of the pattern is exquisite. This kind of decoration technique is also naturally applied to lacquerware".

TABLE III. EARLY CHINESE CARVING DECORATION

<table>
<thead>
<tr>
<th>The rock paintings on Molehetugou cliff</th>
<th>The pottery tablets in shapes of tile in the Hemudu cultural site</th>
<th>The jadeware in the Longshan cultural site</th>
<th>The inscriptions of tortoise shell and animal bones in Yin Ruins</th>
<th>The feast, fishing, hunting and seizing pattern pot of the Baihuatan tomb in Sichuan province</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Rock Paintings" /></td>
<td><img src="image2" alt="Pottery Tablets" /></td>
<td><img src="image3" alt="Jadeware" /></td>
<td><img src="image4" alt="Inscriptions" /></td>
<td><img src="image5" alt="Feast Pot" /></td>
</tr>
</tbody>
</table>

Wang Mingli analyzed the lacquerware fragments of Yecheng site in the Shang Dynasty, and believed that the five kinds of lacquerware decorations, such as taotie pattern, one-legged dragon pattern, dot pattern, thunder pattern and banana-leaf pattern, were the same as those on the bronzes at the same time. He drew the conclusion that "the lacquerware decoration of Shang Dynasty imitated the bronze decoration." In Fu Juyou's article "Cone Painting Art and Inlay Gold Art of Ancient Chinese Lacquerware," he argues that "cone painting art of lacquerware is very similar to bronze carving art, and its patterns are depicted with hard and sharp metal tools."  

But these above discussions are the result of comparing lacquer needle-carving pattern with bronze decoration horizontally. Before the emergence of bronze carving technique, this kind of Warring States needle-carving technique had been applied to other objects. The appearance of bronze decoration is later than lacquer decoration. For example, the surface of pottery with lacquered pattern at Meiwei site during the period of Liangzhu culture has been painted with golden and brownish red lacquer. The cloud and taotie patterns of bronze ware are quite common on the painted with golden and brownish red lacquer. The cloud and taotie patterns of bronze ware are quite common on the painted pottery. Many potteries with carved symbols were unearthed from Yangshao, Longshan, Liangzhu, Hemudu and Majiayao cultural sites. The pottery tablets ("Table III") in shapes of tile of the Zhejiang Museum in the Hemudu cultural site are densely carved plant decoration. These lines of plant decoration are curled, circular. Early carving symbols also appeared on the jade in the Xinglongwa and Chahai sites of Neolithic Age. In Longshan Culture Period, the jadeware's pattern ("Table III") also carved a large amount of precise carved lines. In the Shang Dynasty, this kind of carving represented the inscription in the oracle bones, such as the inscriptions of tortoise shell and animal bones in Yin Ruins. This kind of carving on the shell and bone were widely used to predict the future and document historic events ("Table III").

From the Spring and Autumn Period to the Han Dynasty, the decoration of bronzes also used carving techniques. For example, the feast, fishing, hunting and seizing pattern pot unearthed in the Baihuatan tomb of the Warring States Period in Sichuan province ("Table III") is famous for its beautiful carving patterns.

According to the above, it can be seen that the needle-carving technique on surface of lacquerware has been produced in the Neolithic Age. Therefore, the needle-carving technique of lacquerware in the Warring States Period should be the result of interaction and synchronous development with other handicraft industries.

IV. FROM WITCHCRAFT TO RITUAL SYSTEM: THE CHANGE OF THE FUNCTION AND SYMBOLIC MEANING OF LACQUERWARE NEEDLE-CARVING DECORATION IN WARRING STATES PERIOD OF CHINA

In the early days of Chinese society, carving had very special functions and symbolic meanings. In "The Course of..."
The act of "carving" is endowed with vertical and curved symbols accumulated into writing and the state affairs." With the "outstanding figures invented writing", these vertical and curved symbols accumulated into writing and formed grammar. The act of "carving" is endowed with special political and social significance. Graphic decorations with witchcraft meanings are carved on oracles, jades, pottery, bronzes and other objects, thus give these objects the nature of witchcraft. Therefore, the carving behavior also has a certain "sacred" meaning.

In the Pre-Qin Dynasty, this kind of sacred carving decoration was not allowed to be added to artifacts privately. Such as Xunzi recorded, "It is the duty of a Supervisor to examine the product quality of each craftsman, check the production of each season, classify the quality of the product, enhance the durability of the product, make the equipment and appliances easy to use, and dare not make carved pattern appliances and dresses with colored pattern privately."

The carving pattern on the surface of objects also means eternity and immortality. For example, in Mozi, "We should warn the next generation that they should not have more words on bamboo and silk, more carvings on stones and more inscriptions on the surface of bronzes than we have." Lushi's Spring and Autumn Annals written: "We should engrave our merits and achievements on stone and bronze ware." The Book of Rites recorded: "The surface of bronze tripod usually inscribed words that people inscribe these words to praise their ancestors and let the next generation know their virtues and achievements."

Comparing with painting decoration in general sense, the reason why the ancestors carved decoration on utensils was that they believe this expression method has the eternity of super-space. Moreover, this kind of expression with "eternity" can establish the connection with gods and ancestors. From the perspective of visual perception, the hidden carving makes the objects have a sense of mystery and transcendence.

As a part of symbolic representation of Chinese ritual system, carving patterns became popular in the Warring States Period, and was a symbol of luxury and unfavorable to the national economy and people's livelihood in a specific period.

Xunzi believed that the purpose of carving decorations on utensils was to establish ritual system and distinguish grades. For example, in Xunzi,"People carve complex decorations and embroider beautiful and bright patterns to meet the visual needs of appreciating beautiful things. So ritual system is used to control people's desires", and "Therefore, people carve complex patterns on utensils and embroider gorgeous decorations on clothes in order to distinguish social classes."

The Book of Rites also recorded: "When the state is in financial straits, people should not carve patterns on carriages, design complicated decorations for armor, carve patterns on the surface of food utensils, wear luxurious silk shoes and feed horses with grain.", and Confucius' attitude towards the carvings". In order to embody equality with ordinary people, officials should only live in ordinary houses, wear frugal clothes, not pursue luxurious palaces, not carving patterns on carriages and utensils, and not eat different meals with others. This is the behavior of a gentleman in the past.

Mozi opposes the carvings and believes that it is not beneficial to the national economy and the people's livelihood. He wrote that "It's not that the carvings and gorgeous colors are not beautiful, but they are not consistent with the virtues of the wise monarch and the interests of the people."

Han Feizi also objected to carving decorations on utensils. He holds that "When the Xia Dynasty perished, the Shang Dynasty gained the world. They made flags with nine ribbons, carved utensils, engraved cups and spoons, built white walls and stairs and woven rich pattern blankets. It's very luxurious. As a result, there are fifty-three disobedient parties. The monarch only pays attention to gorgeous decoration, and fewer and fewer subjects say they are willing to obey. So I think thrift is the first principle of governing the country."

Guan Zi also holds the same attitude that "Craftsmen who only carve on the surface of the objects and women who are busy embroidering colorful patterns will lead to poverty in the country".

All the above-mentioned literatures oppose the overelaborate carving patterns of utensils as excessive luxury behavior which is not conducive to the national economy and people's livelihood. It also shows the application of carving technique on the surface of utensils was general in the pre-Qin period. So Wang Chong in the Han Dynasty strongly opposed" The bronze ware is engraved with the shapes of clouds and thunders. The clouds and thunders in the sky are more like gods than other things. The images of clouds and thunders cannot become gods. How can the images of other things become gods?"(see Lun Heng).

This kind of engraving for the purpose of establishing ritual system and distinguishing grades deviates from the principle of "practicality" and tends to be more luxurious for decorative purposes.

In addition, the carving and decoration on the utensils have the meaning of pursuing immortality and symbolizing the ritual system at the same time. As a means of engraving, the needle-carved decoration on the Warring States lacquerware retains the symbolic meaning from "witch" to "ritual".
The carving behavior and carving pattern with witchcraft meaning reflected the early ancestors in the relentless pursuit of eternity, and gradually formed a tradition of "carving" in the Warring States Period.

Over time, this tradition has gradually expanded the symbolic significance of carved decorations and carved objects, that is, ancestors carved decorations on objects to show their hierarchy and religious concepts. But this logic order is reversed as time pass. An object has meanings of religious and ritual system because someone carves decoration on it.

Therefore, carving decoration strengthens the "divinity" of utensils. The images of immortals, horses, chariots, beasts and clouds appearing on the surface of needle-carved lacquerware in the Warring States Period were activated and sensed by the expression of needle-carved dark patterns, so that the carving behavior became a carrier of history and ancestor worship.

V. THE INFLUENCE OF NEEDLE-CARVING TECHNIQUES ON LACQUERWARE IN THE WARRING STATES PERIOD

Needle-carving techniques of lacquerware in the Warring States Period evolved into many kinds of decorative techniques through the continuous development. From the point of view of technological principles, it can be said that needle-carving techniques was the source of such techniques as "inlay gold", "inlay silver", "carving lacquer" and "filling lacquer" in ancient lacquer technology of China.

Needle-carving techniques of lacquerware have begun to appear in the Spring and Autumn Period and the Warring States Period, and become mature in the Han Dynasty.

In terms of the content of needle-carving, the information about the production of lacquerware needle-carving inscriptions in the Han Dynasty is more detailed than that in the Warring States Period. For example, the inscriptions "A Royal Plate for storing, Thirty years, October, Zhao offered it respectfully" on the lacquered plate of the Liu Sheng Han Tomb in Man city left behind the information of the dedicatory (Zhao) and the user, King Jing of Zhongshan country (Royal). The 12 cups and 11 lacquered plates which unearthed from the same tomb were all needle-carved or written the inscriptions with similar contents with red lacquer.

In terms of decoration, the needle-carved patterns of lacquerware in Han Dynasty are more varied, such as the needle-carved hunting pattern lacquer pottery unearthed from No. 3 Mawangdui Han Tomb, which carves geometric patterns, the needle-carved patterns of immortals riding dragon and hunters pursuing deer with spears on the lacquer pottery with needle. The fine pattern of the lacquerware also shows the maturity of the needle-carving techniques of the Han Dynasty lacquerware.

Besides, the Han Dynasty began to fill in gold and silver in the needle-carving decoration. For example, the cup which unearthed from Tomb No. 3 and No. 6 of Han Wuzuo Feng tombs in Hubei Province were filled with gold in the needle-carving animals and cloud patterns. This is the earliest example of the technique of "inlay gold". These two lacquer cups, as the earliest lacquerware objects, were also the source of the popular lacquer technology in the Song Dynasty.

Sprouting in the Han Dynasty, the technique of "inlay gold" became mature in the Song Dynasty. Four pieces of lacquerware with needle-carvings un-earthed from the tomb of the Southern Song Dynasty in Jiangsu Province were exquisite and unusual. They were the lacquer box in the shape of lotus petal of flower figures with inlay gold, the rectangular red lacquer box with inlay gold and color, the rectangular lacquer box with inlay gold and markings, the rectangular box with inlay silver and markings. These four needle-carved lacquer wares are full of landscape, trees, stones, bamboo, feathers and pavilion figures patterns. These use the brushing techniques inherited from the Han Dynasty. The depiction is very detailed, skilled and complex.

Needle-carving techniques in Song Dynasty than the previous dynasty are more skilled, and integrated with painting. Its decorative patterns focus on depicting natural interest, more worldwide, common and fresh.

Owing to the prevalence of lacquer carving and filling, in the middle and late Ming Dynasty, the inlay gold object more used multiple crafts on the lacquered surface at the same time. In the Palace Museum, the earliest inlay gold lacquerware was in the Xuande title of Emperor Xuan Zong's reign in Ming Dynasty. This lacquerware combines the lacquer-filling technology with the inlay gold technology.

Later, it also combines the lacquer-drawing technology with the inlay gold technology. The inlay gold technology in Ming and Qing Dynasties is more used in conjunction with the lacquer-filling technology.

Typical pure inlay gold lacquerware from Zhutan Tomb of King lu in Shandong Province. One is a gold cup top lacquer box. The outer part of the box is painted with vermilion lacquer. The four walls and the top of the box are painted with gold cloud and dragon patterns. The other two gold cloud and dragon pattern boxes are decorated with vermilion lacquer inside and outside the box. The outer wall of the box is also painted with gold cloud and dragon patterns, which is the same as that of the cup top lacquer box. These three pieces of gold lacquerware, as Royal objects, highlight the very high level of inlay gold technology in the Ming Dynasty.

Lacquer-filling technology, also known as inlay color, carving and filling, filling and so on, refers to the technique of filling color in the carving decoration. It is consistent with the operation of the inlay gold technique, but filling in more colors, or utilizing various techniques at the same time, such as drawing with costly paints in gold, stacking and so on. Lacquer-filling and inlay gold are two different techniques, but they are actually developed on the basis of early needle-carving technology. In Ming Dynasty, Huang Cheng summed up the inlay gold and inlay color. "Inlay color likes inlay gold and not scratched, and not fill in color," he
concluded, in *Xiu Shi Lu*. [19] It can be seen that development of techniques of inlay gold and color has been quite complete in the Ming Dynasty.

Carving and filling lacquer techniques also have various nicknames everywhere. It is called "deep carving" in Yangzhou, and "carving" or "carving and filling" in Beijing, and are called "carving lacquer" in Suzhou and Shanghai.

With the development of the decoration technology, the difference of decorating with gold, silver or paints has evolved after the engraving decoration.

As Yang Ming summarized, in the preface of *the lacquering craft*, "there are complicated designs, which are countless".

Then, the craftsman use more advanced cutting tools to deepen the depth of carving, turn the engraving techniques into embossment crafts, and carve more smooth and slender lines, such as the knife with hook in Yangzhou area. When craftsman was carving with this knife, the lacquer filament will rise from the back edge. So the engraved lines will be very smooth.

**VI. CONCLUSION**

The needle-carving technique of lacquerware in the Warring States Period was the result of continuous interaction and reference among various handicraft industries at that time. It retained the nature of witchcraft and sorcery of the early Chinese carving, and embodied the purpose of establishing ritual system and distinguishing grades. It was the embodiment of the "Wu Le Gong Ming" system during the pre-Qin period.

After going through embryo stage of the Spring and Autumn Period and the Warring States Period. Lacquerware needle-carving techniques In the process of continuous evolution developed large number of new decorative techniques, such as "inlay gold", "inlay color" and "carving lacquer". They are all carved on the surface of lacquer with sharp tools.

The needle-carving techniques of lacquerware in the Warring States Period directly affected the "cone painting" technique of lacquerware in the Han Dynasty, and had great significance to the later inlay gold and carving and filling lacquer techniques.

**REFERENCES**


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