You Are What You Eat: Cooking Pots as Ritual Objects in Ancient China

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MANY VISITORS may not have noticed that the first object they see when entering the recently renovated Hotung Gallery of China is, in a way, a cooking pot (1). The giant 18th century bronze incense burner has, indeed, its ultimate prototype in a ding, a food vessel developed in Neolithic (circa 6500–1700 BC) China that acquired a prominent ritual role during the Bronze Age. Similar examples can be seen among many precious items in the British Museum Chinese collections, for instance a Southern Song dynasty (1127–1279) Longquan celadon incense burner based on the shape of a Western Zhou (circa 1100–771 BC) gui (food vessel) (2), a Ming dynasty (1368–1644) enamelled flower vase in a Bronze Age wine vessel zun form (3), as well as a modern jade jue artwork (4), which refers to a drinking vessel that originated in the Neolithic period.

However, we seldom link these objects with busy kitchen or bustling banquet scenes today, especially after the long development of antiquarianism. Moreover, modern gallery settings, such as spotlights, solemn plinths and lofty display cases have never been successful in bringing out or even emphasising the monumentality of Chinese vessels, especially for those with ritual roles. But a question remains: why vessels? How did the forms of ancient food and drink vessels gain such prominence in Chinese culture, with significance in various contexts, from ritual to religious, from political to artistic? Did their original function, related to eating and drinking practices, play a role? As recent research on crop domestication and farming practices in China progresses, it now seems increasingly possible and necessary to review these ancient Chinese vessels from a “food and drink” perspective.

Take ding and li for example. They are both tripod vessels that made their first appearance in China back in the Neolithic period, which are probably the two most referenced shapes in Chinese antiquity. As ritual vessels, tripods have often been regarded as a symbol of power in Chinese literature, as indicated by household proverbs, such as “w6ng ding zhongyuan” (間關中源, to pursue the tripod in the central plain—attempt to usurp the throne). Their later development as incense burners has not taken away their ritual role either. They remained important objects for many secular or religious occasions, from family offerings to ancestors to Buddhist or Daoist temple ceremonies. Some incense burners in later China even show combined traits of both ding and li (5). However, these were indeed two distinct
types of vessels back in Neolithic China and their distribution has, to some degree, revealed the border between two climate zones: while ding vessels were mostly used in the more humid and warmer south-east of the country where rice was the dominant crop, li vessels seem to have made their first appearance in the drier and cooler north-west, where millet was domesticated. As major cooking utensils of the time, the presence of ding and li in different regions may, therefore, have indicated or even corresponded with different food resources and diets. Could the development and spread of these tripods, as well as their variations, be related to the movement of peoples and the adoption of different diets? Did the “food” dimension of these vessels contribute to the making of their ritual roles, as it relates to the control and presentation of fundamental food resources? The concern of the “food and drink” dimensions can certainly shed new light on the origins and development of these two types of tripod.

Indeed, the “foodways” in China, which started to take shape 10,000 years ago, along with the process of plant and animal domestication, have left an indelible mark as well as enduring legacy for Chinese culture. The so-called “five grains” (usually referring to foxtail millet, broomcorn millet, rice, soybeans and wheat), which were either native to and domesticated within China, or brought into China during the Neolithic period, are still the major staples or economic food in present-day China. The main culinary practices, which have been used on the two native crops—rice and millet—may, therefore, have even contributed to the “passion” for vessels in China.

Excavations and archaeobotanical studies over recent decades have confirmed that rice was first cultivated in the Yangtze Valley, where copious rainfall made irrigated paddy fields possible, while millet dominated the drier regions of the north around the Yellow River. Although grinding stones (each set usually contains a nong stone and a meibang grinding roller) have also been found, boiling and steaming of dehusked full grain seem to have been the major ways of cooking in both northern and southern China. In contrast to the grounding and baking of wheat and barley in western Asia, such processing methods of rice and millet may have contributed to bringing about some distinctive vessel shapes used in China. Vessels with a relatively deeper belly, which can hold cooked grains or semi-liquid food, such as porridge, instead of shallow plates, have always been in favour. Tripod vessels, suitable for boiling and steaming with larger heating surfaces, were widespread in both the north and the south. Moreover, there seems to have been an increasing diversity in vessel shapes along with the development of farming.

The world’s earliest extant pottery vessel is a rounded-bottomed pot from the Yuchanyan cave site (16,000–12,000

\(^1\)Wu, 1995.
\(^3\)Zhao, 1998; Fuller, et al., 2007 and 2009.
\(^4\)Grinding stones have been regarded as an indicator of the beginning of agriculture in Neolithic China, but recent studies have shown that they may not have been used to process cultivated crops but rather acorns. Liu, et al., 2010.
BC) in present-day Hunan province, where the practice of collecting and using wild rice can also be identified. The pot itself is, however, very coarse and of a very simple form, with a wide mouth, a tapering body and a round bottom, which may not relate to any specific function (6). It could have been used for collecting, storage or simple cooking. In southern China, variations of vessel profiles seem to have started at Shangshan, Zhejiang, where domesticated rice made one of its first appearances in China. Besides round-bottomed vessels, like the one at Yuchanyan, at Shangshan there were also pots with handles, jars with narrow mouths and large bellies, as well as early stemmed vessels like dou. The earliest use of three-footed vessels in southern China, known to date, may have come from Kuahuqiao (6000–5000 BC) in Zhejiang, where half of the rice consumed at the site was cultivated, although a variety of plants and animals were also used. In this case, small earthenware supporting legs were found to be used under round-bottom vessels to elevate the latter, allowing heat resources to go underneath (7). A mature version of the ding tripod appeared at the Chengtoushan site in Hunan province (8), where some of the earliest rice paddy fields and irrigation systems in China were found, dating to 4500 BC. As a long occupied site, Chengtoushan contains remains from three cultural periods (Daxi, Qujialing and Shijiahe) from 4600 to 2000 BC. During this period, vessel forms continued to vary, with every type of profile to meet the different needs of society: from ding tripods, with or without lids, for cooking, large jars, with narrow necks and mouths, probably for storage, ring footed or flat-bottomed bowls and high-stemmed bowls, probably for serving (9). However, it seems pottery vessels of various shapes in southern China never acquired salient status in rituals. This situation is evident in the Liangzhu culture (3500–2000 BC), one of the most complex and developed societies in late Neolithic southern China. The tomb M12 at Fanshan is a top-ranking elite tomb of the Liangzhu culture, which is usually regarded as the “king’s tomb”. The tomb is filled with 647 jades of top quality of the time, including the so-called king cong, the largest jade cong so far found, weighing 6.5 kg. However, excavation and reconstruction work of the whole tomb have only uncovered a total of four pottery vessels, nothing compared to the overwhelming amount of ritual jades. These four humble pots—one ding tripod, one dou stemmed cup, one jar and one urn—were not even illustrated in the excavation report. They were unlikely to be ritual objects, but remained daily utensils to be used in the afterlife of the Liangzhu “king”.

Food and drink vessels, however, seem to have already acquired the role of ritual objects in the Yellow River Valley from the mid-Neolithic period, with those related to brewing and drinking practices standing out. In the mid Yellow River Valley, Yangshao culture (5000–3000 BC) was reaching a peak of social complexity in its mid-later phases. Large palace structure and ritual venues have been unearthed at many Yangshao culture sites of this period, such as Xipo in Henan and Dadiwan in Gansu. A representative Yangshao cultural vessel, the jiangdiping amphora with a pointed bottom (10), has been one of the most common finds at these palace sites or ritual venues. It was previously believed that these amphorae were used to fetch water from rivers, as their profiles would allow them to stand up straight when they were filled, making it easier to be pulled up from water. Recent studies have, however, demonstrated that they are more likely to be brewers of probably the earliest beer in China, as well as beer drinking vessels.

Analysis of residue in a series of pottery vessels, including jiangdiping amphorae from Mijiaya, a late Yangshao culture site, has identified phytoliths from broomcorn millet, various tubers, a variety of wild and domestic wheat and barley, and most importantly, ions of the principal compo-
nent of beerstone,\textsuperscript{15} a byproduct of beer brewing using barley.\textsuperscript{16} This research may have unlocked a 5000-year old beer recipe in China.

According to a series of ethnographic materials, Li Liu, a professor of archaeology, and her team at Stanford University suggest that the Yangshao people may have drunk their beer as a group (communal siphoning)\textsuperscript{17} directly from the jiandiping amphora, with straws made from bamboo or reed. This way of consuming alcohol may have also suggested emphasis of “group solidarity and alliance forming”.\textsuperscript{18}

In the lower Yellow River Valley, drinking practices seem to have taken another form, indicated by more various and sophisticated drinking vessels. Both the Dawenkou culture (4300–2600 BC) and the Longshan culture (2600–1900 BC) had vessels for storing and serving alcoholic drinks in a great variety of forms, such as guohuangbei stemmed cups, handled mugs, gui tripod pitchers and he spouted pots (11). A large amount of such vessels have been unearthed

\textsuperscript{5} Yasuda, 2002.
\textsuperscript{6} Yuan, 2000.
\textsuperscript{8} Zhejiang Institute of Cultural Relics and Archaeology and Pujiang Museum, 2016.
\textsuperscript{9} Zhejiang Institute of Cultural Relics and Archaeology and Xiaoshan Museum, 2004.
\textsuperscript{10} Hunan Institute of Cultural Relics and Archaeology, 2007.
\textsuperscript{11} Zhejiang Institute of Cultural Relics and Archaeology, 2005.
\textsuperscript{12} Zhejiang Institute of Cultural Relics and Archaeology, 2005.
\textsuperscript{13} Liu, 2017, p. 30.
\textsuperscript{14} Liu, 2017.
\textsuperscript{15} Wang, et al., 2016.
\textsuperscript{17} Liu, 2017.
\textsuperscript{18} Liu, 2017, p. 24.
from tombs. One Dawenkou cemetery at Lingyanghe, Shandong, has yielded 663 goblet-shaped cups, comprising 45% of all finds, suggesting drinking at feasts or banquets was an important part of contemporary social life. A new object in the renovated Hotung Gallery has also illustrated the particular role of drinking at feasts or banquets in social life. It is a white pottery gui pitcher with a high-rising sprout and three bag-shaped legs, a typical vessel from the Longshan culture (12). White pottery such as this was made predominantly of kaolin clay and fired at up to 1000 degrees centigrade. This is probably the best quality pottery achieved in the Neolithic period. The manufacture and use of such fine vessels certainly indicate the role that drinking practices played at ceremonial feasts or ritual offerings. However, the various forms of drinking vessels developed in the lower Yellow River Valley may suggest an “individualised drinking tradition”, in contrast to the communal siphoning in the Yangshao culture.

In any case, the widespread custom and the increasingly important social role of drinking practices along the Yellow River Valley from the mid-late Neolithic period may have shed light on the prosperous life of the time. Brewing is certainly not the most efficient way of using stored grain without much surplus. Looking at the abundance of food and drink vessels, it may not be overly exaggerating to say that the mid-lower Yellow River Valley had unprecedented success with its agriculture sector. Indeed, this was the period when all “five grains” started to enter and thrive in this area. Besides millet, which has long been domesticated and grown there, rice also pushed into present-day Henan province, just to the south of the Yellow River, by 2500 BC. Wheat and barley, as suggested by the 5000-year-old beer recipe mentioned above, may have also reached this area much earlier than previously thought, at the end of the 3rd millennium BC. Besides making various delicious drinks and excessive drinking possible, the cultivation and use of multiple grains in this area may have, in a way, contributed to enhance environmental risk-resistance capabilities of the societies there. With a broad selection of food resources, which could cope with a wide range of climates, one or even two crops failing in a year would not have been a catastrophic event. This may also be why this area continued to thrive into the Bronze Age, when many other well-established Neolithic societies, even the most sophisticated ones like the Liangzhu culture, started to decline around 2000 BC.

Indeed, the well-established and successful subsistence strategy, based upon the farming of multiple grains, seems to have continued into the Bronze Age in the Central Plains, as well as the related eating and drinking practices. Foxtail millet, broomcorn millet, rice, wheat and soybeans, the “five grains” which have been grown in this area since the mid-late Neolithic period, have also been found in large quantities at Erlitou, an early Bronze Age site in the Central Plains, long regarded as the capital of an early Chinese state. Probably not surprisingly, the earliest bronze vessels (as well as the earliest ritual bronzes) found at Erlitou have also largely followed the forms of the pottery drinking vessels extensively used in the area from the late Neolithic period, such as jue goblets, jia wine warmers.
and he spouted pots (13).25

As the use of ritual bronzes gradually became the norm in the Central Plains from the 17th century BC, the tradition continued to develop to include more and larger objects. In Shang dynasty (1600–1046 BC) hoards of ritual bronzes (circa 1400–1300 BC) found at Erligang, Zhengzhou, fangding (square ding) with a square box supported by four legs were found made of bronze in an unprecedented size, measuring up to 100 cm tall (14).26 Later, the Houmuwu (后母戊) ding from the late Shang dynasty, the heaviest vessel by weight, weighed more than 800 kg. The impractical size and weight of these vessels further demonstrate their absolute (also very obvious) status as ritual objects.

Although prominent ritual objects now, it seems, at least for the elites, ritual bronzes had not lost their original function as food and drink vessels, however impractical they might look. In the tomb of Lady Fu Hao (circa 1200 BC), the only intact Shang royal burial tomb so far found, there appeared to be an apparent distinction in terms of deposition for bronze vessels in the forms of food and drink vessels and other burial goods. According to the excavation report, burial jades, ivories, lacquers and shells, and even some personal items like bronze mirrors and bone hair pins, have been found within upper layers of the filled earth of the grave pit, while nearly all bronze vessels were placed at the bottom of the grave pit in two neat groups—large food vessels such as yan steamers, round or square ding were mainly on the north side, while most drinking vessels like zun, lei, jia and gong were placed in the south.27 Such a layout may not only suggest the prominent status of ritual bronzes, but also their specific use related to eating and drinking practices, which distinguishes them from other sophisticated artefacts that served as ritual objects in the tomb.

Some objects from the tomb of Lady Fu Hao do show traces of use as well. The 72.2 cm tall ding, inscribed with the name "yajian", was definitely used for cooking, indicated by soot traces at its bottom and on its feet. The same name "yajian" also occurs on a set of five nao bells in the same tomb. These objects may have been tributes to Lady Fu Hao, which would have been used during her lifetime. Another more stunning object, which bears Lady Fu Hao's own name, is the santian-yan tri-steamer.

Yan steamers are probably the earliest rice cookers, consisting of a bowl placed above a li tripod with a perforated plate between the two. They were made in pottery as long

20 Liu, 2017.
21 Cunliffe, 2015, pp. 61–68.
22 Zhao, 2015.
26 Henan Institute of Cultural Relics and Archaeology, 1999.
27 CASS Institute of Archaeology, 1980.
ago as 3000 BC in the Neolithic period. When placed over a fire, water in the lower tripod turned into steam and rose through the perforated plate, the steam cooking grains in the upper bowl. The vessel, therefore, definitely a specific cooking pot designed for a cooking method that goes hand in hand with grains, like millet and rice. On Lady Fu Hao’s sanlie-yun steamer, three large bowls were fitted onto a low “table” that has a hollow body to be filled with water. Traces of textile were found on the table, while soot traces can still be seen at its bottom and four feet, suggesting that it may have served grand dinners during Lady Fu Hao’s lifetime, and possibly the banquet at her funeral as well. I’an steamers like this, however, have never been found anywhere else. The sanlie-yun may have been a special commission for this powerful lady and military chief during the late Shang.

It is, however, important to note that food and drink vessels seem to have only played prominent ritual roles (while maintaining their utility function) for a long time in the Central Plains. In northern and southern China, bronze ritual vessels, in the forms of food and drink containers, were much rarer. It is probably understandable that pastoral nomads in the north would be less inclined to carry around bulky food and drink vessels, not to mention keeping a large number of them as ritual objects. Indeed, the lower Xiajadian culture and Zhuukaigou culture, which spread into present-day Inner Mongolia and northern Shanxi and Shaanxi, paralleling the early Chinese states in the Yellow River basin, have so far yielded very few bronze vessels. Most metal was dedicated to the making of tools and weapons.28

It is somewhat surprising to see that little interest in food and drink vessels as ritual objects was shown in the south, given it was the birthplace of domestic rice. Wu-cheng, a large settlement, and Xin’gan, the largest bronze deposit in southern China, are two major sites in Jiangxi, south of the Yangtze River, paralleling the late Shang dynasty (circa 1200–1000 BC). Both sites have yielded a large quantity of stone, jade and bronze objects, some of which even show close contact with the Shang.29 However, bronze vessels were only a minority compared to bronze weapons found there. At Xin’gan, there were wine containers such as lei and you, but no bronze drinking vessels at all.30

Another prominent site in the south, Sanxingdui (1600–1000 BC) in Sichuan, is best known for two sacrificial pits containing some extraordinary objects from Bronze Age China, such as massive bronze masks covered with gold foil and large upright bronze figures representing a high priest.31 However, only thirteen bronze vessels have been found among 6600 objects in these two large pits.32 Moreover, these vessels were not in the form or assemblages of the most common food and drinking vessels of the contemporary Shang dynasty. They only occurred in two forms—zun and lei (15, 16). Both are large wine vessels with flared mouths, wide shoulders and tapering bodies, low or high ring foot. In contrast to the neat layout of bronze vessels in the tomb of Lady Fu Hao, bronze vessels, deposited with other objects in the two major sacrificial pits at Sanxingdui, were obviously not treated as more specific objects than others. The way of deposit here also shows no particular relation between these vessels and specific eating and drinking practices. The zun and lei vessels found may not have been used or valued in the same way as they were within the Shang realm. They may have been expensive items, but probably were not an essential part of local life in terms of what they consumed.

The larger picture of the use of food and drink vessels in the Neolithic and early Bronze Age of China could shed some new light on our understanding of the distinct tradition of using ritualised food and drink vessels. As discussed above, food and drink vessels first acquired a dominant status in ritual practices in the Yellow River Valley from the mid to late Neolithic period. It is also where they further developed into sophisticated bronze vessels, taking up a prominent ritual role, unlike anywhere else in the world. The formation of a tradition in which food and drink vessels were highly valued may not have been an accident, but was deeply rooted in the well-established subsistence strategy in the area—farming of multiple crops and their specific processing methods: boiling or steaming when cooked as a staple, or fermented as beverage ingredients.

Similar vessel shapes and the specific use of them as ritual objects have, however, been relatively rare outside the
Central Plains. This may be because farming and culinary practices corresponding to the use of these vessels did not really reach regions beyond the Central Plains, or edged out other subsistence strategies there, for instance, hunting and gathering.

Indeed, in the Shiji (Records of the Grand Historian): “...the region of Chu and Yue is broad and sparsely populated, and the people live on rice and fish soups. They burn off the fields and flood them to kill the weeds, and are able to gather all the fruit, berries, and univalve and bivalve shellfish they want without waiting for merchants to come around selling them. Since the land is so rich in edible products, there is no fear of famine...” The land in southern China, in fact, was not intensively farmed until much later, during the Han dynasty (206 BC–AD 220) or even later, even if it was where rice started to be cultivated.

Indeed, the use of sets of bronze food and drink vessels as ritual objects had already started to decline and eventually disappeared after the Western Zhou dynasty, although individual object shapes or decorative elements could occasionally be revived among a contemporary group of ob-

jects. By the Imperial Age, bronze vessels had already mostly returned to the role of cooking pots and canisters.

When the forms of the Shang and Zhou (circa 1100–256 BC) ritual bronze vessels were revived and “revived” again in the later Han and Song dynasties, they were related to very different ritual practices and embedded with new social, religious or artistic significance. They were detached from actual eating and drinking practices, like the 18th century gigantic incense burner mentioned at the beginning of this article. However, objects (re)created in the form of these ancient food and drink vessels remain solemn objects that are valued in various social contexts, from palaces and temples, to scholars’ studios. People have been keen to copy or recreate ancient objects to link themselves with the past: emperors commissioned bronze, ceramic or jade vessels in ancient forms to demonstrate the legitimacy of their power, as well as moral order; scholars could build their reputation and status among their peers by collecting ancient vessels and displaying them; even a man on the street could present his taste and identification with the (probably imagined) past by using objects with archaic details.

However, the beginning of these vessels gaining their prominent status in China goes back to the time when they were cooking pots, bowls or goblets. Their relation with power may have been, after all, built up through their connection with food and drink in the first place. When they were still food and drink vessels, what they held during a feast would have been the result of the annual harvest, the ownership of fertile land, organised labour, as well as local knowledge of plants, soils, seasons and weather. These are all, indeed, the keys to survival and success in an agrarian society and, therefore, symbols of wealth and power.

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