Marjorie Akin (马乔里・厄琴)
James C. Bard (詹姆斯・巴德)
Gary J. Weisz (加利・韦兹)

Asian Coins Recovered from Chinese Railroad Labor Camps: Evidence of Cultural Practices and Transnational Exchange
在中国铁路劳工营发掘的亚洲钱币：文化实践和跨国交流的证据

ABSTRACT

Asian coins carried and lost by Chinese workers as they lived and worked in camps along the route of the Northern Pacific Railroad can illuminate daily activities, beliefs, and the movement of people and supplies along the rail lines during their construction. A review of what is known about recovered Asian coins in Chinese work camps is compared with recently recovered examples. The role of material recovered by surface collection and the conclusions made possible with them are discussed.

在北太平洋铁路沿线劳动和生活的中国劳工携带和遗失的亚洲钱币反映了他们的日常生活、信仰以及铁路修筑过程中人口及物资的流动。本文将比较研究近期发掘的钱币和已知的中国劳工营的钱币，也将考察并讨论地表采集的文物所扮演的角色，以及我们从中得到的发现。

Introduction

Asian coins recovered in North America were part of the material culture of two great socioeconomic movements: the North American fur trade and the movement of Chinese labor to North America. We focus here on the Chinese workers and the coins they left behind at railroad labor camps along the Northern Pacific Railroad (NPRR).

Coins are frequently found where Chinese railroad workers lived and worked. Analyzing these coins can be challenging because they all changed function when they were moved across the Pacific (Akin 1992a). Understanding why these coins were shipped and carried out of China illuminates the everyday activities in the camps, religious beliefs, and related practices of the workers. It also reveals trade patterns of goods and coinage moving out of and into southern China in the late 19th century.

Coins were developed in China about 2,600 years ago, and a multitude of Chinese words has been used to refer to various types. The most common word for the lowest-denomination brass coins in 19th-century southern China was *wen.* All the coins discussed here were often referred to in English as "cash," from a word for small copper coins used in southern India. The word "cash" was never used by the Chinese themselves, although it appears on some coins as part of English-language inscriptions.

The Asian coins most commonly found on Chinese railroad sites in North America are the Chinese *wen* and the Vietnamese *dong* (Figure 1). These coins, and the related Japanese *mon* and Korean *mun,* have a square hole in their centers and Chinese characters on one or both sides. *Dong* were modeled on the Chinese *wen*, although they were often produced from zinc instead of the various copper alloys used by the Chinese.

A full description of Asian coin types recovered in North American Chinese communities of all sizes, as well as Asian coins used by Native Americans and other communities, can be found in an earlier article in this journal (Akin 1992b). The most essential characteristics of the Asian coins that apply to this study area are:

1. They were cast of several metals, primarily copper alloys (brass) for Chinese *wen* and Japanese *mon*, and zinc for Vietnamese *dong* (that oxidize easily and deteriorate rapidly in soil);

2. They circulated in Asia for hundreds, sometimes thousands, of years, making it difficult to use them for dating except as assemblages;

3. They varied in size according to when and where they were made, with some sizes preferred for particular uses; and

Historical Archaeology, 2015, 49(1):110–121.

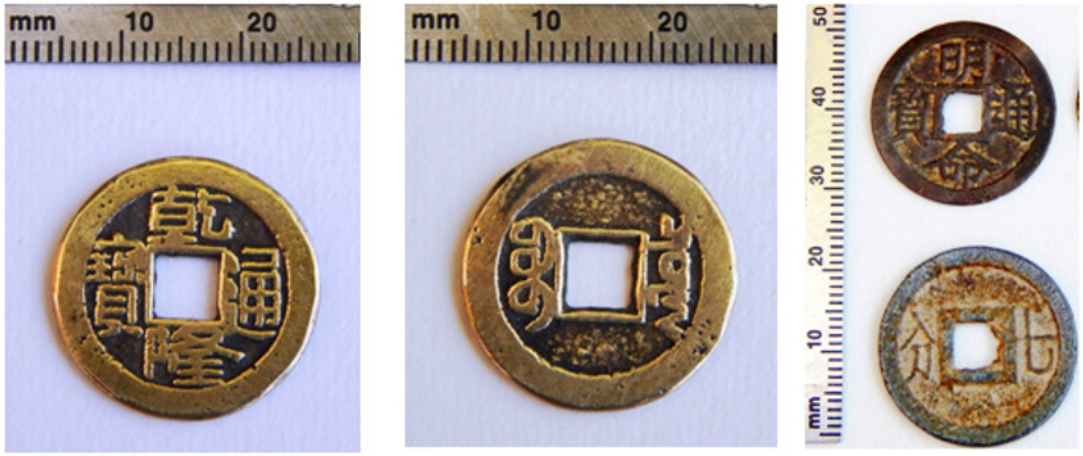

FIGURE 1. *Left*, typical *wen* obverse and reverse; *upper right*, typical *dong* obverse; *lower right*, typical *dong* reverse. (Photos by M. Akin, 2014.)

4. They were never used as money in North America, but were imported for many other uses, such as gaming pieces and talismanic items, and were employed in folk medicine.

The unusual features of Asian coins, as used in North America, provide glimpses into the daily life and the few comforts of the work camps. If the coins had been used as circulating currency (money), different things could be learned from them; yet there are aspects of daily life in the railroad camps that can be learned through these coins.

History and Archaeology of the Northern Pacific Railroad

Once completed in 1883, the NPRR extended from St. Paul, Minnesota, to Tacoma, Washington, and Portland, Oregon. Construction began in 1870, but it was many years before the NPRR had its "Golden Spike" ceremony at Gold Creek, Montana, on 8 September 1883. The railroad served a large area and provided the means to transport farm products to market and to bring goods and supplies to the Pacific Northwest.

By the spring of 1881, an army of men followed surveyors to northern Idaho and western Montana as full-scale railroad construction began. As summarized by Boswell (2014:11), waves of tree fellers, graders, and track layers did their work in northern Idaho and kept moving east to meet similar work teams moving west through Montana. Draftsmen, blacksmiths, laborers, teamsters, and carpenters comprised the force of as many as 5,000 men, nearly two-thirds of them Chinese (Figure 2).

Hired through labor contractors in San Francisco and Portland, they were often divided into gangs of 40 men under the leadership of a Chinese "boss" or foreman who received and distributed their wages. The Chinese were regarded as the hardest workers and were given many of the most dangerous tasks. In the mountainous areas near Cabinet Landing in Bonner County, Idaho, the Chinese workers navigated with ropes down steep cliffs, drilled holes, and then set dynamite charges before they were hoisted back up to safety. Some did not survive the rock blasting (Merritt et al. 2012). A detailed review of the Chinese and the NPRR is provided by Merritt (2010:154–175).

As work proceeded, new work camps were set up and became the "Front." The workers lived and staged their operations there just long enough to perform their jobs. Boswell (2014:13) noted that the Front was called "the largest moving city in the world." Some camps housed all of the labor force, but in others the Chinese were completely segregated with their own food supplies and facilities (Landreth et al. 1985).

The Chinese workers occupied work camps along the Front between 1881 and 1883 (Merritt 2009, 2010; Merritt et al. 2012; Weisz 2013, 2014; Boswell 2014). Temporary camps

FIGURE 2. Chinese railroad construction workers building the Northern Pacific Railroad grade along the Clark Fork River, ca. 1882. (Oregon Historical Society Collection, Image 002822.)

were occupied for brief periods of weeks or months and then permanently abandoned, but some long-term settlements remained in use for various purposes after the construction moved on. Several Chinese NPRR work camps have been identified in northern Idaho and western Montana (Figure 3).

Currently there are no known descriptions of camp life written by the Chinese workers themselves. The available historical documents are usually written in English. A fuller picture of the culture, lifeways, and practices of Chinese immigrant workers may be obtained elsewhere, from the sites of long-term camps, towns, and city Chinatowns. But the short-term camps offer something the long-term settlements cannot: tight dates for the loss or discard of the artifacts found there. Unlike similar short-term camps at some mines, farms, levees, and other workplaces, railroad camps are generally distributed in chronological order along a railroad line being built from one place to another, during a defined (and well-recorded) time period.

Food, liquor, medicine, and various novelties were constantly flowing from Guangdong toward America for Chinese workers who could afford minor luxuries from home. Gaming equipment was included in the regular exports to America. Equipment for fan-tan (*fāntān*), a gambling game, included large numbers of coins that were removed from circulation in China immediately before being shipped abroad. Gambling, a popular pastime, appears to have been tolerated by the railroad authorities (Boswell 2014:14).

Surface Collecting as "Default Methodology" in Remote Settings

None of the temporary NPRR work camps has been systematically surveyed or excavated. Small, almost ethereal sites in remote locations do not attract much funding for formal survey and excavation. The same miserable weather and difficult living conditions that made the original railroad construction work so challenging also make these camp locations challenging and expensive to excavate, but these camps have attracted other types of study. Like many other similar places along the rail lines, the work camps discussed here have been visited by railroad history buffs and individuals who like to collect the material remains left behind at the

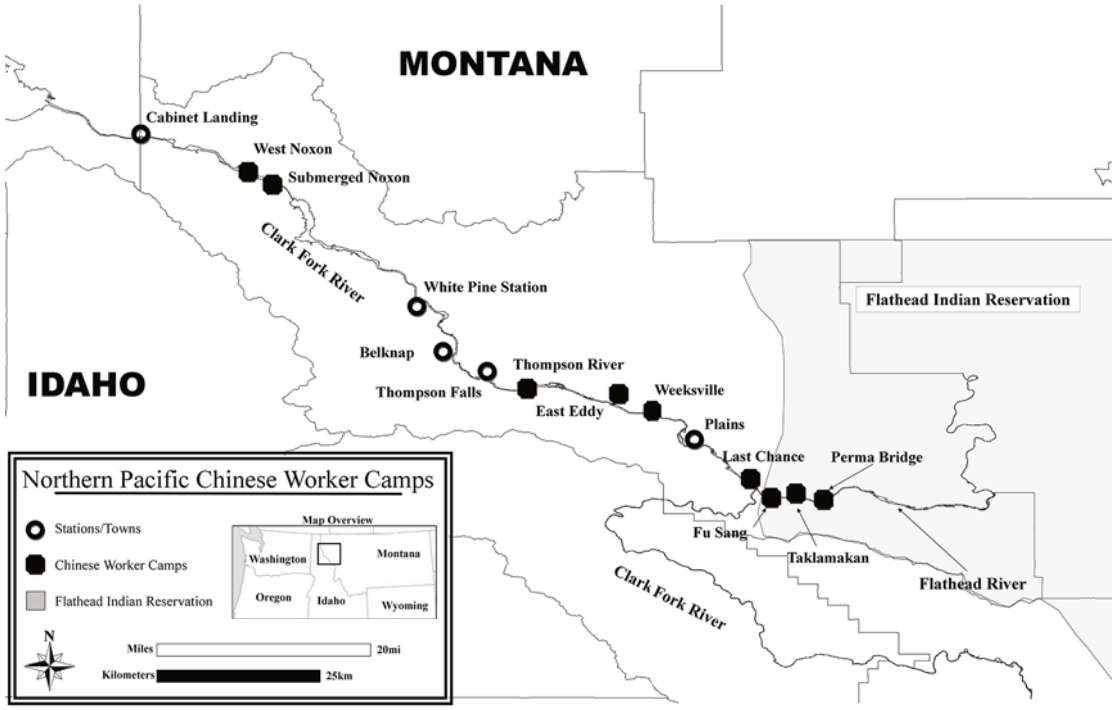

FIGURE 3. Chinese Northern Pacific Railroad work camps. (Map by Christopher Merritt, 2014.)

camps. This activity, also reported in other studies in this issue, has been going on for decades, done with a range of skill and care, depending on the collectors' knowledge, expertise, and intention to share findings.

Asian coins were recovered from several Chinese NPRR camps by amateur historian Gary Weisz. Coins were visible on the surface when he visited the sites. Weisz was formerly employed by the Northern Pacific Railway (the renamed Northern Pacific Railroad), which later became the Burlington Northern Railroad. He had access to many of the former NPRR work camps, where he collected exposed coins and other artifacts, and carefully recorded their provenience. While assisting archaeologists conducting data recovery of historical archaeological sites in Sandpoint, Idaho, he began collaboration with Dr. James C. Bard to further both public and professional appreciation of the rich numismatic history contained within these former NPRR work camps (Bard and Weisz 2012). The authors focus here on the behavior represented by the coins and what the coins can tell researchers about transnational exchange and cultural practices.

Authors Jim Bard and Gary Weisz met in 2006 during the data-recovery phase of the Idaho Transportation Department's Sandpoint Archaeology Project. Located adjacent to the tracks that belonged to the NPRR in 1882, the town of Sandpoint sprang up quickly and hosted a small Chinese settlement within the thriving mix of hotels, mercantile establishments, saloons, and restaurants. Weisz shared his knowledge of the railroad and its relationship to Sandpoint, developed over years of study and work, with Bard and the project's historical archaeologists Robert M. Weaver and Dr. Mark S. Warner. Information and photographs from Weisz's informal surveys of the work camps were shared with professional archaeologists to ensure the permanent recording of his findings and to help deepen the overall understanding of relationships between the town and the NPRR. The fruitful collaboration between Weisz and the Sandpoint team continued through the reporting phase, when it was expanded to include Dr. Margie Akin, who helped with the identification of the *wen* and *dong* recovered from Sandpoint and the railroad work camps.

Interpreting Asian Coins Found along the NPRR

Most Asian coins recovered in association with railroad camps come from two countries, China and Vietnam, with Japanese coins appearing occasionally as outliers. The non-Chinese coins were mixed with Chinese coins before leaving China.

Chinese Coins

Most *wen* recovered in North America date from the Qing Dynasty (1644–1911) and range in diameter from about 18 to 28 mm. Qing *wen* have four Chinese characters on the obverse (front) that say "circulating currency," along with the *nien hao*, or reign name of the current emperor. Each emperor, in consultation with historians, astrologers, and political advisers, chose a slogan-like name to be used instead of his personal name. An American equivalent might be a reference to the "Great Society President." No individual year of production is on the coin, but the reign name gives the range of years during which the coin was made. Standard references for Qing Dynasty *wen* include Krause and Mishler (1985), Jen (2000), and Hartill (2003, 2005).

Almost all Qing coins bear mint names on their reverses indicating where they were cast or struck. The mint name is a single syllable written in the phonetic Manchu script, or as a Chinese character, or both. Qing *wen* all have a raised rim—equal in height to the height of the characters, but varying in width—around the edge and surrounding the central square hole. Qing *wen* are composed of brass or copper in varying alloys with the exact content varying according to the location and year of production (Wang et al. 2005). Despite official standards, metallic compositions of *wen* vary widely, resulting in different types and degrees of corrosion, even in the same archaeological context.

Until 1889 all *wen* were cast in molds, with considerable weight variations. All *wen* of the standard range of sizes were accepted and used as money in late Qing China**,** no matter how old they were, until well after the end of the empire in 1911. These coins circulated as money throughout the 2,000 years they were produced, and this fact must be taken into account when analyzing recovered coins.

Some undersized *wen* were produced during the Taiping Rebellion (1850–1864) and are considered "counterfeits" by most Chinese numismatists. They do not appear in standard references, but archaeologists cannot ignore them. These smaller *wen* set the standard for circulation in much of southern China during the period and were the model for the Hong Kong *mil* of 1863. Some came to America and were used as gaming pieces, though apparently not for talismanic purposes, for which older and larger coins were preferred. A confusing aspect of these undersized coins is that many bore reign names from earlier periods. However, they can be assigned a production date of about 1850–1864 based on their small size, in spite of misleading reign names (Akin 1992a).

In China, *wen* were usually stored and carried in "strings" of 1,000 or multiples of 100 and were sometimes packaged in that way, but most strings were broken up once the coins shifted to nonmonetary uses. *Wen* had a value of about 1/1,000 of a silver dollar in China during the 19th century and were described in contemporary American English-language reports as being worth a tenth of a cent. In practice, the exchange rate in China often varied, from as few as 600 to as many as 2,000 *wen* to the silver dollar (Peng 1994).

In 1889 modern minting methods were introduced to China with the opening of the Canton mint. Over one billion brass *wen* were struck over the next 18 years, and in 1900 the striking of copper cents, nominally equal to 10 *wen*, commenced. These new machine-struck coins are often found on North American Chinese sites occupied after the early 1890s. They were favored for some decorative purposes because of the matching polished surfaces produced by machine striking and were often used on sewing baskets and dangling, decorative parts of coin "swords."

Vietnamese and Japanese Coins

The zinc *dong* of Vietnam were a grayish white when first cast, but they soon took on a darker color, oxidized very easily, and are considered not as attractive as the brass or copper coins (Barker 2004). They are quickly

and severely damaged by fire and deteriorate rapidly in soil. *Dong* require special care when recovered from archaeological sites.

In order to analyze recovered *dong*, it is important to remember that Vietnam was occupied centuries ago by China. In Vietnamese history, there has been a tension between Vietnam's national identity and Chinese cultural forms, including the use of Chinese characters for writing, which continued for official purposes well into the period of French occupation. The Vietnamese alphabet introduced by Jesuit priest Alexandre du Rhodes (1591−1660) did not fully displace Chinese characters on coins until independence after World War II. There has often been some cross-border use of Chinese coins in Vietnam, as well as that of certain Vietnamese coins in border areas of China.

Japanese *mon,* which resembled *wen,* were not used in Japan after 1873, when the Meiji reforms replaced them with new, machine-struck *rin* and *sen*. By the mid-1870s, large numbers of *mon* (and the Chinese *wen* that had circulated together with them in pre-Meiji Japan) were loaded on ships and taken to Chinese ports to be traded for merchandise. Due to the coin shortage that began during the Taiping Rebellion, both *wen* and *mon*, all of copper alloys, were accepted in the ports of Guangdong, and some were included in coins shipped from there to Chinese living in North America (Akin 1996).

In Asia, it has not been possible to separate groups of coins from datable sites with brief occupation periods in order to determine when *dong* entered circulation in large numbers. But, in the United States, temporary settlements of Chinese workers along railroad construction projects provide just the kind of sites needed to date the introduction of zinc *dong* to China.

Examination of a large number of overseas Chinese sites has shown that zinc *dong* usually appear in assemblages deposited between the early 1880s and 1895, a result of the circulation patterns described above. Zinc *dong* have not been recovered from earlier sites, though a few brass Vietnamese coins have been found. This pattern holds true for Chinese railroad labor camps in Nevada and Texas. At the early to mid-1872 Virginia & Truckee camp near Carson City, Nevada (26-OR-214 Area G), three *wen* were recovered (Rogers 1997). At the 1882 Southern Pacific camp near Langtry, Val Verde County, Texas (41-VV-585), four *wen* and one *mil* were recovered (Briggs 1974:95).

In Vietnam, copper-alloy coins circulated at the same time as zinc coins of similar size and design. The copper-alloy coins were preferred and traded at a higher value than the zinc coins. French colonialists moved large numbers of struck copper coins into the Vietnamese economy starting in 1879, and by 1887 tens of millions of colonial coins had become the basis of low-level transactions in Vietnam. Large numbers of zinc (but few copper-alloy) *dong* were introduced into circulation in Guangdong Province, and many were then shipped across the Pacific.

As the *mon* were copper and similar in appearance, weight, and diameter to pre-1850 *wen*, some of them circulated in China well before the Meiji period. But only after the mid-1870s did *mon* commonly circulate in China. During the fur-trade period of the 1700s and early 1800s, a few *mon* came to America among the *wen* imported to pay for furs. But at sites where more than a few of the recovered coins are *mon,* it is likely that the coins were imported from China after 1875.

The Many Uses of Asian Coins

Economic and cultural practices in China and neighboring countries are expressed archaeologically in Chinese railroad work camps. Understanding the movement of the coins and the cultural practices in which they were used helps verify dates of sites and intrasite sections of larger communities in North America. Reviewing descriptions of the noncurrency functions of these coins should help analysis when the various characteristics of the coins and the behavior connected with them are described, as they are below.

Gaming Equipment

Gaming usually involved wagering, but Asian coins were used as game pieces, not money. In the game of fan-tan, popular with the Chinese and their coworkers, coins functioned as game pieces and counters (Figure 4). Work crews

often organized games in temporary camps associated with their migratory labor.

In Stuart Culin's 1891 description of fan-tan, *dong* were used as game pieces and *wen* as counters. All bets were conducted in American money. Game operators imported *wen* and sometimes *dong* specifically for use as game pieces, and there was a strong preference for uniform sets of coins (Culin 1891:5; Akin 1992b).

The dominant European American society exhibited varying degrees of tolerance for games at different times. The degree of prosecution and its severity depended on local factors. Evidence developed by Weisz (2013) suggests gaming in the segregated Chinese laborer work camps was tolerated by the NPRR and its labor contractors.

Talismanic Pieces

Talismanic pieces are material expressions of a belief system related to the spirit world and the manipulation of luck and fortune. There was wide variation in expected efficacy among people using them, and they also served as a reminder of home and "how things should be done." Examples include small groups of coins used as good-luck pieces that could be hung on walls or attached to items of personal importance, and small strings given to people departing on a long journey. They also have been found attached to keys. The coins that make up "coin swords," groups of coins tied onto a central iron rod in the shape of a sword, were used in some rituals and as offerings and gifts for special occasions (Armentrout-Ma 1984:3).

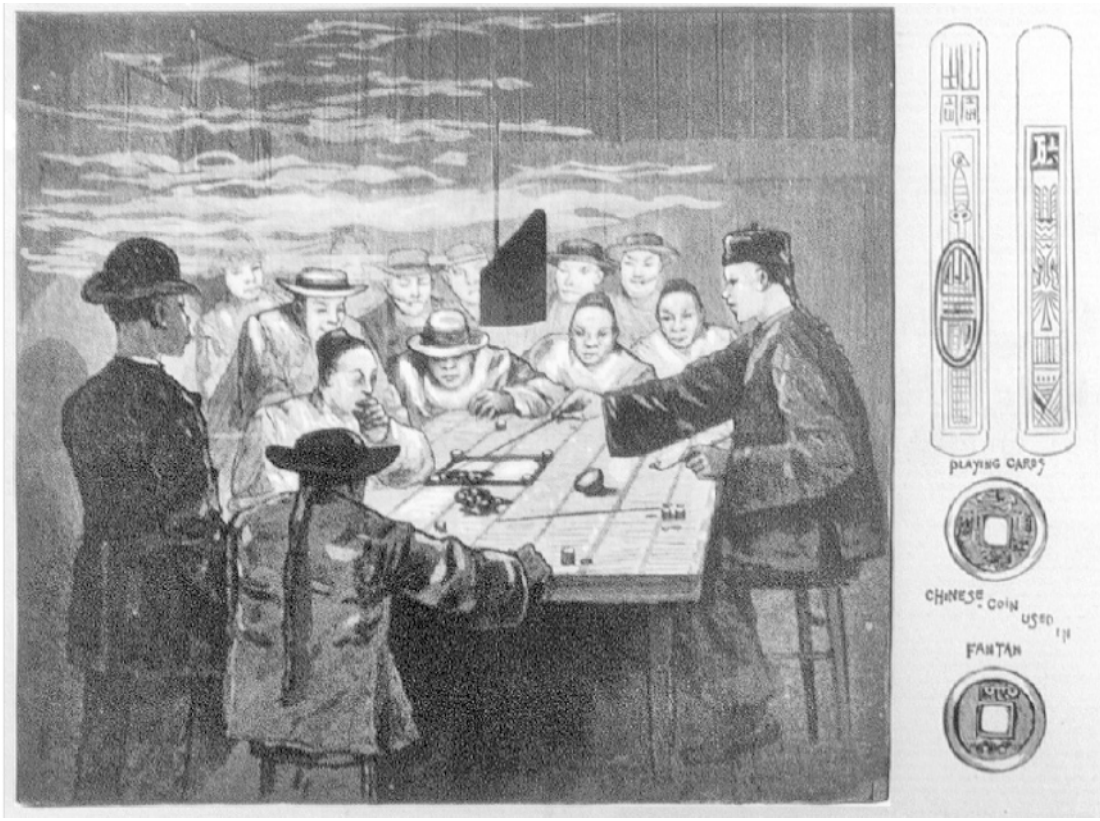

FIGURE 4. New York City—Scenes in a Chinese Gambling House (*Frank Leslie's Illustrated Newspaper* 1887).

Larger and earlier coins, such as the coins of Kāngxī (1662–1726), have long been preferred for most talismanic and religious uses (Figure 5). Vietnamese zinc *dong* were not made in China, did not carry the names of respected emperors, and were not considered to be beautiful, and so were not used for talismanic purposes.

FIGURE 5. Kāngxī *wen* modified for use in a talisman. Minted at the Wu Chang Mint (Hubei Province), recovered at Site 24SA592, the Submerged Noxon Chinese Camp. (Photo by J. Bard, 2014.)

Decoration

During the 18th and 19th centuries, the fur trade between China and ports along the coast of North America brought Chinese *wen* for exchange with aboriginal peoples who especially prized copper and brass. This introduction of Asian goods to Native Americans ended well before 1850 and was never connected with Chinese railroad worker labor camps. Sewing baskets decorated with cast and machine-struck Chinese coins were exported to the United States by the hundreds of thousands before and after 1900. These baskets were made for the American market and were not used much by the Chinese, but their presence in the towns and cities of the region must be noted.

The scant material carried by the Chinese workers from work camp to work camp did not allow for purely decorative items, but sometimes it is difficult to separate talismanic and decorative devices. A protective coin sword hanging on a wall is both pleasant to look at and may bring protection from evil spirits. Additional holes were sometimes drilled into the coins to facilitate attaching them to other objects. Drilled holes and distinct patinas are good indications of a mixture of talismanic and decorative uses.

Medicine

Asian coins are incorporated in several traditional medicinal practices for symptomatic treatment of minor ailments. No archaeologically recovered coins have yet been found in strongly suggestive medical contexts. However, there are common practices and treatments, some still in use today, described in the literature on overseas Chinese. This kind of secondary use is hard to determine from recovered coins, but if the practices are known to archaeologists it is much more likely that some testable hypotheses can be developed to help confirm such usage.

Several medical treatments incorporated coins. The Chinese railroad workers often needed to treat themselves, using teas, massage, and ointments. For example, brass or zinc coins were boiled in water to produce a "tea" that was consumed by the patient or made into a paste for external application. Zinc in the coin was the curative agent.

Ethnic Chinese practice coin rubbing (*guā shā*) as a treatment for "hot" diseases, such as colds and flu (Nielsen 1995). It is related to acupuncture (Walterspiel et al. 1987:309; Roberts 1988) and is still very widely practiced by many Asian Americans (Yeatman and Dang 1980). The most common procedure consists of a systematic massage, using the smooth edge of a coin, of downward strokes that parallel the spine and then spread out to the sides paralleling the ribs.

It is reasonable to suggest that the Chinese railroad laborers, who had to rely on self-treatment for most medical problems, would have kept a few coins around for such purposes. Archaeologists cannot recognize this potential use unless they know about these common camp remedies.

New Observations

Timeline for Movement of Coins

The occupation dates of the NPRR Chinese railroad work camps are well known: 1881–1883 (Merritt 2009, 2010; Merritt et al. 2012; Weisz 2013). So, what new information can be gained from the archaeological evidence of the coins?

A dating problem first raised in the 1980s may be answered now within a tighter time frame. The question: When did Vietnamese zinc *dong* coins move into circulation in Guangdong Province during the coin shortage of the 1870s and 1880s? No sites in the western United States from the 1870s have shown the presence of *dong*, while sites with firm dates in the late 1880s and early 1890s all contained *dong*.

NPRR Chinese work camp site data suggest that Vietnamese zinc *dong* arrived with the workers along the railroad line by sometime in early to mid-1882 (Table 1). The sample from the single earlier site without *dong* (Dukes Island) is not large enough to conclude that no *dong* were used during late 1881, but the 1882 dates are the earliest yet known for deposition of *dong* at American sites. Communication and commerce with China was surprisingly quick, and it is already known that imported food and other goods available in the ports of Guangdong Province appeared along the American West Coast, from Vancouver to southern California, within weeks rather than months.

Because the occupation dates for the railroad camps are known from railroad records, this table shows that the *dong* appeared by early 1882 along the shipping pipeline that ran from Guangdong to the railroad camps. This information can help to date future discoveries of small, undocumented sites or even discrete portions of complex sites occupied over several decades.

The Outliers at Last Chance

At the Last Chance Chinese Camp (26SA596), which was occupied from late 1882 to early 1883, 19 *wen*, 4 *dong*, and 5 *mon* (Figure 6) were recovered.

Weisz identified a very large tent platform that was covered with a tent—as evidenced by a handheld rock drill and a long bridge or trestle bolt driven into the ground as tent pegs—along with some smaller tent platforms. This large tent platform was possibly a former communal cooking area, and, as the largest interior space at the camp, it may also have

TABLE 1
NORTHERN PACIFIC RAILROAD CHINESE WORKER CAMPS, IDAHO AND WESTERN MONTANA, 1881–1883: OCCUPATION DATES AND ASIAN COIN FINDS

Chinese Work Camp	Occupation Dates	Asian Coins
Dukes Island 10-BR-pending	Late 1881 to early 1882	5 *wen*
Denton Slough/O'Neil Creek 10-BR-pending	Early 1882	4 *wen,*1 *dong*
Denton Slough/ Signal 988 10-BR-546	Early 1882	14 *wen*
Twin Creek 10-BR-pending UI-BC-12-07	Early to mid-1882	7 *wen,* 1 *dong*
West Noxon 24-SA-591	Early to mid-1882	6 *wen,* 1 *dong*
Submerged Noxon 24-SA-592	Early 1882 to 1890	9 *wen,* 4 *dong*
Thompson River 24-SA-593	Late 1882	3 *wen,* 5 *dong*
East Eddy 24-SA-594	Late 1882	2 *wen*
East Weeksville 24-SA-595	Late 1882	5 *wen,* 2 *dong*
Last Chance 24-SA-596	Late 1882 to early 1883	19 *wen,* 4 *dong,* 5 *mon*
Fu Sang 24-SA-597	Late 1882 to early 1883	2 *wen* 1 *dong*
Taklamakan 24-SA-598	Late 1882 to early 1883	13 *wen*
Perma Bridge	Late 1882 to early 1883	None found

FIGURE 6. Five *mon* from Site 26SA596,the Last Chance Chinese Camp. (Photo by G. Weisz, 2014.)

been a place where gaming took place. At the edge of this large platform was found a small cache of five *mon* and a few *wen*. Why did this grouping include five *mon*? Did the owner recognize what they were, and did he intentionally retain them in this group? If so, they must have been separated from the *wen* and *dong* while in use at the camp. The known presence of *mon* in the circulating currency of the ports of Guangdong provides a full explanation of the way the Japanese coins reached the camp, since all the workers were Chinese and none were Japanese.

The Question of Reuse at Noxon Camp

The Submerged Noxon Chinese Camp (24SA592), which was occupied from early 1882 to 1890, yielded nine *wen* and four *dong*, including a Kāngxī *wen* (Figure 5). This coin, a large, well-made older coin carrying the name of a favorite emperor, exhibits two small holes on the inside edge of the rim. The purposeful modification suggests it was used as a talisman, but did it enter the archaeological record as a strung talisman (whose string did not survive), or did the function change when the coin was used in gaming? If function and the behavior related to it changed, how can the possible uses of the coin when it entered the archaeological record be determined? At this time there are more questions than answers for this and similar finds. As more evidence is collected, we archaeologists will be able to develop useful hypotheses, generating questions that will bring us closer to understanding the behavior behind these artifacts that are used for different purposes.

Conclusion

The same practice of importing coins from neighboring countries to meet coin shortages in Guangdong is the reason why both Vietnamese and Japanese coins are found at Chinese sites in North America.

In Asia, it has not been possible to separate groups of coins from datable sites with brief periods of occupation in order to determine when *dong* entered circulation in large numbers. But in the United States, temporary settlements of Chinese workers along railroad construction projects provide just the kind of sites needed to date the entry of zinc *dong* into circulation in China—and thus into North America.

Artifacts recovered from the short-term railroad camps can be used to produce lists of food and drinks, patent medicines, and a host of liquid products that were used within a very short period of time. Artifacts assigned a use date of "the late 19th century" or "during the 1880s" may soon be assigned to much tighter time periods. This, in turn, will help date other more poorly documented sites, or specific features in use at different times, unknown to researchers until now.

When gambling equipment includes small low-value artifacts (brass and zinc coins and dice), and the gambling takes place in dark tents or buildings, above dirt surfaces, during the consumption of liquor, it takes a short time for small gambling paraphernalia to find its way into the archaeological record. Given these circumstances, it appears likely that *dong* began to enter the soil of western states no more than two or three months after they became available in quantity in Guangdong ports. If zinc *dong* reached northern Idaho and western Montana by early to mid-1882, they are likely to have entered circulation in Guangdong by early 1882.

Gaming accounts for the largest number of coins recovered from the railroad sites, with talismanic uses being next most common. Talismanic and decorative uses often overlap, so it can be difficult to ascribe one or the other function accurately for each coin or assemblage of coins. There is a possible additional use for the coins, as hardware, when coins might be used as washers, but only one such case is known to date (Briggs 1974), from a railroad camp site in Texas.

The use of the coins for medicinal purposes, although known from historical records and literature, has not yet been demonstrated at any North American overseas Chinese site. It is expected that greater knowledge and understanding of the medical practices will help archaeologists recognize such activities when they uncover the evidence.

References

Akin, Marjorie

1992a *Asian Coins in the North American West: A Behavioral Studies Approach to Numismatic Analysis*. Doctoral dissertation, Department of Anthropology, University of California, Riverside. University Microfilms International, Ann Arbor, MI.

1992b The Non-Currency Uses of the Wen in Western North America. *Historical Archaeology* 26(2):56−63.

1996 Asian Coins: *Dong, Wen*, and *Mon.* In *Down by the Station: Los Angeles Chinatown, 1880−1933*, Roberta S. Greenwood, editor, pp. 98−104. University of California, Institute of Archaeology, Los Angeles.

Armentrout-Ma, Eve

1984 *Chinese Popular Religion*. Chinese and Chinese American History Project, El Cerrito, CA.

Bard, James C., and Gary J. Weisz

2012 Who Has Been Working on the Railroad? A Look at the Coins from Northern Pacific Railroad Chinese Labor Camps in Idaho and Montana. Paper presented at the 39th Annual Conference of the Idaho Archaeological Society, Moscow.

Barker, R. Allan

2004 *The Historical Cash Coins of Việt Nam: Vietnam's Imperial History as Seen through Its Currency, Part I: Official and Semi-Official Coins.* COS Printers Pte., Singapore.

Boswell, Sharon A.

2014 Building the Line across North Idaho: A History of Early Railroad Development. Manuscript, Idaho Transportation Department, Boise, and Bonner County Historical Museum, Sandpoint, ID.

Briggs, Alton K.

1974 The Archaeology of 1882 Labor Camps on the Southern Pacific Railroad, Val Verde County, Texas. Master's thesis, Department of Anthropology, University of Texas, Austin.

Culin, Stuart

1891 The Gambling and Games of the Chinese in America. *University of Pennsylvania Series in Philology, Literature and Archaeology* 1(4):1−17.

Frank Leslie's Illustrated Newspaper

1887 New York City—Scenes in a Chinese Gambling House. *Frank Leslie's Illustrated Newspaper* 17 December:296.

Hartill, David

2003 *Qing Cash*. Royal Numismatic Society Special Publication No. 37. London, UK.

2005 *Cast Chinese Coins: A Historical Catalogue*. Trafford, Victoria, BC.

JEN, DAVID
2000 *Chinese Cash Identification and Price Guide*. Krause, Iola, WI.

KRAUSE, CHESTER L., AND CLIFFORD MISHLER
1985 *Standard Catalog of World Coins*, 12th edition. Krause, Iola, WI.

LANDRETH, KEITH, KEO BORESON, AND MARY CONDON
1985 *Archaeological Investigations at the Cabinet Landing Site (10BR413), Bonner County, Idaho*. Eastern Washington University, Archaeological and Historical Services, Papers in Archaeology and History 100-45. Cheney.

MERRITT, CHRISTOPHER W.
2009 Northern Pacific Railroad Archaeological Sites in Montana. Manuscript, Department of Anthropology, University of Montana, Missoula.
2010 *"The Coming Man from Canton": Chinese Experience in Montana (1862–1943)*. Doctoral dissertation, Department of Anthropology, University of Montana, Missoula. University Microfilms International, Ann Arbor, MI.

MERRITT, CHRISTOPHER W., GARY WEISZ, AND KELLY J. DIXON
2012 "Verily the Road was Built with Chinaman's Bones": An Archaeology of Chinese Line Camps in Montana. *International Journal of Historical Archaeology* 16(4):666–695.

NIELSEN, ARYA
1995 *Gua Sha: Traditional Technique for Modern Practice*. Churchill Livingstone, Edinburgh, UK.

PENG XINWEI
1994 *A Monetary History of China (Zhongguo huobi shi)*, 2 vols., Edward H. Kaplan, translator. Western Washington University, Center for East Asian Studies, Bellingham.

ROBERTS, JAMES R.
1988 Beware: Vietnamese Coin Rubbing. *Annals of Emergency Medicine* 17(4):143.

ROGERS, C. LYNN
1997 Making Camp Chinese Style: The Archaeology of a V&T Railroad Graders' Camp, Carson City, Nevada. Report to Silver Oak Development Company, Carson City, NV, from Archaeological Research Services, Virginia City, NV.

WALTERSPIEL, JUAN N., J. R. ROGERS, AND C. KEMP
1987 Coin Rubbing and Acute Phase Reactants. *Australian Paediatric Journal* 23(5):309.

WANG, HELEN, MICHAEL COWELL, JOE CRIBB, AND SHERIDAN BOWMAN (EDITORS)
2005 *Metallurgical Analysis of Chinese Coins at the British Museum*. British Museum Research Publication Number 152. London, UK.

WEISZ, GARY J.
2013 "Stepping Light": Revisiting the Construction Camps on the Lake Pend d'Oreille Division and Clark Fork Division of the Northern Pacific Railroad, 1879–1883, 3 vols. Manuscript, Asian American Comparative Collection, Laboratory of Anthropology, University of Idaho, Moscow.
2014 Chinese Comparative Collection, Archaeology of the Overseas Chinese, 2 vols. Manuscript, Asian American Comparative Collection, Laboratory of Anthropology, University of Idaho, Moscow.

YEATMAN, GEORGE W., AND VIET VAN DANG
1980 Cao Gio (Coin Rubbing): Vietnamese Attitudes toward Health Care. *Journal of the American Medical Association* 244(24):2748–2749.

MARJORIE AKIN
20212 HARVARD WAY
RIVERSIDE, CA 92507-6621

JAMES C. BARD
1500 SW PARK AVENUE, NO. 424
PORTLAND, OR 97201

GARY J. WEISZ
11715 W. PINE STREET
SANDPOINT, ID 83864