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## Leaves that Sway: Gold Xianbei Cap Ornaments from Northeast China

#### Abstract

Over the last fifty years, rich finds of gold objects have been uncovered in China's northeastern Liaoning province. These tombs belonged to a tribe of steppe nomads called the Murong Xianbei who settled north of the Great Wall during the Han dynasty and established a succession of short-lived states called Yan that ruled parts of Northeast Asia during the third to fifth centuries CE. Until now, the history of the Murong and the rapidly emerging field of Murong archaeology have been published almost exclusively in Chinese. This dissertation seeks to rectify the lack of Western scholarship about this unique border population and their cultural identity as expressed though gold personal adornments.

The gold objects in Murong tombs are typically decorated with some combination of openwork and pendant gold leaves attached by wires, some taking the form of trees or antlers. These were probably affixed to fabric caps and have been associated with ornaments described in the Chinese histories as *buyao* ("step-sway") ornaments because their thin sheet gold leaves tremble and sway with each step the wearer takes. However, leaf-covered gold crowns and headdresses excavated from tombs across Central Asia, Western Asia, and the Mediterranean have also been proposed as prototypes. This dissertation considers the existing textual and visual data supporting arguments for local and western origins and arrives at new conclusions concerning the relationships between Murong artisans and their counterparts in China, Central Asia, and the Near East though the careful study of the visible traces of the manufacturing process.

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## LEAVES THAT SWAY: GOLD XIANBEI CAP ORNAMENTS FROM NORTHEAST CHINA

Sarah Laursen

#### **A DISSERTATION**

in

East Asian Languages and Civilizations

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"Leaves that Sway: Gold Xianbei Cap Ornaments from Northeast China"

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2011

Sarah Laursen

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#### ABSTRACT

## LEAVES THAT SWAY: GOLD XIANBEI CAP ORNAMENTS FROM NORTHEAST CHINA

#### SARAH LAURSEN

#### NANCY SHATZMAN STEINHARDT

Over the last fifty years, rich finds of gold objects have been uncovered in China's northeastern Liaoning province. These tombs belonged to a tribe of steppe nomads called the Murong Xianbei who settled north of the Great Wall during the Han dynasty and established a succession of short-lived states called Yan that ruled parts of Northeast Asia during the third to fifth centuries CE. Until now, the history of the Murong and the rapidly emerging field of Murong archaeology have been published almost exclusively in Chinese. This dissertation seeks to rectify the lack of Western scholarship about this unique border population and their cultural identity as expressed though gold personal adornments.

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#### PREFACE

It began with a stem cup. In 2005, during my second year of graduate school, I visited the Chinese Rotunda of the Penn Museum several times a week, either for my own research or to prepare for leading weekly Asian art recitations. Several times a week I would take the elevator up to the third floor, walk briskly through the Etruscan, Roman and Near Eastern galleries, and turn left at India. By the time I stood in front of the early East Asian ceramics, pondering a lidded stem cup with an openwork foot that I was writing about in my Korean art class, my mind was already filled with images of ceramics spanning more than 6,000 miles and three millennia. The more I stared at the fifth – sixth century CE stoneware vessel, the more I saw the features of an impasto footed bowl with an openwork base from a seventh century BCE tomb at Narce, in southwestern Italy.

I delved into research for my course on the state of Silla (Ch. Xinluo) 新羅 in the Korean Three Kingdoms period (c. 300 – 668 CE) and on the much less familiar eighth – seventh century BCE tombs of the Faliscan culture and their Etruscan neighbors, sure of a connection between them and equally convinced of its impossibility. What I found were two cultures whose tombs shared a few vessel types but more often a tendency to decorate them with openwork, bronze bits and other horse-riding accoutrements, some iconographical elements (especially pertaining to horses), and beautifully crafted granulated gold ornaments. This last discovery caught me by surprise because I had always assumed that such exceptional craftsmanship was characteristic of colossal, wealthy, and highly ordered empires like ancient Rome and the Achaemenid. In fact, I

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learned that in contrast to bronze, gold requires minimal tools, a limited workforce, and a relatively small quantity of raw material. Thus any population living in close proximity to alluvial or mined sources or engaged in a strong trade network could develop a local—and if necessary, portable—goldsmithing industry.

Captivated, I began to look for intermediary sites with developed goldsmithing industries that might explain the ostensibly related techniques employed in the pre-Classical gold jewelry of the Mediterranean and the early medieval gold jewelry of East Asia. Among the first that I encountered was Tillya Tepe in Afghanistan, a first century CE site where Greek iconography and technologies like granulation intermingle with a more basic steppe tradition of ornamenting surfaces with openwork gold designs and sheet gold discs attached to the surface by wires. A clear echo of this tradition appeared in many of the gold crowns, ear pendants, and belts of Silla, on the opposite side of the continent. It was then that I encountered a transitional: the so-called *buyao* 步搖 ("stepsway") ornaments of Liaoning 遼寧, which were uncovered in the tombs of the Murong 慕容 branch of the Xianbei 鮮卑 tribe who dominated much of North China between the Han 漢 (206 BCE – 220 CE) and Tang 唐 (618 – 907 CE) dynasties.

Only about a dozen of these shimmering head ornaments survive, and they consist of two main parts. The base is roughly square-shaped but with sloping shoulders and a raised ridge running down the center. On either side of the ridge is openwork that has been described as cloud scrolls, curled leaves, or inward-facing commas, and the sides of the base and the patterns are sometimes edged in tiny raised dots. The second element is a large stalk that projects from the top edge of the base and sprouts into several wire branches that are wound into loops from which hang circular or droplet-shaped leaves. Chinese dynastic histories describe these as being worn at the front of the head by Chinese ladies of the court beginning in the Han dynasty and by the Murong Xianbei beginning in the Jin dynasty.

In this dissertation, I explore the hotly debated origins of these tree-shaped ornaments and the apparent relationship between the ancient goldsmithing traditions on opposite ends of the Eurasian continent, with particular attention to the swaying gold leaves that fall between them. I also attempt to situate the Murong craftsmen within the larger picture of cultural transmission across this expanse.

#### **INTRODUCTION: SEEING THE FOREST FOR THE TREES**

#### 1. Silk Road v. Steppe Route

Any study of the interrelationships of the ancient Eurasian cultures immediately evokes visions of the Silk Road ("Seidenstraße"), the term coined by German geographer Ferdinand von Richthofen in 1877. The Silk Road or Silk Routes were a the network of trade routes along which Chinese silk was bought and sold, and they flourished beginning in the second century BCE, when the Han emperor Wudi 武帝 (r. 141 – 87 BCE) opened diplomatic and commercial channels to the West by sending exploratory missions in search of horses and allies against the nomadic Xiongnu 匈奴 tribes. 1500 years later, a brief revival of overland trade was achieved under the Mongols in the thirteenth and fourteenth centuries as a result of the pax mongolica. While the Han (206 BCE – 220 CE) and Tang (618 – 907 CE) dynasty capital Chang'an 長安 (today's Xi'an 西安) is generally agreed upon as the eastern terminus, the western boundary remains a subject of much debate. Some scholars place it as far west as Rome, while others place it more conservatively at Antioch on the Levant, near the modern border between Turkey and Syria.

In addition to textiles, the Silk Road was a highway for the transport of religions, languages, art forms, iconographies, and technologies. It was the conduit through which Buddhism entered China from India during the Han and Northern Liang 北涼 (397 – 439 CE) dynasties, and Buddhist cave temples dot the path from Western India, through Central Asia, and into the oasis towns of Northwest China. The inns established by monks to house religious pilgrims en route to and from India became not only centers of artistic patronage, but also important rest stops and trading posts for later silk merchants. The Buddhists, in turn, built their monasteries along earlier short-distance trade routes that had existed long before the beginning of large-scale international silk trade.

The movement of objects, imagery and ideas across Eurasia prior to the second century BCE took place more gradually or incrementally. It is usually explained in terms of down-the-line trade or migrations of nomads along an ecological zone called the steppe, a grassland plain without trees (equivalent to "prairie" in North America) that stretches from Hungary, through Central Asia, Siberia, and Mongolia, into Northeastern China. These lands, ill-suited to farming, were usually home to pastoral nomads who grazed herds of sheep, goats, cattle, yak, and horses, rotating camps from one pasture to another throughout the year. Nomadic groups sometimes migrated across great distances, as well, either seeking natural resources or evading external pressures like the invasion of another tribe.

The major migrations in Eurasia seem to have taken place in the fifth to fourth millennium BCE. Two reigning theories describe the directions of those movements. The first, the "Kurgan Model," argues that the earliest proto-Indo-Europeans originated in the Northern Caucasus and moved both east and west in the fifth and fourth millennia BCE. These groups would later develop their own Indo-European languages, but their common point of origin explains marked similarities among genetics, languages, and material cultures of the second millennium BCE mummies of the Tarim Basin in Northwest China and in the eighth to sixth century CE Hallstatt Culture of Central Europe. The "Anatolian Hypothesis," espoused by Colin Renfrew, instead supposes the

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migration of proto-Indo-European speakers from Anatolia to Europe in the seventh millennium BCE. However, this theory is less widely accepted.<sup>1</sup>

The passage of one branch of the Indo-Europeans from the Caucasus to East Asia set the stage for subsequent migrations and trade networks across the Eurasian steppe belt. In the last quarter century, a great deal of attention has been paid to the movement of nomadic tribes across what has come to be known as the Steppe Route. Nicola Di Cosmo described the situation during the first millennium BCE:

Beginning in about the eighth century B.C., throughout Inner Asia horse-riding pastoral communities appear, giving origin to warrior societies. Known by the Greeks as Scythians in the western end of Asia, their cultural expansion was by no means limited to the Pontic steppe to the north of the Black Sea, but extended across the Eurasian steppe belt. Equestrian pastoral peoples, who may be broadly defined as "early nomads," were present in northern China and can be regarded as cultural forerunners of the Xiongnu, the Huns, and the later Turco-Mongol nomads.<sup>2</sup>

These early nomads can be further subdivided on the basis of either the archaeological or

literary data, but the discrepancies between the two make their positive identification

problematic. The uniformity of their archaeological remains qualifies the application of

the terms "Scyth" or "Scythian" (borrowed from Herotodus) to burials containing

"special weapons, horse gear, and animal art in the form of metal plaques."<sup>3</sup> However,

historical names like Saka, Sarmatian, Yuezhi 月支, Xiongnu, and Xianbei—which are

discussed in Chapter 4—are commonly mapped onto their material remains depending

not so much on their important content but on the location of their excavation.

<sup>&</sup>lt;sup>1</sup> J. P. Mallory and Victor Mair, *The Tarim Mummies: Ancient China and the Mystery of the Earliest Peoples from the West* (New York: Thames & Hudson, 2000), 128.

<sup>&</sup>lt;sup>2</sup> Nicola Di Cosmo, "The Northern Zone in pre-Imperial China," in *The Cambridge History of Inner Asia*, ed. Denis Sinor (Camrbidge: Cambridge UP, 1990), 887.

<sup>&</sup>lt;sup>3</sup> Di Cosmo, "Northern Zone," 890-891.

Regardless of what we choose to call them, David Christian has suggested that the role of "early nomads" in the development of the Silk Road was much more substantial than has generally been recognized. He argues that "trans-ecological exchanges" between settled agrarian populations and nomadic pastoralists accounted for a larger share of the trade and communication along the Silk Road than long-distance "trans-civilizational" contact:

What really happened as a result of the conquests of Wudi, at the end of the second century, is that a new branch of the Silk Roads was created. This bypassed the older routes, through the steppelands of Xiongnu-controlled Mongolia. What is reflected in the written record . . . is really an attempt by agrarian empires to secure a greater degree of control over trade routes that had previously passed through the Inner Eurasian steppes, and had been dominated by pastoralist communities.<sup>4</sup>

Christian understands the Silk Road as being both predated by and contemporary with the Steppe Route. This model is useful in the study of the material culture of the early nomads because it demands that we see development of the tombs and objects excavated throughout Eurasia as reflections not as a result of the unilateral influence of one distant culture on another, but as a conversation between neighboring groups with different economies and resources.

Emma Bunker has also highlighted this connection between steppe and sedentary societies, noting that during the Eastern Zhou period (770 - 256 BCE), "The steppe tribes created little, but borrowed much of their artistic vocabulary from the urban civilizations they came into contact with, frequently altering it to suit their own taste."<sup>5</sup> This statement highlights the rarely discussed question of agency among early nomads—that

<sup>&</sup>lt;sup>4</sup> David Christian, "Silk Roads or Steppe Roads? The Silk Roads in World History" *Journal of World History* 11.1 (Spring 2000): 17.

<sup>&</sup>lt;sup>5</sup> Emma C. Bunker, "The Steppe Connection," *Early China* 9-10 (1983-5): 73.
is, their ability to accept and reject the trappings of civilization offered to them by sedentary cultures. This issue is extremely important in reference to the study of the Xianbei because although they occupied the Chinese frontier, their history was firmly rooted in the steppes.

# 2. Alternative Models

Recently, scholars have begun to formulate models of contact and exchange within smaller areas, following more nuanced and less linear paths. Gina Barnes has developed the idea of a "Yellow Sea Interaction Sphere," a local network of trade and cultural exchange that existed in Northeast Asia from about 500 BCE to 500 CE. Looking at extensive archaeological evidence, she proposes that waves of immigration sent material culture and technologies northward from South China and through the Korean Peninsula to Japan. Among the advances that were transmitted in this manner were wet-rice agriculture, bronze and iron metallurgy, kilns for the production of stoneware, and several other aspect of material culture—like weapons, armor, and riding gear—that arrived intermittently over the course of a millennium.<sup>6</sup> The Murong 慕容 tombs in Liaoning fall squarely into the geographical parameters and timeframe of this model, and many Murong funerary practices and customs of personal adornment originated in the Han dynasty and were perpetuated in Korea. Sme examples of the continuity of material culture existed throughout Northeast Asia will be discussed in greater detail in Chapter 5.

<sup>&</sup>lt;sup>6</sup> Gina L. Barnes, *Rise of Civilization in East Asia: The Archaeology of China, Korea and Japan* (London: Thames and Hudson, 1999).

Most recently, Michael Frachetti has devised a new model for the study of contact between China, the Black Sea, Mesopotamia and the Indus Valley between the fourth and the second millennia BCE. In keeping with Christian's views on the trans-ecological exchanges between nomadic and sedentary societies, Frachetti credits the mobile, smallscale pastoralists living between core civilizations of the ancient world with the "distribution of technologies, material cultural, and ideology across Central Eurasia."<sup>7</sup> However, Frachetti challenges the assumption that cultural exchange in this period was concentrated on the steppe belt that runs east-west across Kazakhstan and into the Northern Caucasus. Instead, he advocates for the transmission of material culture and technology via the "Inner Asian Mountain Corridor," an ecological zone extending from the Hindu Kush in Afghanistan, into the Pamir, Tianshan, and Dzhungar Mountains, and terminating in the Altai Mountains of southwestern Siberia."<sup>8</sup>

Although formulated in reference to an earlier era, Frachetti's model nonetheless applies to the Warring States  $\Re \otimes (c. 475 - 221 \text{ BCE})$  and Han periods, when many goldsmithing technologies were first introduced to China from the Near East and the Eastern Mediterranean. Because several of the intermediary sites discussed in Chapter 4 are in Iran, Afghanistan, Kazakhstan, and Southern Siberia, it may be more accurate to associate them with the Inner Asian Mountain Corridor than with the steppe belt, which is generally thought to pass north of the Caspian Sea rather than south of it.

Any study of early nomad material culture must consider how these networks the Silk Road, the Steppe Route, the Yellow Sea Interaction Sphere, and the Inner Asian

<sup>&</sup>lt;sup>7</sup> Michael D. Frachetti, "Multi-Regional Emergence of Mobile Pastoralism and Nonuniform Institutional Complexity across Eurasia," *Current Anthropology* (in press) 7.

<sup>&</sup>lt;sup>8</sup> Frachetti, "Multi-Regional Emergence," 19, 30-31.

Mountain Corridor—impacted the styles, imagery, and technologies available to the Murong artisan in the third to fifth centuries CE. However, as Rudolf Wittkower explained in his 1966 essay, "East and West: The Problem of Cultural Exchange":

Classification of the roads of transmission is only the first step when dealing with the problem of diffusion. In considering the transplantation of forms, designs, and styles, we are faced with a triple challenge, from the simplest cases—the trading of objects and the migration of artisans—to the assimilation and adaptation of imported material, and then to its complete transformation. On the level of such artisan media as ceramics, metalwork, and textiles, modern techniques of research make it possible to establish conclusively how this kind of import was assimilated and transformed in a new cultural environment.<sup>9</sup>

All of the scenarios described by Wittkower can be detected in remains of the Murong Xianbei, the shimmering gold cap ornaments from Liaoning falling into the last category: transformations of inherited models that have changed so greatly in form as to barely be recognized.

When Wittkower reassures us that "modern techniques of research" will allow us to understand the importation, assimilation, and reconfiguration of ancient metalwork, what exactly did he mean? I believe that the "modern techniques" to which he was referring were the exciting developments in analytical conservation science of 1950s and 60s, such as the studies of Chinese bronze metallurgy and casting techniques conducted by Rutherford J. Gettens in the laboratories of the Freer Gallery of Art. Following Wittkower's suggestion, this dissertation seeks to supplement traditional approaches to art historical and textual research by meticulously examining the gold Murong ornaments through the lens of the conservator.

<sup>&</sup>lt;sup>9</sup> This article has been reprinted in Rudolf Wittkower, "East and West: The Problem of Cultural Exchange," *Allegory and The Migration of Symbols* (New York: Thames and Hudson, 1966), 13.

# 3. Methodology

Since the Song  $\Re$  dynasty (907 – 1279 CE) when antiquarians compiled massive catalogues of Shang  $\ddot{B}$  (1600 – 1046 BCE) and Zhou  $\ddot{B}$  (1045 – 256 BCE) dynasty bronzes, there has been a great deal of interest in the decoration of Chinese metalwork. Until the later part of the twentieth century, however, the focus of compendia and exhibitions of bronze ritual vessels was the style and meaning of decorative motifs rather than the materials and processes involved in their manufacture. A 1991 exhibition entitled "Ancient Chinese Bronze Art: Casting the Precious Sacral Vessel" at China House Gallery in New York therefore marks an important turning point.<sup>10</sup> Co-curated by archaeologist K.C. Chang and conservator W. Thomas Chase, the exhibition incorporated ceramic mold fragments and models explaining the casting process, signaling a new interest in scientific avenues of art historical research. Nonetheless, it would be some time before precious metal objects would be approached in this way, in part because many of the richest gold finds in China had not yet been uncovered.

Gold jewelry of the Classical world, in contrast, has been studied in greater depth and is better published. At the center of this nascent field is ancient jewelry expert Jack Ogden, who has described the scholarly value of investigating manufacturing techniques:

Comparing several different aspects of the construction of two or more objects can be helpful in assessing their likely relationships. This type of research into what we might term the constructional characteristics of Classical jewellery is in its infancy, but it is already beginning to help us to group objects both geographically and chronologically. Stylistic and art-historical study will allow us

<sup>&</sup>lt;sup>10</sup> W. Thomas Chase, Ancient Chinese Bronze Art: Casting the Precious Sacral Vessel (New York: China House Gallery, 1991).

to link pieces of similar form or with motifs of similar design, and study of their constructional characteristics will then enable us to define their differences.<sup>11</sup> Ogden's work on ancient jewelry provided an essential foundation for Chinese art historians like Emma Bunker, who was among the first to draw attention to the often overlooked amount of goldwork produced in ancient China.<sup>12</sup> In the catalogues for two exhibitions, "Adornment for Eternity: Status and Rank in Chinese Ornament" (1994) and "Traders and Raiders on China's Northern Frontier" (1995), she explored the methods of production employed in belt hooks plaques, earrings, hairpins, combs, and cap ornaments that were executed not only in gilt bronze, but also in gold, silver, and gilt bronze. By combining a traditional analysis of style and motifs with careful observation of manufacturing techniques, she has begun to undertake the enormous task of differentiating between the bronze-casting and goldsmithing industries scattered across the perplexing Eurasian Steppes in the Warring States period.

In terms of geography and chronology, my research picks up approximately where Bunker's leaves off, in the northeastern corner of China at the end of the Han dynasty. However, my methodology resembles even more closely that of Ellen Reeder whose pioneering studies of Hellenistic and Scythian gold place her at the crossroads between the scholarship of Ogden and Bunker. Reeder's 1987 article entitled "The Mother of the Gods and a Hellenistic Bronze Matrix" is based on the close reading of a single object—a first or second century BCE mold found in Egypt that was modeled on a fourth century BCE Anatolian prototype and could have been produced anywhere in the

<sup>11</sup> Jack Ogden, "The Techniques of the Greek Goldsmith," eds. Jack Ogden and Defry Williams, *Greek Gold: Jewelry of the Classical World* (New York, Harry N. Abrams, 1994), 30.

<sup>&</sup>lt;sup>12</sup> Emma C. Bunker, "Gold in the Ancient Chinese World: A Cultural Puzzle," *Artibus Asiae* 53.1/2 (1993): 27-50.

Hellenistic world. The handful of leaf-covered gold cap ornaments from Liaoning have an equally complicated history, and one that has been largely obscured by an overreliance on textual sources and lack of careful looking.

### 4. Contents

This dissertation is divided into five chapters which attempt to answer the three underlying questions about these enigmatic objects: What are they? Where do they come from? How do their decoration and manufacture reflect the historical circumstance under which they were produced? My discussion proceeds this way:

The first two chapters introduce the primary sources that lie at the center of this study. Chapter 1 establishes a historical framework for the Murong Xianbei on the basis of two very different types of evidence. The first is a compilation of Chinese historical records that recount the political and military history of the Murong Xianbei from the breakup of the Donghu 東胡 tribe to the fall of the last Yan state, while the second is a survey of the archaeology and material culture of areas believed to have been occupied by the Murong. Chapter 2 catalogues the surviving gold head ornaments and a few other related items of personal adornment, while at the same time outlining important typologies created by Chinese scholars. Details concerning the tombs from which they were excavated, their occupants (when known), and other grave goods will also be discussed.

The next two chapters explore the dominant theories regarding the origins of the gold ornaments. Chapter 3 examines Chinese literary descriptions of gold ornaments called *buyao* 步搖 and *dang* 璫, which form the basis for the argument that they follow

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Chinese models. However, by pointing out inconsistencies between the textual record and contemporaneous pictorial representations, this chapter also highlights the weaknesses of this argument and the dangers of relying too heavily on secondary sources. Chapter 4 investigates the forms, styles and motifs that have led to frequent comparisons between the Murong ornaments and gold headgear of the steppe—particularly gold crowns and headdresses with pendant gold leaves from the tombs of the various early Eurasian nomads.

The last chapter takes this formal analysis a step further by describing the goldsmithing techniques employed in their construction and comparing the repertoire of the Murong goldsmith to that of other Eurasian cultures as evidence for the path of technological transmission proposed in the preceding chapter. The conclusion integrates these findings about the shimmering gold ornaments with what is known about the history of the Murong Xianbei, elucidating their function as a vehicle of self-expression during an important moment of transition in Murong interactions with both China and the steppe.

Finally, taking a wider view, this dissertation is intended to serve as a case study demonstrating the value of close observation as a means of study. This practice is not a new one—connoisseurship has been the backbone of Chinese art history since the writing of the famous imperial painting catalogues of the Song dynasty—but it is one that has not been sufficiently integrated with Sinological and art historical practice in the analysis of artifacts from medieval Chinese tombs. In this study of gold head ornaments with swaying gold leaves, I unite these three methodological approaches with a solid grasp of the Murong artisan's materials and methods in order to unearth the roots of the goldsmithing and costuming traditions of Liaoning in the third – fifth centuries CE.

### CHAPTER 1: A TEXTUAL AND ARCHAEOLOGICAL HISTORY OF THE MURONG XIANBEI

### 1. The Murong in the Textual Record

While the Murong Xianbei themselves left behind no history, one can be postulated by compiling textual and archaeological sources. In this chapter, I will provide with an outline of the history of the Murong tribe of the Xianbei, as described in the Chinese sources. Next, I will present an overview of the current state of Murong archaeology and discuss how the picture painted by the archaeological data compares to the one described in the histories. Finally, I will address the various approaches ha have espoused by archaeologists, historians, and art historians in reconstructing the history of the Murong Xianbei.

The textual record is almost exclusively provided by the Chinese, whose dynastic histories include detailed accounts of their interactions with ethnic minorities and border populations. The Xianbei, on the other hand, possessed their own distinct spoken language but no written language beyond the script they adopted from the Chinese, and they left behind no such record aside from the occasional inscription on an excavated object. Thus it is only from the Chinese perspective that we encounter their customs, military exploits, and political history. The chief sources of information about the Xianbei are the *Hou Han shu (Book of the Former Han)* 後漢書 compiled in 445, the *Wei shu* 魏書 (*Book of Wei*) of the *Sanguo zhi* 三國志 compiled in 289, the *Jin shu (Book of Jin)* 晉書 edited by Fang Xuanling 房玄齡 (579–648) and completed in 648, and the *Shiliuguo Chunqiu* 十六國春秋 (*Annals of the Sixteen States*), written by Cui Hong 崔鴻

of the Northern Wei 北魏. This last text was probably the basis for most of the records written in later periods.<sup>13</sup>

### 1.1 The Donghu and the Origins of the Xianbei

The identity of the Xianbei is obscured by the fact that they are one of two closely related branches of an earlier confederation of steppe nomads collectively called the Donghu. The origins of this term are disputed, but it is likely a Chinese adaptation of the name that the group used in reference to itself. The Donghu first appear in Zhou dynasty records as a group living to the east of the Xiongnu, west of the Yi 夷, and north of the Yan 燕 state (not to be confused with the later Yan state of the Murong). Donghu territory centered on northern Hebei 河北 and extended from the middle of Inner Mongolia (Nei Menggu) 内蒙古 to its eastern border.<sup>14</sup>

During the intense fighting during the Warring States period, the Donghu migrated south into Chinese territory. The intrusion was not well received by King Zhao 昭王 of Yan, who then retook these lands and reinforced the border around 300 BCE with what would come to be known as the Five Commanderies (*wujun* 五郡): Shanggu 上谷, Yuyang 漁陽, and Youbeiping 右北平 in Hebei, and Liaoxi 遼西 and Liaodong 遼 東 in Liaoning (Figure 1.1). The Yan state erected a "long wall" through Henan 河南, Inner Mongolia, and Liaoning that encompassed these territories and provided the foundation for the northeastern section of the later Qin-Han period wall.<sup>15</sup> The wall

<sup>&</sup>lt;sup>13</sup> Jennifer Holmgren, "The Last of the Mu-Jung: Southern Yen and the History of the Shantung Peninsula, AD 399-410," *Papers on Far Eastern History* 42 (Sept. 1990): 2.

<sup>&</sup>lt;sup>14</sup> Xu Bingkun, *Xianbei, Sanguo, Gufen: Zhongguo, Chaoxian, Riben Gudai de Wenhua Jiaoliu* (Shenyang: Liaoning guji chubanshe 1995), 17.

<sup>&</sup>lt;sup>15</sup> Xu, "Xianbei," 17-18.

created a dividing line—at least in theory—between the sedentary Chinese population to its south and the steppe nomads to its north. In actual practice, the wall was a site of cultural interaction, where trade between nomads and sedentarists took place.

The Donghu occupied the area north of the wall throughout the third century BCE, but after Qin Shihuangdi 秦始皇帝 launched a major attack on the Xiongnu in 216 BCE. When the Xiongnu fled north, leaving the region south of the Gobi Desert 戈壁沙漠 unoccupied, the Donghu entered their lands and attempted to exploit the instability following Maodun's 冒頓 murder of his father and attempt to replace him as tribal leader (or *shanyu* 單于) in 209 BCE. However, they underestimated Maodun's strength, and his counterattack annihilated them, causing the Donghu to disperse. Many former members of the Donghu subsequently joined the Xiongnu confederation.<sup>16</sup>

In fact, neither the Xiongnu nor the Donghu had ever represented a single ethnicity. Both were confederations composed of smaller tribes who unified in order to ensure economic stability. When they dissolved, their members were subsumed into other large confederations but probably retained certain aspects of their individual cultural identities, such as language and mortuary customs. The two main branches of the Donghu who parted ways around the beginning of the Western Han dynasty were the Wuhuan 烏桓 and Xianbei. According to the *Hou Han shu* and *Sanguo zhi*, the two tribes shared the same language and cultural traditions, and they are only differentiated in these sources by their location in relation to the Han state.

<sup>&</sup>lt;sup>16</sup> Xu, "Xianbei," 18-19.

The Wuhuan—sometimes written Wuwan 烏丸—were settled in between the Xianbei and the Han, preventing any direct contact between them until the Xianbei moved closer to the border. For this reason, even though the Wuhuan had begun to appear in Chinese records in the Western Han dynasty, the Xianbei did not emerge as a major power until the Eastern Han. After the breakup of the Donghu, the Wuhuan migrated several thousand li southeast of their original base at Red Mountain (Chishan 赤山). They settled down at Wuhuan Mountain (Wuhuanshan 烏桓山), the landmark from which from which they took their name. According to the *Dili zhi* 地理志 of the substantially later *Liao shi* 遼史, Wuhuan Mountain may have been located north of the Xilamulun River 西拉木倫河 in Inner Mongolia, near today's Tongliao 通遼 (Figure 1.2). In any case, the location of the original Red Mountain remains unknown, as do other details of the Xianbei's ethnic and linguistic origins.<sup>17</sup>

In the mid-Eastern Han dynasty, the Wuhuan migrated from the area south of the Xilamulun River to the drainage area of the Laoha River 老哈河, which also feeds into the Liao River 遼河. The Xianbei, who like the Wuhuan were named for their sacred mountain, followe the Wuhuan south, migrating south into the Xilamulun River Valley a short time later. A number of mountains have borne the title of Xianbei Mountain, perhaps due to the tribe's constant migrations. One Qing 清 scholar believed that the original Xianbei Mountain is located in Ke'erqin Right Middle banner 科爾沁右翼中旗, in Zhelimu league 哲里木盟, near the Xihagulei River 西哈古勒河, only 140 *li* 里 southwest of Wuhuan Mountain.

<sup>&</sup>lt;sup>17</sup> Xu, "Xianbei," 19-22.

### 1.2 The Wuhuan and Xianbei in the Han Dynasty

The Wuhuan and Xianbei, in spite of their cultural affinities, had very different relationships with the Han government. Chinese histories present the Wuhuan as a rather weak tribe, used as a pawn first in the power struggle between the Xiongnu and the Western Han court, and later between the Xianbei and the Eastern Han. When Maodun unified many of the existing tribes in the late third century BCE the Xianbei escaped to the northeast, while the Wuhuan became their subjects of the Xiongnu, submitting tribute of oxen, horses, sheep, and furs in order to escape enslavement.<sup>18</sup> The Wuhuan first entered the Chinese sphere when Han Wudi's famous general Huo Qubing 霍去病 attacked the left flank of the Xiongnu in central and western Inner Mongolia in 121 BCE, causing their *shanyu* to flee from the region. The Han court took advantage of the temporary distance between the Xiongnu and their subjects and relocated the Wuhuan to the Five Commanderies, where they could monitor the activities of the distant Xiongnu and provide a military buffer zone.

As subjects of the Han, the Wuhuan paid annual tribute and in return received Han protection. The office of Colonel Protector of the Wuhuan (*hu Wuhuan xiaowei* 護 烏桓校尉) was established in Ningcheng 寧城 (probably today's Zhangjiakou 張家口, Hebei) sometime after 119 BCE for this purpose, although is unclear though how effective this office was—even after the Xiongnu had been notified of Wuhuan submission to the Han, they continued to treat them as subjects and demand tribute.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> Xu, "Xianbei," 21, and Yü Ying-shih, "Han Foreign Relations," in *The Cambridge History of China*, Vol.
1: *The Ch'in and Han Empires.*, ed. John K. Fairbank and Denis Twitchett (Cambridge University Press, 1986) 436.

<sup>&</sup>lt;sup>19</sup> Yü, "Han Foreign Relations," 437.

The Wuhuan finally broke free of Xiongnu domination during the civil wars from 58 to 49 BCE, but when Wang Mang's 王莽 government fell in 23 CE, the Xiongnu reasserted their power over both the Wuhuan and Xianbei. It was not until the Xiongnu *shanyu* died in 45 CE and the massive Xiongnu confederation was divided into northern and southern braches that the former Donghu tribes finally gained some measure of independence. By 49 CE, the Han had forged an alliance with the southern branch of the Xiongnu, the Wuhuan, and the Xianbei in in an effort to quash the northern Xiongnu.<sup>20</sup>

In the first century CE, Han Guangwudi 光武帝 (r. 25 - 57 CE) tried to woo the Wuhuan and Xianbei by conferring on them gifts of money and silk, but Chinese protection alone was no longer a sufficient incentive to maintain steady tribute relations, and both groups grew stronger and more defiant. The Wuhuan attacked the northern Xiongnu in 46 CE, driving them out of the area south of the Gobi Desert, and the Xianbei dealt the final blow in 87 CE by killing the northern Xiongnu *shanyu*. As a result, 280,000 members of the northern Xiongnu surrendered to the Han, and many others joined the the Xianbei. Three more coordinated assaults in 85, 78, and 91 left the northern Xiongnu nearly defenseless. Following the murder of their newest *shanyu* in 93 CE, the Xianbei occupied all of former lands of the Northern Xiongnu and absorbed the remaining population.

Their newly conquered territory, people and resources allowed the Xianbei to turn their attention south, toward the southern branch of the Xiongnu and the Wuhuan on the edge of the Han state. Although the Xianbei accepted subject status and submitted tribute

<sup>&</sup>lt;sup>20</sup> R.R.C. de Crespigny and H. J. Gardiner, "T'an-shih-huai and the Hsein-pi Tribes of the Second Century A.D.," *Papers on Far Eastern History* 15 (1977): 3-4.

to the court during brief periods, the Xianbei frequently fought the Han—or the Wuhuan and southern Xiongnu, whom the Han impelled to fight their battles for them—between the end of the first century CE through the early part of the second century. However, the Xianbei of this period were scattered throughout Liaodong, Liaoxi, and Dai 代 commanderies and did not represent a unified front.

The Xianbei, together with the Wuhuan, periodically fought on behalf of the Han up through the reign of Han Andi 安帝 (r. 106 – 125), but they were also intent on expanding their own territory. They advanced on Liaodong and Liaoxi in 97 CE, and on Yuyang and Youbeiping in 101 and 106, only backing off during the Qiang 羌 uprisings in the northwest between 107 and 118. By then, Han relations with its settled foreign populations were worsening. The Wuhuan raided the Chinese border in 109, and the southern Xiongnu turned on the Han in 108 and 109. Xianbei raids gradually intensified and moved as far west as the Dai Dai 代 commandery in 118 and 119.<sup>21</sup>

## 1.3 Tanshihuai (c. 136 – 180 CE) and His Legacy

It was not until the reign of Han Huandi 桓帝 (r. 147 – 167) that the Xianbei spread out across various commanderies tribes finally coalesced into a single powerful military alliance on the Mongolian Steppe. This was achieved under the direction of Tanshihuai 檀石槐, the most important leader of the early Xianbei, who was probably born in 136 and died in 180. His life, beginning with his miraculous birth, is described in the accounts of the Wuhuan and Xianbei in the *Hou Han shu*, as well as a lost section of

<sup>&</sup>lt;sup>21</sup> Crespigny and Gardiner, "T'an-shih-huai," 5-6.

the Wei shu by Wang Shen 王沈 that Pei Songzhi 裴松之 appended to Chen Shou's 陳壽 ccount of the Xianbei in the Sanguo zhi.<sup>22</sup>

Tanshihuai's court and military headquarters were located north of the Great Wall, in the valley of the Cheqiu 歡仇 River (near modern Zhangbei 張北 in Hebei), only about 300 *li* from the capital of the Dai Dai 代 commandery. His attacks, which continued through the reign of Han Lingdi 靈帝 (r. 168 – 189), were focused on the Bing 并, You 幽, and Liang 涼 provinces (from Beijing 北京 to southern Manchuria, from the Dai Dai 代 commandery west to Shuofang 硕放 on the northern loop of the Yellow River 黃河, and from Ningxia 寧夏 to the west of Shuofang, respectively). However, he was most interested in the areas of southern Manchuria and the Ordos Desert 鄂尔多斯沙漠 in Inner Mongolia. The Han were no match for Tanshihuai's armies, and Huandi offered to recognize him as king—albeit king of a tribute state—but the offer was an empy one because by this time Tanshihuai already controlled the entire crescent along China's northern border.<sup>23</sup>

Regognizing the precariousness of ruling over such a vast area by himself, Tanshihuai divided his territory into three administrative and military sections (bu 部), over which three of his generals held jurisdiction. The westernmost division consisted of more than twenty tribal groups from Dunhuang 敦煌 to northern Hebei and was led by Huaitou 槐頭, who may in fact have been Yuwen Mohuai 宇文莫槐, the ancestor of the Yuwen 宇文 tribe of the Xianbei. The central section, which stretched only from

<sup>&</sup>lt;sup>22</sup> Crespigny and Gardiner, "T'an-shih-huai," 9-12.

<sup>&</sup>lt;sup>23</sup> Crespigny and Gardiner, "T'an-shih-huai," 24-28.

Shanggu to Youbeiping and consisted of only ten tribal groups, was led by a member of the Murong clan. Finally, the eastern section, with more than twenty-four tribal groups, reached from the area north of Youbeiping to Puyŏ (Ch. Fuyu) 夫與 and Yemaek (Weimo) 濊貊 states in Manchuria. Tuiyin Kehan 推寅可汗, the ancestor of the Tuoba 拓跋 clan, was in charge of the eastern section.<sup>24</sup> These divisions set the stage for the later development of three distinct clans after the death of Tanshihuai during the reign of Han Lingdi.

Tanshihuai was succeeded by his son, Helian 和連, but the government quickly devolved into power struggles between Tanshihuai's grandson Budugen 步度根 in the west and Kebineng 柯比能 in the east. In the center, settled between the Youbeiping and Yuyang Commanderies in Liaoxi, were the followers of generals like Suli 素利, Mijia 彌加, Que Ji 關機, etc., who had maintained a submissive attitude towards the Central Plains government. The three divisions were briefly reunited in 228 by Kebineng, but he was assassinated in 235 by the Chinese prefect (*cishi* 刺史) of Youzhou. After his death, the Xianbei tribes again dispersed, the strong ones striking out on their own and the weak ones seeking the protection of the Cao Wei 曹魏 government.<sup>25</sup>

The Murong tribe pursued the latter option, following Murong Mohuba 莫護跋 into Liaoxi in the second half of the third century.<sup>26</sup> They settled in the area north of what would later be called Jicheng 棘城, which is also called Dajicheng 大棘城 in the

<sup>&</sup>lt;sup>24</sup> Xu, "Xianbei," 28, and Crespigny and Gardiner, "T'an-shih-huai," 29-30.

<sup>&</sup>lt;sup>25</sup> Xu, "Xianbei," 29, and Crespigny and Gardiner, "T'an-shih-huai," 39-43.

<sup>&</sup>lt;sup>26</sup> The following account of the Former Yan period is based on the following two-part article: Gerhard Schreiber, "The History of the Former Yen Dynasty," Parts 1 & 2, *Monumenta Serica* 14 (1949-55): 274-480 and 15 (1956): 1-141. All official titles are translated on pages 130-7 in Schreiber 1956.

Zizhi tongjian 資治通整.<sup>27</sup> The Wei 魏 court granted for the Murong to begin consolidating power in the Liaoxi area. In return, when Wei general Gongsun Yuan 公孫 淵 attempted to establish an independent state to the northeast of Wei in 237, Mohuba fought in the campaign against him and the victorious Mohuba was rewarded by the Wei emperor with the title King who Leads People to the Righteous Cause (*shuai yi wang* 率 義王). In 245, his son Muyan 木延 received the titles of Grand Commander-in-Chief (*dadudu*) 大都督 and Crown Prince (*zuo xian wang*) 左賢王, the latter of which was a title inherited by the Xianbei from Xiongnu princes.

Muyan's son Shegui 涉歸 was made *shanyu* of the Xianbei but nonetheless chose to throw off the reins of the Eastern Jin 東晉 court. He attacked Changli 昌黎 and Liaoxi in 281, but the Jin fended him off, triggering a northward migration of the Xianbei to Liaodong, outside the Great Wall. Perhaps owing to poorer natural resources in this newly settled region, the Murong continuously attacked Changli up until the time of Shegui's death in 283. Afterwards, his brother Murong Shan 刪 (also known as Murong Nai 耐) usurped the throne and attempted to kill Shegui's 15-year-old son Murong Hui 廆 (who is also recorded as Ruoluohui 若洛廆 or Yiluohui 弈洛廆, his courtesy name) in order to eliminate any other pretenders to the throne. Hui managed to survive in hiding, and when Shan's subjects killed him in 285, they made Hui their chieftain.

<u>1.4 The Former Yan State (337 – 370 CE)</u>

<sup>&</sup>lt;sup>27</sup> Muhuba was the first to take the surname Murong, which is explained as a misinterpretation of *buyao* (the kind of cap he like to wear), or a combination of the Chinese characters "emulation" and "bright appearance" 容. Murong is also the name of one of Tanshihuai's generals, among whom he divided the empire in 166, but this seems to be coincidence. Schreiber, "History," Part 1, 392-3.

The formation of the first Yan state begins with Shegui's son, Murong Hui, who only received the title of emperor posthumously, when it was conferred on him by his grandson. During his lifetime, Hui continued to make raids on the borders with China in the south and Puyŏ in the north. Repeated Jin retaliation eventually led Hui to pursue a more conciliatory approach, and in 289 he submitted to the Jin court and was made Commander-in-Chief (*Xianbei dudu*) 鮮卑都督 of the Xianbei. In the same year, he moved his capital to the better cultivated lands of Qingshan 青山 in Tuhe 徒河. Five years later he ventured even closer to the Chinese border, returning the capital to Dajicheng and ushering in a period of prosperity and political success.

At this time, the two most troublesome adversaries of the Murong were the Duan 段 and Yuwen tribes of the Xianbei, who were held at bay by a combination of marriage alliances, tribute gifts, and military force. After a major victory over the Yuwen, the Murong acquired the submission of several more tribes, and in 308, Hui assumed the position of Great Shanyu of the Xianbei. Meanwhile, China's poor administration of Ping and You provinces in the northeast drove many Chinese to cross the borders and join the Murong (Figure 1.3)—so many, in fact, that new districts had to be created in Ping province 平州 according to the districts in Jin China from which they had arrived. The Yan state held great appeal for refugees in part because Murong Hui offered Chinese exiles high positions within his government. By the founding of the Eastern Jin dynasty in 317, tens of thousands Chinese were fleeing north across the border.

The newly established Emperor of the Eastern Jin offered Hui the titles of General who Prances like a Dragon (*longxiang jiangjun*) 龍驤將軍, Great Shanyu, and Duke of

Changli (*Changli gong*) 昌黎公. Hui had by this time asserted dominance over all of the Xianbei tribes, in spite of interference from Koguryŏ (Ch. Gaogouli) 高句麗, the Duan, the Yuwen, and the governor of Ping province. Because he aspired to be King of Yan, Hui accepted the first two titles but declined the third. He placed his son Murong Ren 仁 in charge of Liaodong and notified the Jin emperor in Jiankang 建康 of his conquest of the last Chinese-controlled city in the region. However, the emperor again offered him posts that fell short of his expectations: General who Pacifies the North (*anbei jiangjun* 安北將軍), Prefect of Ping Province (*Pingzhou cishi* 平州刺史), and Duke of Liaodong (*Liaodong gong* 遼東公).

Meanwhile, Shi Le 石勒, the Xiongnu general who had established the Later Zhao 後趙 dynasty, sent an embassy to Yan in 323 in hopes of forming an alliance against the Eastern Jin, but Hui took the envoys prisoner and had them delivered to Jiankang. Hoping to be repaid for his loyalty to the Jin, he sent a request in 325 for the titles of Grand General (*da jiangjun* 大將軍) and King of Yan (*Yan wang* 燕王), but in 333 he died without having received an answer. Even after his death, he was still denied the title of king. It was not until Hui's son and grandson declared themselves king and emperor that these two greatest of epithets were finally conferred on Hui.

Hui's legitimate heir, Murong Huang 皝, received a classical Chinese education and maintained the close relationship with the Eastern Jin court established by Hui. As a ruler, he was more heavy-handed than his predecessor, and this fact upset many officials in his court, as well as his brothers Murong Han 韓, Ren, and Zhao 昭, who all sought refuge from him among the Duan and Yuwen tribes.

In 336, Huang posthumously enstated his father as King of Yan, and in 337 he took the title himself, marking the official creation of the Former Yan state (Figure 1.4). Two years later, he sent envoys to inform the Jin emperor of his decision. In 341, the Jin emperor recognized him as King of Yan, Prefect of You Province, and military commander of everything north of the Yellow River, gaining the recognition that had evaded his father for so long. In 342, he relocated his capital from Jichengto Longcheng 龍城, close to the Han site of Liucheng 柳城. At the same time, he allied with his estranged brother Han to attack Koguryŏ in the north, and to ensure future cooperation, Huang took the king's mother captive and relocated the corpse of his father to Longcheng.

Yan's greatest opponent during Huang's reign was Shi Hu 石虎, the nephew and successor of Shi Le of the Later Zhao dynasty. As a result of the fighting in the Central Plains, there was a constant flow of Chinese refugees into Yan, and new populations continued to be transferred from other conquered territories. As Yan grew in size and strength, its reliance on the Jin court decreased, and in 345, Huang abolished the use of Jin reign titles and began counting years beginning with his own rise to power. However, he died only a few years later in 349, following a hunting accident.

Before Huang died, he appointed his second oldest son, Jun 雋, as his successor. When Jun assumed the throne in 349, he too was recognized by the Jin court as the King of Yan. Although Shi Hu had also claimed the title of emperor the same year, he died a short time later, and his empire quickly crumbled under a series of succession disputes. When the dust finally settled, the majority of Zhao was controlled by Ran Min 冉閔, while northern Shanxi was ruled by Shi Qi 石祇, Shi Hu's only surviving relative. The civil unrest provoked by these events provided the first real opportunity for Yan to take the city of Ye 鄴.

In the years that followed, Jun retook all of You province that had been conquered by Zhao, leading to Later Zhao's final disintegration and the eventual capture and execution of Ran Min in 352. Jun laid siege to Ran's capital at Ye and captured it, but instead of establishing his own capital there, he relocated it to Ji 薊, near modern Beijing. Having taken the Central Plains, the ruler of Yan was for the first time positioned to elevate himself from king to emperor of China, and the king of Koguryŏ was now offering Jun hostages, tribute, and his submission in exchange for his captured mother.

Previously, during the conflict with Ran Min, Duan Kan 段龕 proclaimed himself King of Qi 齊, established his capital in Guanggu 廣固, and submitted to the Jin court. Yan now laid siege to Qi's capital and seized it in 356, expanding Yan as far south as the edge of the Shandong 山東 Peninsula. Campaigns against the Chile 敕勒 (or Gaoche 高 車, former Xiongnu) and Dingling 丁零 in the north in 357 led to their submission, as well. In the same year, the capital was transferred to Ye.

Jun's chosen successor was his son, Ye 曄, but when Ye died in 357, Murong Wei 暐 became Crown Prince in his place. Jun was uncertain of Wei's capacity for the position through, and on his deathbed in 359, he begged his brother Ke 恪 to replace Wei, who was still only a child. Ke refused to become emperor, but he consented to serve as regent. As an added precaution, Jun also recalled his estranged brother Murong Chui  $\pm$ , Huang's fifth son, from his distant post in Liaodong to help lead young Wei. When Jun died in 360 at age 53, his 11-year-old son Wei ascended the throne with Huang's brothers Ke and Ping  $\mp$  acting as his Regent and Vice Regent, respectively.

During the early part of Wei's reign, there were skirmishes within the court and a few rebellions within the state, but the army was able to restore order. In 365, Yan even extended its borders, taking Luoyang 洛陽 for the first time and passing uncomfortably close to the territory of the Former Qin 前秦 dynasty, which was established in 350 by Fu Jian 符建. A short time later, however, Yan was afflicted with famine and lost one of its more capable leaders, Murong Ke. Before Ke died, he encouraged Wei to allow Murong Chui to take control of the government, but Wei deferred to Ping instead. Jealous, Ping kept Chui out of key positions, frittered away the state's resources, allowed the bureaucracy to balloon to unsustainable proportions, watched the decline of the army, and ultimagely underestimated the strength of the Former Qin.

The Jin army observed these weaknesses and convinced the emperor to attack Yan in 369, prompting Yan to request military support from the emperor of the Former Qin, Fu Jian 苻堅 (the grandson of the dynasty's founder) in order to repel Jin advances. Meanwhile, Ping and the Empress Dowager conspired to kill Chui, who escaped first to Longcheng and then to the Former Qin state. With Chui removed from the Yan court, Fu Jian felt turned on his former ally in 370 and he seized the capital at Ye and captured Wei. However, instead of killing him, Fu sent him back to the palace unharmed to run the state and formally submit to Qin. Later, he transferred the entire Yan court at Ye to his capital at Chang'an, where Wei and Ping retained high posts in the government until Murong Chui revived the Yan dynasty and attacked Ye. Reunited with his uncles, Wei plotted with them to kill Fu Jian, but their plan was discovered, and Wei and over a thousand of his countrymen were slaughtered in retaliation.

At the height of his power, Fu Jian succeeded in unifying almost all of China north of the Yellow River, except for the Dai Dai 代 state in the far north. It was his leadership and his advances against the Jin that unified the diverse peoples of the Former Qin state, who were of Di 氏, Jie 羯, Qiang, Xianbei, and Xiongnu descent. However, after the devastating defeat by the Jin in the Battle of the Fei River 淝水之戰, the dynasty began to unravel. The Former Qin collapsed in 394, and several other small non-Chinese states arose. These fell one by one to the Northern Wei dynasty of the Tuoba Xianbei, which eventually came to rule all of North China.<sup>28</sup>

# <u>1.5 The Later Yan State (384 – 407 CE)</u>

Murong Chui was the fifth son of Murong Huang and according to steppe tradition should have been his successor, but the role had instead been assigned to Huang's second son Jun. After Jun's death, he was succeeded by the young Murong Wei, for whom Huang's brothers Ke and Ping acted as regents. After Ke's death, Wei and Ping schemed to remove Chui from the court, forcing him to seek refuge in the Former Qin state in 369. Chui loyally served Fu Jian until 383, and until that time he ignored his son's suggestion that he resurrect the fallen state of Yan.

<sup>&</sup>lt;sup>28</sup> Piero Corradini, "The Barbarian States in North China," Central Asiatic Journal 50.2 (2006): 198-205.

However, an irresistible opportunity presented itself in 383, when Chui was sent to northern Shanxi 山西, which had once belonged to Yan, to subdue a rebellion. Once he was there, Chui did precisely the opposite: he incited a rebellion. With the support of the former citizens of Yan, he declared himself King of Yan in 384 and laid siege to the former capital of Ye. The siege was drawn-out and left the city in ruins, so in 385 he established his Later Yan capital at Zhongshan 中山 (Figure 1.5). The following year, he assumed the title of emperor. The last of the Former Qin rulers had been killed by 394, and most of the Former Qin territory north and east of the Yellow River had been recaptured.<sup>29</sup> The Later Yan territory now covered Hebei, the Shandong Peninsula, the upper reaches of the Fen River Valley 汾河流 in Shanxi, and parts of Northern Henan.<sup>30</sup>

However, Chui's death in 390 marked the beginning of a decline in the Later Yan state. Chui was succeeded by his inept son Bao 寶, and consequently the newly emerged Northern Wei conquered much Later Yan between 395 and 397. Bao was murdered in 398 and replaced by his son, Sheng 盛, a more capable and humble ruler who voluntarily demoted himself form emperor to king. Although Sheng instituted many reforms and expanded Yan's territory into Koguryŏ, his legitimacy was still questioned by other contenders for the throne in the court, and he was murdered by one of his relatives in 401. An uncle of Sheng's widow named Xi 熙 took the reins next, but his exorbitant spending on palaces and parks and failure to put down revolts in Koguryŏ led to his eventual demise. An adopted son of Bao named Gao Yun 高雲 (or Murong Yun 雲) seized the

<sup>&</sup>lt;sup>29</sup> The following account of the Western Yan period is based on pages 353-354 of C. Piton, "China during the Tsin dynasty, A.D. 264/419," *China Review* 12 (1883-4): 353-362, 390-402.
<sup>30</sup> Holmgren, "Mu-Jung," 1.

throne while Xi was at his consort's funeral in 407 and killed him when he returned to the capital, bringing to a close the Later Yan dynasty.<sup>31</sup>

# <u>1.6 The Western Yan State (384 – 394 CE)</u>

Murong Chui was not the only refugee with his heart set on restoring the Former Yan. During the rebellion against Fu Jian in 384, Chui's nephew Hong 泓 abandoned his Former Qin post and crossed the Yellow River eastward into Shanxi to assemble a Xianbei army, and his brother Chong 冲 left his post as Prefect of Pingyang 平陽 to join him. The two joined forces in an expedition against Chang'an, but Hong was murdered before they could reach it, leaving Chong in command of his armies. After capturing the palace outside the capital, Chong established himself as Emperor of Yan—a position that by this time was already occupied by Chui in the east. He successfully laid siege to Chang'an and subsequently occupied it himself. His victory was short-lived though. When he refused to lead his Xianbei army back to their homeland, they killed him and replaced him with a general named Duan Sui 段隨.

What followed was a quick succession of rulers: Murong Yi 顗, Chong's son Yao 瑤, Hong's son Zhong 中, and finally Yong 永, a distant relative of Chui. Yong moved his capital to Zhangzi 長子 in Shanxi and in 386 proclaimed himself Emperor of the Western Yan dynasty. The dynasty only survived for nine years, and its territory never exceeded the area of southern Shanxi. In 394, irritated by the challenge to his authority posed by Yong, Chui led his army to Zhangzi, where he was welcomed by the citizens. Yong was beheaded, and the lands of Western Yan became part of the Later Yan state.

<sup>&</sup>lt;sup>31</sup> Piton, "Tsin dynasty," 354-355.

In the Chinese histories, the Western Yan state was never regarded as a legitimate dynasty because it did not even last beyond the lifetime of its founder.<sup>32</sup>

# 1.7 The Southern Yan State (398 – 410 CE)

Many Murong refugees fled after the Later Yan suffered major territorial losses in the 390s—those who went south formed the Southern Yan, while those who remained in Liaoning later formed the Northern Yan (Figure 1.6). Southern Yan embraced the area of the Shandong Peninsula that was called Qing province 青州 during the Jin dynasty. Although it was a minor state, it acted as a buffer zone between the north and the south.

It was mentioned earlier that during the fighting with Ran Min, Duan Kan had taken as his capital, established himself as Prince of Qi, and paid tribute to the Jin court.<sup>33</sup> In 356, Murong Huang's youngest son, De 德, entered with troops and retook control of the peninsula. However in 370, after Yan's capital at Ye was captured by Fu Jian, De was transferred along with the rest of the Former Yan court to the Former Qin capital of Chang'an, where he received special attention and was given an official post after participating in the Qin conquest of Gansu 甘肅 in 376. He, his brother Na 納, and his whole family later moved to Zhangye, and in 383, they were recalled to Former Qin Chang'an. As described above, De and Chui turned against Fu Jian in 383, retook Ye and declared Chui King of Yan in 384, and formally established the Later Yan dynasty in 386. A decade later, they retook the Shandong Peninsula in 394 by forcing the Inspector of Qing province to give his allegiance to Yan rather than the Jin court.

<sup>&</sup>lt;sup>32</sup> Piton, "Tsin dynasty," 360-362.

<sup>&</sup>lt;sup>33</sup> The following account of the Southern Yan period is based on Holmgren, "Mu-Jung"

Having survived its conflicts with the Jin in the south, the Yan government now had to confront the emerging threat posed by the Northern Wei. Under the under the leadership of Tuoba Gui 拓拔珪, the Northern Wei laid siege to Ye and toppled the Later Yan capital in 398. As city after city in the north fell to the Northern Wei, De was faced with the problem of where to take the 40,000 families that accompanied him. In the end, there were only two feasible options: moving southeast into northern Jiangsu 江蘇, where they would encounter Jin resistance, or moving northeast into Shandong, where they might be able to find refuge in Guanggu. De settled on the latter course of action, but his ally in Guanggu refused him access, forcing to change his route and recapture the southern parts of the peninsula before again advancing on Guanggu.

In July of 399, at age 63, Murong De assumed the title of emperor in Guanggu, the capital of what would later become the Southern Yan. Guanggu was only meant to be a temporary capital before retaking the northeastern plain, but De's territory was encircled by enemies, and there was no real possibility of establishing a new capital elsewhere. It was only the constant infighting between the Northern Wei, Eastern Jin, and Later Qin 後秦 that allowed the small and relatively weak Southern Yan state to survive. In addition, the leadership struggled to secure its position because it consisted almost entirely of non-Han émigrés, along with a handful of Chinese or sinicized families that had fled from the Tuoba conquest of the in 398. The Southern Yan had no local support from the people of central Shandong and even had to go so far as to position guards at the borders to keep its people from fleeing to the enemy.

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In the process of retaking Shandong, De had been separated from all of his family except for his wife and brother. His sister-in-law and her son (his nephew, Chao 超) had survived abroad—they lived among Qiang of Shanxi, sought refuge with the Later Liang 後涼 of Gansu, and finally were moved back to Chang'an. Murong Chao escaped the attention of his various captors by feigning madness, but his mother eventually sent him east to find the rest of his family. Upon arriving in Guanggu, De appointed Chao as heir to the throne, and when De died in 406, Chao became emperor. The Murong and Chinese elites at court did not regard Chao with the same loyalty as they had to De, but they also could not agree on a more appropriate successor and remained sharply divided over the question of whether to recapture the northeast. Many of Chao's supporters were mercenaries or refugees who had grown up in the northwest and saw Shandong as the permanent location of the Yan state. However, the precariousness of the peace that had preserved Yan up to that point was shattered when Yan made raids on Jiangsu, instigating a conflict with the Jin dynasty.

In 409, the Jin laid siege to Guanggu. Chao offered to submit and cede territory, but by this time it was clear that Yan had been defeated, and the offer was refused. The Jin armies blocked the river that provided the main water supply of Guanggu, and people began to defect en masse. In 410, the city fell and the Jin executed most members of the non-Han leadership, including 25-years-old Chao. Thus ended the reign of the last leader directly descended from the Murong clan.

## <u>1.8 The Northern Yan State (407 – 436 CE)</u>

While the subsequent Northern Yan dynasty encompassed much of the land held by the Former and Later Yan states, the ethnic origins of the leadership are less clear. The ruling family of the Northern Yan dynasty were the Fengs 馮, who are referred to in the histories as "barbarized Chinese." This term probably did not refer to Chinese who became barbarized through intermarriage with non-Chinese—more likely, it meant sinicized non-Chinese. Judging from the three-syllable names used by some early members of the clan, the Fengs had probably spoken a Xianbei language at one time but gradually became Sinicized.<sup>34</sup> Regardless of their ethnicity and lineage, they certainly inherited much of the culture of the previous Yan states.

The earliest reliably identified ancestor of the Feng clan was Feng He 馮和, who lived in the fourth century. His son An 安 had two sons, Feng Ba 馮跋 and Feng Hong 馮弘. Ba, a general, led the charge against the last sovereign of the Later Yan, Murong Xi, and replaced him with his close friend Gao Yun, the adopted son of Murong Bao. When Gao was killed in 409, Ba took the reins as emperor until his death in 430. Ba was succeeded by his younger brother Hong, who was killed by Koguryŏ in 436 as he tried to escape from the approaching Tuoba forces.

After the fall of the last Yan state, the Tuoba conquered and unified the remainder of North China. The remaining Murong—most of whom were by now thoroughly Sinicized—were absorbed into the mixed Han and non-Han population ruled by the Northern Wei, just as hundreds of thousands of Xiongnu had dissolved into the Xianbei population during the Eastern Han dynasty.

<sup>&</sup>lt;sup>34</sup> Jennifer Holmgren, "Social Mobility in the Northern Dynasties: A Case Study of the Feng of Northern Yan," *Monumenta Serica* 35 (1981-83): 19-32.

#### 2. The Murong in the Archaeological Record

### 2.1 Where History Ends and Archaeology Begins

The historical overview provided above is, at present, the only complete history of the Murong Xianbei that is available in the English language. These dated events provide a chronological framework for Murong archaeology, as well as a rough sketch of Murong interactions with their neighbors. However, details described in the dynastic histories, such as the attitudes of individual rulers towards their rivals, should be taken with a grain of salt. The *Hou Han shu* and *Jin shu*, for instance, were compiled centuries later using diverse sources, and it should be assumed that these state-sponsored projects supported the political agendas of their patrons. For this reason, we must carefully weigh the textual evidence against the evidence in the archaeological record, which frequently supplies slightly incongruous or even contradictory information.

When the dynastic histories mention the Murong, they primarily report on political and military episodes or give biographies of emperors, kings, and a few elite members of society. Sometimes they contain ethnographies that give a glimpse into the lives and customs of the people, like the accounts of the Wuhuan and Xianbei in the *Hou Han shu*, but tend to present a distorted view of all non-Han populations as inferior, uncivilized, and deeply admiring of the Chinese. A far more nuanced picture can be obtained by looking at the material remains of the Xianbei that have come to light. While a comprehensive survey of Xianbei sites is cannot be provided here, this section of Chapter 2 will supply a basic introduction to the history of Xianbei—and Murong in particular—archaeology as a field, while at the same time drawing attention to some trends and methodological problems that confront today's Murong scholars.

# 2.2 The Foundations of Murong Archaeology

Murong archaeology is a relatively recent phenomenon, launched by the chance discovery in 1956 of Jin period tombs in Fangshen 房身 village, between Beipiao 北票 and Chaoyang 朝陽 in Liaoning province.<sup>35</sup> Beginning with the excavation of the Fangshen and other tombs along the Daling River Valley 大陵河流, the last half century has seen the field advance by leaps and bounds (Figure 1.7). Today, dozens of Xianbei sites—at least ten of them apparently Murong—have been identified and excavated. Archaeological studies of these tombs fall into roughly three main categories: individual excavation reports, surveys of groups of sites and their contents (which is less often attempted today), and specialized studies of particular artifacts, such as gold ornaments or horse trappings.

The first survey was undertaken by Su Bai 宿白 in his 1977 article, "Xianbei Relics of the Northeast and Inner Mongolia: Compiled Xianbei Relics, Part I," the first of a three-part series that described Xianbei archaeological remains from the Jin through the Northern Wei periods.<sup>36</sup> Part I addressed the Murong Xianbei, while Parts II and III focused on the Tuoba Xianbei in the early period at Shengle 盛樂 and Pingcheng 平城, and in the later period at Luoyang.<sup>37</sup> Su begins with a brief history of Northeast China during the Han, Wei and Jin periods, but he remarks that the scanty data about the

 <sup>&</sup>lt;sup>35</sup> Chen Dawei, "Liaoning Beipiao Fangshen cun Jin mu fajue jianbao," *Kaogu* 1960.1 (1060): 24-26.
 <sup>36</sup> Su Bai, "Dongbei, Nei Menggu diqu de Xianbei yizhi—Xianbei yizhi jilu zhiyi," *Wenwu* 1977.5 (1977): 42-54. Translation and notes provided in trans. David Fridley, "Xianbei remains in Manchuria and Inner Mongolia," *Chinese Studies in Archaeology* 1.2 (Fall 1979): 3-43.

<sup>&</sup>lt;sup>37</sup> Su Bai, "Shengle, Pingcheng yidai de Tuoba Xianbei—Bei Wei yiji—Xianbei yiji jilu zhi er," *Wenwu* 1977.11 (1977): 38-46, and "Bei Wei Luoyangcheng he Beimang Lingmu—Xianbei yiji jilu zhi san," *Wenwu* 1978.7 (1978): 42-52.

migration routes of the early Xianbei must be supplemented using information gleaned from the region's archaeology.

Su identified seven early Xianbei sites—the first three belonging to the Murong of Liaoning (namely, the tombs at Fangshen, the tombs of Feng Sufu 馮素弗 and his wife in Beipiao county,<sup>38</sup> a stone tomb at Bao'ansi 保安寺 in Yi county 義縣<sup>39</sup>), a fourth belonging to the Tuyuhun 吐谷渾 of Qinghai 青海, and the last three representing the Tuoba of Heilongjiang 黑龍江 and Inner Mongolia. At the time Su was writing, however, relatively few tombs were known, and there were no set criteria for recognizing them. Instead, Su compared the Murong remains to the findings from slightly better understood Xiongnu and Tuoba sites located nearby.

Over the next ten years, as additional Murong tombs were unearthed, literature on the subject flourished. Among the most important discoveries were: a stone coffin tomb excavated in Zhelimu League 哲理木盟, Inner Mongolia, in 1975, and objects uncovered nearby in Ke'erqin Right Middle banner and Naiman 奈曼旗 banner that have been designated as part of the Eastern Han period "Shegen Culture 舍根文化"<sup>40</sup>; the Former Yan painted tomb excavated at Yuantaizi 袁台子 in 1982<sup>41</sup> and the Later Yan tomb of Cui Wei 崔遹 excavated in 1979 at Xiaoyaojingou 小姚金溝 (near Yao'eryingzi 腰面營

<sup>&</sup>lt;sup>38</sup> Li Yaobo, "Liaoning Beipiao xian Xiguan gongzi Bei Yan Feng Sufu mu," *Wenwu* 1973.3 (1973): 4-30, 67-71.

<sup>&</sup>lt;sup>39</sup> Liu Qian, "Liaoning Yi xian Bao'ansi faxian de gudai muzang," *Kaogu* 1963.1 (1963): 53.

<sup>&</sup>lt;sup>40</sup> Zhang Bozhang, "Zhelimu meng faxian de Xianbei yicun," *Wenwu* 1981.2 (1981): 9-15.

<sup>&</sup>lt;sup>41</sup> Pu Shi, "Liaoning Chaoyang Yuantaizi Bei Yan mu," Wenwu 1994.11 (1994): 43-47.

子),<sup>42</sup> both south of Chaoyang; and the Jin tomb at Xiaomintun 孝民屯 in Anyang 安陽, Henan, excavated between 1973 and 1974.<sup>43</sup>

The next major study to address these finds was Xu Ji's 徐基 1987 paper entitled "Initial Observations on the Murong Xianbei Relics."<sup>44</sup> One of Xu's most significant contributions was the creation of a system for identifying Murong tombs, which were not easily distinguished from other Xianbei tribes because of the lack of inscriptions in in their tombs. Xu's overview of Murong material culture was the first of its kind and became a touchstone for subsequent studies. What follows is a detailed summary of the criteria for identifying Murong tombs that were presented in Xu's groundbreaking article.

First, the ceramics of Murong burials are generally simple and include earthenware and grayware vessels. The two most common vessel types are the  $hu \equiv$ (bottle) and the *guan* i (jar), which appear in glazed and unglazed forms. On rare occasion, celadons from the South were also uncovered. Decoration is simple, often consisting of little more than darkened areas and incised bowstring or wave patterns.

Second, tombs often contained gold ornaments in the shape of crescents, squares, or peaked squares that were worn at the front or sides of a cap. These were sometimes accompanied by flower-, tree- or vine-shaped elements and will be the subject of a longer analysis in the following chapter. Other common gold and silver items found in Murong tombs include hairpins, bracelets, finger rings, large ear pendants, thimbles, and buttons.

<sup>&</sup>lt;sup>42</sup> Chen Dawei and Li Yufeng, "Liaoning Chaoyang faxian Shiliuguo shiqi Hou Yan Cui Wei mubei," *Wenwu* 1981.4 (1981): 91.

<sup>&</sup>lt;sup>43</sup> Zhongguo shehui keyuan kaogu suo Anyang dui, "Anyang Xiao Mintun Jin mu fajue baogao," *Kaogu* 1983.6 (1983): 501-511, 577-579, 584.

<sup>&</sup>lt;sup>44</sup> Xu Ji, "Guanyu Xianbei Murong bu yizhi de chubu kaocha," in *Zhongguo kaogu xuehui di liu ci nianhui lunwen ji*, ed. Zhongguo Kaogu Xuehui (Beijing: Wenwu chubanshe) 162-164.

The third category of objects found in Murong tombs includes horse armor, iron weapons, and horse trappings such as bronze saddle cantle covers, large bronze "calabashes" (*danglu* 當戶) with hanging leaves, iron bits, wooden-core bronze stirrups, simple bronze stirrups, gilt bronze bells, and pendant ornaments. Bronze and iron belts and belt hooks also fall into this category. Common weapon types include ring-headed long daggers, long spears, and shovel-shaped wide-bladed arrowheads.

In addition to their grave goods, the construction and layout of the burials themselves are revealing. The earthen pit graves hold wooden coffins (and in fewer cases, stone sarcophagi) that are broader and taller at the head, and shorter and narrower at the foot, making the tops appear trapezoidal. On rare occasion, the painted walls of the coffins have been preserved, revealing images of the tomb occupant, landscape, servants, and dogs. In Liaoxi and Eastern Inner Mongolia, most of the tomb chambers are laid out on an east-to-west axis, but the Xioanmintun tomb at is oriented with the head pointed north, perhaps facing towards the sacred mountain of the Xianbei. Regardless of their orientations, most tombs have a niche for offerings excavated into the wall above the head. The animals bones they contain tend to belong to cows and dogs.

In addition to providing this invaluable overview of Murong tomb features, Xu also took care to distinguish between the objects and features connected to the Murong Xianbei, those that exhibit external cultural influences, and those manufactured by the Murong on the model or imports or foreign craftsmanship. He regarded most of the simple ceramics, gold ornaments, and horse trappings and armor as reflective of Murong material culture, while lacquer wares, particular ceramic vessels (e.g. celadon-glazed chicken-headed ewers) and bronze items (e.g. steamers, mirrors and coins) were of Han

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origin. Xiongnu craftsmanship could be seen in inlaid gold and silver objects and in a type of cauldron with bridge handles and a high round openwork foot, but glass objects were almost exclusively imported from the West. Xu's third category—objects made by Xianbei artisans in imitation for foreign goods—is less easily delimited but seems to include grayware vessels, iron bits, spears, and ring-handled daggers.

Finally, Xu created a periodization of the now-expanded body of remains, dividing them into four phases correlated to events and migrations described in the dynastic histories.<sup>45</sup> He began with the early second century because the Eastern branch of the Xianbei did not leave the southern tip of the Daxing'an Mountains 大興安峰 and headwaters of the Huolin River 霍林河 in Inner Mongolia until the Xiongnu divided into northern and southern branches in the first century CE. At the beginning of the Wei period, Mohuba led them south into the lower reaches of the Liao River—a migration that seems to coincide with the remains of the Shegen Culture in and around Zhelimu League.

Xu's second phase, for which there is also very little textual evidence, picks up in the mid-third century and continues through the early fourth century. In 239, Mohuba entered Liaoxi and established a capital to the north of what would become Jicheng. His grandson, Murong Hui, relocated the capital to Jicheng in 289 and then to Dajicheng in 294. Thereafter, the Murong finally settled down more permanently. There continues to be a great deal of speculation about the precise location of the various capitals, but they

<sup>&</sup>lt;sup>45</sup> The following summary of the periodization is based on Xu, "Xianbei," 163-9.
all seem to be located along the Daling River.<sup>46</sup> The early tombs at Fangshen confirm this early sedentary phase, which was roughly contemporary with the Western Jin period in China.

The third phase in Xu's periodization is roughly equivalent to the Former Yan dynasty, beginning around the time that Murong Huang proclaimed himself King of Yan in 337. In 342, Huang relocated his capital from Jicheng to Longcheng (today's Chaoyang), the site of which has been located. The largest number of Murong tombs uncovered to date belongs to this third phase. They are concentrated in Beipiao and Chaoyang counties but also include the Xiaomintun tomb in Anyang, which is the furthest outlier of the third phase. Its existence may be explained by the expansion of Former Yan in the middle of the century. In the 352, Murong Jun recaptured the city of Ye (near Anyang) from Ran Min and shifted the capital to Ji (near modern Beijing). Four years later, Yan took the Shandong peninsula as well, and in 357 the capital was again transferred, this time to Ye. This phase ends with Fu Jian's conquest of Ye and the fall of the Former Yan in 370.

Xu's final phase from 384 to 436 CE encompasses the Later Yan and Northern Yan dynasties. Interestingly, although their numbers are small, this is the only phase in which the tomb occupants and dates of their deaths can be identified. The first is the tomb excavated in 1979 at Xiaoyaojingou in Chaoyang county. It contained a stone plaque inscribed with fifteen characters indicating that the occupant was Cui Wei of the

<sup>&</sup>lt;sup>46</sup> It is unclear whether Hui left and returned to the same city. One scholar suggests that there were in fact two different cities. Qingshan has been identified with Dahongleishan 大虹螺山 near the northwest corner of Liaodong Bay, so the southern Jicheng is assumed to be near Jinzhou 錦州. The northern Jicheng is probably somewhere between the ancient cities of Liucheng 柳城 (in today's Chaoyang county) and Yizhou 義州 (in today's Yi county 義縣). See Josef L.M. Mullie, "À la Recherche de Ki-Tch'eng la Capitale des Mou-Joung," *Central Asiatic Journal* 15:4 (May 1972): 284-294.

Qinghe 清河 military installation, who served as Prefect in Changli in the tenth year of the Jianxing 建興 reign of the Yan (395 CE). In this case, there is a direct overlap between the literary and archaeological sources—the *Bei shi* 北史 confirms that Cui Wei was Prefect of Changli during the reign of Murong Chui.<sup>47</sup>

The second example of the fourth phase is the site of the tombs of Northern Yan official Feng Sufu and his wife, which were discovered in 1965 near Xiguangongzi in Beipiao county. Feng's burial contained four seals—one in gold and three in gilt bronze—carrying the titles Duke of Fanyang (*Fanyang gong*) 範陽公, Duke of Liaoxi (*Liaoxi gong*) 遼西公, Chariot and Horse General (*juji jiangjun*) 車騎將軍, and Commander-in-Chief (*da sima*) 大司馬. Although Feng's name is not indicated anywhere within the tomb, the histories record only one figure who held all of these titles: Feng Sufu, the younger brother of Feng Ba, who became the second ruler and king of the Northern Yan state. According to Feng Ba's biography in the *Jin shu*, Feng Sufu died at the age of about 30 in 415 CE, which is now the date assigned to the tomb.<sup>48</sup>

Su Bai's introductory survey and Xu Ji's periodization laid the groundwork for more expansive studies by other scholars in the 1990s. Perhaps the most ambitious of these is Xu Bingkun's 1995 book entitled *Xianbei*, *Three Kingdoms, and Kofun: The Ancient Cultural Interaction between China, Korea, and Japan*, which looks at cultural exchange in Northeast Asia from early dynastic China up through the sixth century CE.<sup>49</sup> Xu Bingkun's research, like Xu Ji's, touches on the importance of gold ornaments and

<sup>&</sup>lt;sup>47</sup>"燕建興十年昌黎太守清河武城崔遹." See Li, "Cui Wei mubei."

<sup>&</sup>lt;sup>48</sup> Li, "Feng Sufu mu," 2-28.

<sup>49</sup> Xu, "Xianbei."

horse trappings within Murong culture. The former, however, is less concerned with the question of their debated origins than with the uncontested reality of their absorption by Puyŏ, Koguryŏ, Paekche (Ch. Baiji) 百濟, Silla, Kaya (Ch. Jiaye) 加倻, and Kofun 古墳 (c. 250 - 538 CE) Japan in the fifth and sixth centuries—a topic that falls beyond the scope of this dissertation. However, Xu's book makes an invaluable contribution to the broader field of Northeast Asian archaeology by charting the estimated dates of the Murong tombs that had been excavated to date against a comprehensive timeline of Chinese, Korean, and Japanese dynasties, reign dates, and important historical events.

# 2.3 Recent Murong Archaeology

It was only after several additional discoveries in the 1990s and early 2000s that research on Murong material culture truly flourished though. Among the most important discoveries in this period were the Goumenzi 溝門子 painted Jin tomb,<sup>50</sup> the two Jin tombs at Shi'ertai 十二台 brick factory and 88M1,<sup>51</sup> the Fengcheduwei 奉車都尉 tomb,<sup>52</sup> the Tiancaogou 甜草溝 tombs,<sup>53</sup> the Lamadong 喇嘛洞 cemetery,<sup>54</sup> the Dabanyingzi 大板營子 Xianbei tomb, and Li Gui's 李廆 tomb in Jinzhou 錦州.55 Architectural remains are sparse, but two "pavilion 亭 style" buildings a tamped earth wall came to light in Daban town 大板鎮, near Beipiao city in 1994. These were excavated in 2000, yielding courtyard-style architecture arranged on a north-south axis

<sup>&</sup>lt;sup>50</sup> Chen Dawei, "Chaoyang Goumenzi Jin bihua mu," *Liaohai wenwu xuekan* 1990.2 (1990): 12-24. <sup>51</sup> Sun Guoping, Tian Likun, and Zhang Keju, "Chaoyang Shi'ertai xiang zhuan chang 88M1 fajue jianbao," *Wenwu* 1997.11 (1997): 19-32. <sup>52</sup> Tian Likun, "Chaoyang Qian Yan fengju duwei mu," *Wenwu* 1994.11 (1994): 33-37.

<sup>&</sup>lt;sup>53</sup> Wan Xin, Wang Chengshang, and Zhang Hongbo, "Liaoning Chaoyang Tiancaogou Jin mu," Wenwu 1997.11 (1997): 33-41.

<sup>&</sup>lt;sup>54</sup> Zhang Keju and Tian Likun, "Liaoning fajue Beipiao Lamadong Xianbei guixu mudi," *Zhongguo Wenwu* Bao 1996.12.24 (1996):1.

<sup>&</sup>lt;sup>55</sup> Lu Baolin, Wu Peng, and Xing Fa, "Jinzhou Qian Yan Li Hui mu fajue," Wenwu 1995.6 (1995): 42-46.

and a few scattered tiles. It has been speculated that this site is connected to the as-of-yet unidentified capital that Mohuba established north of Jicheng.<sup>56</sup>

As for Murong archaeological remains, the most comprehensive study gathering them together together in an exhibition catalogue entitled *The Essence of Three Kingdoms Period Relics*, which was produced by the Liaoning Cultural Relics and Archaeology Research Institute in 2002.<sup>57</sup> The gold objects included in this exhibition make pervasive use of small sheet gold leaves and discs (which will be discussed in greater detail in the next chapter).<sup>58</sup> In the catalgogue's introductory essay, Wan Xin 萬 欣 proposes the concept of a Swaying Leaf Culture (yaoye wenhua) 搖葉文化 that entered China from Western Asia in the first century CE and had spread across the Daling River Valley by the mid-third to early fourth century. It was then transmitted from the Northern Yan state to the Korean peninsula via the Koguryŏ kingdom in today's Liaoxi around the first half of the fifth century. From the sixth century onward, it began to appear in Japan as well.

Wan himself is quick to point out, however, that there are missing links along the route of transmission. These leaves are scarce in the Yan territories in Eastern Inner Mongolia and Northwestern Henan, where one would expect to see a greater concentration because of their proximity to Western Asia. Moreover, it is unclear whether "culture" here denotes ethnicity, technology, or simply an aesthetic preference

<sup>&</sup>lt;sup>56</sup> Wang Jingchen, ed., San Yan wenwu jingcui (Shenyang: Liaoning renmin chubanshe, 2002): 5.

<sup>&</sup>lt;sup>57</sup> Wang, ed., *San Yan*, 4-5. "Three Yans" refers to the Former, Later, and Northern Yan states, which all took Lioaning as a base. The Western and Southern Yan states are excluded.

<sup>&</sup>lt;sup>58</sup> Wan Xin, "Xianbei mu zang, San Yan shiji yu jin *buyao* shi de faxian yu yanjiu," *Liaoning kaogu wenji*, ed. Liaoning sheng Wenwu Kaogu Yanjiusuo, 268-281 (Shenyang: Liaoning jiaoyu chubanshe, 2003).

passed from one group to another, regardless of the ethnic, linguistic and cultural differences between them.

Wan's study belongs to a strain of literature that deals specifically with gold head and cap ornaments discovered in Murong tombs. However, the most comprehensive wor to address these materials is a 2007 PhD thesis by Jiang Nan 江楠 entitled "The Discovery and Study of Gold *Buvao* Ornaments in Northeast China."<sup>59</sup> Like Xu Bingun, Jian focuses on the Murong's relationship with Three Kingdoms period Korea and Kofun Japan, rather than connections to West Asia and China. Jiang first identifies the tombs primarily in Liaoning, Jilin 吉林, and Inner Mongolia—that contain six types of ornaments with attached sheet gold pendant leaves. By creating typologies of each of these ornaments types and tracing their development over time and in across regions, he determines that the Liao River acted as a boundary between two distinct cultures: the Murong of Western Liaoning, Northern Henan, and Eastern Inner Mongolia, and the Koguryŏ state centered on Ji'an in Jilin province. According to Jiang, the Swaying Leaf Culture coined by Wan was founded by the Greater Yuezhi 大月支 of Bactria, was later introduced to Puyŏ, and was subsequently adopted separately by the nascent Murong and Koguryŏ states on opposite side of the Liao River.

In the last twenty years, many studies have been published about particular aspects of "Three Yans Culture," such as horse trappings, armor, and stirrups. Articles specifically addressing the gold ornaments with pendant leaves will be considered in the following chapter.

<sup>&</sup>lt;sup>59</sup> Jiang Nan, Zhongguo dongbei diqu jin *buyao* shipin de faxian yu yanjiu (Ph.D. diss., Jilin University, 2006-7).

### 2.4 Problems and Trends in Murong Archaeology

Several divergent histories of the Murong emerge from the archaeological studies discussed above, and their conclusions depend largely on the methodologies espoused by their authors. Certainly the most common approach is a historical one that takes the textual evidence in the dynastic histories at face value. These authors, exemplified by Su Bai and Xu Ji, begin with the historical framework extant in textual sources and then adapt the archaeological evidence to it. This traditional approach to Chinese archaeology creates a story of the gradual sinicization of the three successive Yan dynasties in Liaoning. In this version of events, the culture of the Murong Xianbei was primarily shaped by their relations with China and their abandonment of traditional steppe culture.

The second approach centers on the design and decoration of surviving contents of tMurong tombs. These objects tell the story of a culture that inherited and continued many features from the early nomads of the steppe—most notably the Xiongnu—but still maintained strong trade relations with its neighbors in Central China and the Korean Peninsula after settling down in Liaoning. This perspective emphasizes continuity with surrounding cultures, erases national boundaries, and defies the historian's instinct to place highly mobile and heterogeneous populations into neatly labeled boxes. Wan Xin's Swaying Leaf Culture and Jiang Nan's exhaustive typologies fall into this category. However, champions of this approach have a propensity either to explain the transmission of certain aesthetic features as unilateral "influence," or to emphasize similarities between luxury crafts while ignoring striking disparities in other aspects of culture (e.g. distinct languages, economies, and customs). Wan and Jiang have both investigated the evolution of gold ornaments in order to understand their origins and trajectories, but they have failed to recognize that objects with seemingly similar motifs and styles can be manufactured in vastly different ways. Chapters 3 and 4 of this dissertation will incorportate the traditional viewpoints presented above, while at the same time proposing that the Murong did not import other cultures wholesale, but rather selectively adopted of metalworking technologies over time—first from other steppe cultures and then from China.

Chapter 5 will provide an analysis of the goldsmithing methods used by the Murong and their neighbors in China and on the steppe in order to 1) demonstrate that technology can travel over great distances and across cultures independently of other cultural features, and 2) to highlight the boundary between the goldsmithing traditions of the nomadic Murong and the sedentary Chinese in the early period, as well as the eventual erasure of that line towards the end of the "Three Yan" period. In this way, the gold cap and head ornaments in this study will shed additional light on our current understanding of the interactions between the Murong and Chinese in the third, fourth, and fifth centuries CE.

### CHAPTER 2: A CATALOGUE OF GOLD CAP ORNAMENTS FROM CHINA

#### 1. Gold Ornaments in China

#### 1.1 Scope and Focus

Until recently, western textbooks on the history of Chinese art supported the traditional idea that the sole prestige metal of ancient China was bronze, and that gold was not prized in China until the Tang dynasty, as a result of increased trade with the West. In his introduction to *Chinese Gold Ornaments*, Simon Kwan 開善明 rejects this idea and argues that on the contrary, the paucity of ancient surviving in China reflects how highly the material was valued—it was so in demand that antiques were constantly being melted down and reworked into contemporary designs.<sup>60</sup> Also at odds with this conventional view is the abundance of gold in Han and Six Dynasties tombs excavated across China in the last half century.

This chapter will take as its subject tombs containing two distinctive groups of gold ornaments that were originally attached to caps and worn on the head. The first group was excavated from tombs concentrated south of Beipiao and east of Chaoyang along the Daling River, near the Murong's capitals at Jicheng and Longcheng. Ornaments from two other Xianbei sites in Inner Mongolia—a Han period tomb and a hoard from the Tuoba-controlled region north of Huhhot 呼和浩特—constitute a second group. The third group comes from tombs concentrated around the Eastern Jin capital Nanjing 南京, while the ornaments in the fourth group were found in outlying or border

<sup>&</sup>lt;sup>60</sup> Sun Ji and Simon Kwan, *Zhongguo gu dai jin shi* (Hong Kong: Muwentang meishu chubanshe youxian gongsi, 2003), 1. Specifically, the authors contradict William Watson, who wrote before the discovery of sites like Sanxingdui in Sichuan, where gold foil was used extensively.

areas like Shandong and Gansu, which fell under the control of multiple states during the third to fifth centuries. Finally, a number of ornaments in private collections are considered.

### 1.2 Design

Several attempts have already been made to catalogue gold objects excavated throughout China or, more specifically, in the tombs of the Murong Xianbei. In the latter category, the first and arguably most influential study was a 1981 conference paper by Sun Guoping 孫國平 about gold ornaments with swaying leaves that were uncovered at seven sites in Beipiao and Chaoyang counties.<sup>61</sup> This study has proved both a help and a hindrance to subsequent scholarship because several objects lack photographs or adequate citation, suggesting that they either remain hidden in the recesses of museum storage or have been published under different site names. Sun's most useful contribution, however, was recognizing a discrete group of ornaments found only in Murong tombs.

Sun meticulously subdivided the Liaoning gold cap ornaments into six types according to their design and how he believed they were worn. The "blossoming tree" (*huashu*) 花樹 type consists of one or more stalks sprouting wire branches. Circular or droplet-shaped leaves hang from tiny loops wound into the wire, like leaves on trees. The base is vertically oriented and pierced so that it can be sewn or riveted to the forehead or side of a fabric or leather cap. The "blossoming top" (*dinghua*) 頂花 type models itself on a tree or animal and is also covered in pendant leaves, but its pierced

<sup>&</sup>lt;sup>61</sup> Sun Guoping, "Shitan Xianbei zu de *buyao* guanshi," in *Liaoning sheng kaogu bowuguan xuehui chengli dahui huikan* (Shenyang: Liaoning sheng kaogu bowuguan xuehui) 121-127.

base sits perpendicular to the cap so that it can be attached to the top of the cap. The relatively rare "blossoming vine" (*huaman*) 花蔓 type is composed of gold strips interwoven with wires with leaves. The strips are pieced at intervals and probably ran along the edges or over the top of the cap.

Sun identified these first three types—in which gold leaves flutter freely—as *buyao* 步搖 ornaments, in reference to descriptions of headdresses in the dynastic histories that will be discussed in Chapter 3. Ever since, archaeological and art historical scholarship has consistently referred to these excavated ornaments as *buyao*. However, I will instead refer to the excavated gold ornament by their translated name, "step-sway," in order to distinguish them from the *buyao* ornaments known only from literary sources.

According to Sun's typology, Murong tombs contained cap ornaments of three other types as well: the "crescent" (*yueya*) 月牙, "mountain" (*shan*) 山, and "bubble" (*pao*) 泡 types. The first two are panels or plaques pierced along their edges and affixed to the front, back or sides of a cap.<sup>62</sup> Both types may have surface decorations, but the crescents tend to lack leaves. The reason for this disparity may be the fact that crescents were initially used as necklaces or pectorals in the Shang and Zhou dynasties. Later on, their location within burials changed, suggesting that they gradually came into use as cap ornaments.<sup>63</sup> Crescents in a wide range of media from gold to mica appear in many of the tombs discussed below, but in most cases they do not seem to be cap ornaments.

The "bubble" ornaments involves a vertical element with at least one pendant leaf that emerges from a tube atop an inverted bowl that is riveted to the top of the cap, giving

<sup>&</sup>lt;sup>62</sup> Sun, "Shitan Xianbei," 121.

<sup>&</sup>lt;sup>63</sup> Sun, "Shitan Xianbei," 122.

the appearance of bubble or umbrella. However, Sun neglects to mention that bubble ornaments may cover any type of garment—not just caps—and that gilt bronze bubble ornament were also often employed as decorative elements in horse gear.<sup>64</sup> Sun distinguishes the last three types as "ornaments for *buyao* caps" (*buyao guanshi*) 步搖冠 飾 because although they often coexisted with the three other types, they did not necessarily possess the swaying components for which *buyao* were named.<sup>65</sup> Although the correct terminology for these ornaments remains an open question, the piercings found along the edges of all six types suggest fairly definitively that they were attached to fabric or leather caps of some kind, the expense of their materials and their prominent placement on the body indicate the weight of their meaning to their wearers.

While the basic designs of the ornaments found in Murong tombs typically fall into three of Sun Guoping's categories ("blossoming tree," "blossoming top," and "mountain" types), their style and iconography are less easily defined. Qi Dongfang 齊 東方, in a chapter about Xianbei gold in his *Research on Tang Dynasty Gold and Silver Wares*, considers the most characteristic subjects of the Murong to be sheep and deer in groups, although they are more simplified and abstracted reworkings of earlier fashions, like the belt plaques of the Xiongnu.<sup>66</sup> These are typically made from hammered sheet gold and decorated by punching or cutting out areas to create openwork and affixing small sheet gold circles or leaves to the surface with twisted gold wire.<sup>67</sup> What follows is

<sup>&</sup>lt;sup>64</sup> Tian Likun and Li Zhi, "Chaoyang faxian de San Yan wenhua yiwu ji xiangguan wenti," *Wenwu* 1994.11 (1994): 29.

<sup>&</sup>lt;sup>65</sup> Sun, "Shitan Xianbei," 121-122.

<sup>&</sup>lt;sup>66</sup> Qi Dongfang, "Xianbei jinyinqi yanjiu," in *Han Tang zhijian: wenwu yishu de hudong yu jiaorong*, ed. Wu Hung (Beijing: Wenwu chubanshe,2001) 565.

<sup>&</sup>lt;sup>67</sup> Qi," Xianbei jinyinqi," 565-566.

a brief overview of some of the techniques used by Murong craftmen in the making of step-sway ornaments, based on Sun Ji's 孫機 discussion in Chapter 3 of *Chinese Gold Ornaments*.

# 1.3 Methods of Manufacture

Sheet hammering (*chuiye*) 錘鍊 was used as early as the Shang dynasty. Because gold is more ductile than metals like bronze, it can be beaten into sheets or foil using stone, bronze or wooden hammers. After the sheets have been reheated, raised designs can be created on the front by impressing the underside of the sheet with a firm, round-tipped tool, in a technique called repoussage (*fudiao*) 浮雕. The same technique can also be carried out on the front of the object, in which case it is called chasing (*louke*) 鏤刻. As Qi observed, the two other hallmarks of Xianbei goldsmithing are swaying leaves (*yaoye*) 搖葉 and openwork (*loukong*) 鏤空, which is the creation of lacy patterns by removing sheet gold with scissors, chisels, or punches. A punch (*chuoyin*) 戳印 is a chisel topped by a flat solid tip or a tube that can repeatedly impress identical patterns onto a surface or cut out shapes, like droplet-shaped leaves. The cap ornaments discussed below were in many cases attached to caps rivets (*maoding*) 鉚釘, which look like nails with a flat head on either side of the join.

Two techniques less often seen in Murong goldsmithing are granulation (*hanzhu*) 銲珠) and stone inlay (*xiangqian*) 鑲嵌. Granulation involves the attachment of tiny spherical granules as small as 0.1 millimeter to the surface. These were dipped in a solution, arranged on the surface, and heated in order to fuse them in place. The exact methods and formula varied widely from one region to another, and many techniques have been lost. However, most examples in Murong tombs seem to have been imports, the Murong artisans instead substituting rows of tiny bosses impressed by striking the underside of the ornament with a round-headed punch. The result is often referred to in Chinese as a "granule" (*suli*) 粟粒 or "linked pearl" (lianzhu) 聯珠 pattern.<sup>68</sup>

The most common settings for inlay are wires or thin strips of sheet gold called bezels, which lie at right angles to the surface. Bezels for stone inlay may be attached using solder (*hanxi*) 焊錫 or may be dipped in the same solution as granules, arranged on the surface, and heated to fuse them. Sometimes after the semiprecious stone was inserted into the bezel, the metal was pressed just over the edge of the stone to secure it. The rows of granulation often appear along the edge of bezels may indicate an attempt to strengthen their walls and prevent stones from falling out. However, the shortcomngs of the inlay techniques available in China are evidenced by the fact that many of the original stones have been lost.<sup>69</sup>

# 2. Murong Xianbei Tombs in Liaoning

This section will introduce the gold ornaments from Murong tombs in Liaoning, presented in the approximate order of their dates as given by Wan Xin and Jiang Nan.<sup>70</sup>

### 2.1 Tomb 8713, Wangzifenshan cemetery, Chaoyang county, Liaoning

Some of the earliest gold cap ornaments were discovered among a group of princely tombs that has been nicknamed Wangzifenshan 王子墳山 (Figure 2.1). Tucked behind the Daling River, the cemetery is located 11 miles south of the city of Chaoyang,

<sup>&</sup>lt;sup>68</sup> Sun and Kwan, *Zhongguo gu dai jin shi*, 17-30.

<sup>&</sup>lt;sup>69</sup> Demonstration of granulation and inlay techniques provided by Maureen Duffy and Genava Gisondi at Moore College of Art and Design in Philadelphia, in September 2010.

<sup>&</sup>lt;sup>70</sup> Wan, "Xianbei muzang," Table 1, and Jiang, Zhongguo dongbei, Table 2.

and one mile from Yuantaizi. This area straddles the mud sources for two brick factories, one in Shi'ertai and the other in Yao'eryingzi, and many tombs were damaged as a result of the factories' activities. The first survey of the cemetery was conducted in 1979 after locals discovered tiles with the characters 柳城 in the area, and subsequent excavations of 35 tombs dating to the Spring and Autumn (771 – 453 BCE), Warring States, Western Han, and Jin periods took place in two phases, 1987-88 and 1990 (Figure 2.2).<sup>71</sup>

The only tomb that yielded a gold cap ornament was M8713, although this particular grave is not described in the excavation report. However, all of the 21 Murong burials dating to the Jin period were single burials (except for one double burial) and consisted of tamped earth vertical pit shafts. Most of the tombs had a head niche for offerings carved into in one wall. This style is exemplified by M9022 (Figure 2.3), which was located near and oriented in the same direction as M8713, and contained many similar grave goods.

M9022 is a trapezoidal grave with a decayed coffin that is wider at the head and narrower at the foot. The male occupant lay facing upward with his limbs outstretched, and a niche carved above his head contained ceramic vessel and cow bone offerings. There were *guan* by the head, one *hu* above the head and one below the feet, gold and silver plaques on either side of the body, a gold ring on the right hand, and 18 small gold bubble ornaments by the feet that must have decorated the shoes. Many of these features are typical of Murong tombs.

<sup>&</sup>lt;sup>71</sup> Shang Xiaobo, "Chaoyang Wangzifenshan muqun 1987, 1990 niandu kaogu fajue de zhuyao shouhuo, *Wenwu* 1997.11 (1997): 4-18.

M8713 also contained a round silver plaque, four gold earrings, three silver earrings, and five gold bubble ornaments. More importantly, though, this tomb contained a gold blossoming tree step-sway ornament measuring 5.7 inches tall (Figure 2.4). The base is a square with sloping shoulders, and a raised ridge runs down the middle. On either side of the ridge are openwork designs that have been described clouds and curled leaves. At the corners of the base are four holes that were probably once used to attach it to a cap. Two large flat branches stemming from the top of the base separate and then rejoin into a single branch at the top. Four thinner wires extend outward from each of the two branches, each with three twisted wire loops for the attachment of gold leaves. The leaves are rather large in comparison with the rest of the object.

A second rectangular gold plaque found in M8713 (Figure 2.5) is decorated with an abstracted repoussé design of deer whose bodies face forward but whose heads turn to the side. The shape, style, and technique of this plaque—probably worn as a belt plaque or pectoral rather than on a cap—is closely related to others uncovered at the Liaoning sites of Bao'ansi and , and the Inner Mongolian sites of Zhalainuo'er 扎賚諾爾 and Sandaowan 三道彎. This and other similarities between the second phase of burials at Wangzifenshan (tombs numbered from M8705 to M9023, including M8713 and M9022) led excavators to settle on a third to fourth century date, around the time of the Murong migration into Liaoxi. Some tombs may even date to the Cao Wei period, when the Murong tribe was dominated by Mohuba, Muyan, and Shegui.<sup>72</sup>

# 2.2 Tomb 88M1, Shi'ertai brick factory, Chaoyang county, Liaoning

<sup>&</sup>lt;sup>72</sup> Shang, "Chaoyang Wangzifenshan," 17.

A second tomb at Wangzifenshan, more commonly known as Shi'ertai 88M1, may contain another gold step-sway ornament, but it is uncertain.<sup>73</sup> The trapezoidal pit grave, oriented at a 250 degrees and lined with stones, was discovered in May of 1988. Over 300 objects were found inside, along with a lacquered wooden coffin containing a man wearing silk pants, a fur-lined tunic, and a silver-wrapped iron belt with two belt hooks (Figure 2.6). By his head were two small glazed ceramic *guan*, an unglazed *guan*, and a lacquer basin and spoon. A crown-shaped bronze quiver ornament was found beneath the feet, and horse trappings were crammed in under the body. To the sides of the coffin lay cataphract armor and a ceramic ladies' toilet case, and cow bones rested above the top of the coffin. According to the excavation report, on top the coffin cover were saddle cantle covers, a ring-headed iron knife, a silver object, a bronze bubble ornament and a gold step-sway. There was a hair-hemp cover on top of the saddle cantles, and on top of it some pieces of silver that had been burned. (Figure 2.7).

This ornament has never been reproduced in photographs. The excavation report states that the original shape is unclear, but the surviving part consisted of gold wires bent into an X-shape, and below them a base connected to the top of a long, thin silver strip. It stretched towards two sides, each of which held a droplet-shaped leaf. There was about an inch between each section, and at the top of each section, gold wires again joined together. A gold droplet-shaped leaf hung at the center. However, this description of is conspicuously mislabeled in the excavation report as object 88M1:17, a number already assigned a few pages before to an unrelated gilt bronze *danglu* with pendant leaves.

<sup>&</sup>lt;sup>73</sup> Shang, "Chaoyang Shi'ertai," 19-32.

There is some debate about the date of the 88M1 as well, and its excavators place it slightly later than the other Wei-Jin tombs excavated in the same area in 1987 and 1990. They argue that the consistent features of most of the tombs in this cemetery (the presence of a vertical pit, a wooden coffin with a wider head than foot, a relatively small number of grave goods, and a head niche that holds a ceramic toilet case and cow bones) and the modest scale of the tombs suggest a limited amount of social stratification. Thus they probably reflect the Xianbei's first movement into Liaoxi. However, 88M1 is not only large in scale, but also contains luxury items like gilt bronze horse trappings and cataphract armor that demonstrate a later stage of societal development, i.e. the Former Yan period.

### 2.3 Tomb 2 at Fangshen, Beipiao county, Liaoning

To the northeast of Wangzifenshan, but still in Beipiao county, is smaller group of tombs dating to the late third to mid-fourth century. In 1956, while digging a pit for fertilizer, several archeological relics were discovered by residents of Fangshen, 35 miles from the county seat of Beipiao. The residents were later instructed to hand the artifacts over to the local authorities, and it was not until 1957 that excavations were carried out at the site where the objects were first found. There, archaeologists uncovered three collapsed stone single-chambered tombs, numbered 1, 2, and 3 from south to north.<sup>74</sup>

Tombs 1 and 2 are side-by-side burials spaced two meters apart and oriented with their openings at a 100 degree angle. Tomb 3 is smaller than the other two and lies about 30 feet north of Tomb 2, turned slightly eastward. Tombs 1 and 3 are both presumed to be single burials. The former contained a small bronze mirror, fragments of lacquer

<sup>&</sup>lt;sup>74</sup> Chen, "Fangshen," 24-26.

objects, a gold ring, and a red ceramic basin, while the latter held only a *guan*, an iron knife, iron nails, some coins, and a fragment of a gold ornament made from hammered gold strips. Tomb 2, on the other hand, may have been a joint burial because it contained a gold finger ring inlaid with stone (indicating a male occupant) and a gold thimble (indicating a female occupant). Although it had collapsed by the time of its excavation, Tomb 2 yielded an array of important archaeological finds, including lacquer fragments, smashed pieces of wood that probably once constituted the coffin, and 54 other objects.

Most notable among these remains are two step-sway ornaments. Like the one in M8713 at Wangzifenshan, the hammered sheet gold bases are rectangular with rounded shoulders, a raised ridge runs down the center, and on either side are openwork patterns in the shape of curled leaves. Twisted wire branches bedecked with leaves sprout from a flattened trunk made of thicker wire. What is innovative about these ornaments, which are presumed to be slightly later than those in M8713, is the embellishment of their edges with the small raised bosses described at "linked pearl" patterns. However, the two Fangshen examples differ from one another in two respects: one is about twice as large as the other, and its openwork has also been edged in a row of tiny dots.

The larger ornament (Figure 2.8) is 11 inches tall, with a 2 inches base. Four holes, barely visible in most publications, have been punched into its corners. The upper portion has three main stalks, two of which are taller and rejoin over the top of the shorter central stalk. 16 thinner wires branches emerge from them, and each branch was wound into four or five loops, from which dangle droplet-shaped sheet gold leaves. One corner of the base is damaged, and many of the leaves are now lost. The smaller ornament (Figure 2.9) only reaches a height of 5.7 inches, with a base 1.2 inches tall and 12 thinner

branches extending out of the trunk. The leaves of this ornament are considerably larger in relation to the branches.

In addition to the flowering tree ornaments, the same tomb yielded a pair of flowering vines (Figure 2.10) made from long flat gold strips—the only pair published as of yet. These are sometimes displayed as a headband that runs parallel to the hairline and sometimes wound more tightly into a circle. Four sections survive, the longest reaching 11 inches, but they originally seem to have belonged to two separate objects. The strips are perforated to allow the attachment of small sheet gold leaves, although in this case they are circular rather than droplet-shaped. In addition to the holes for wire, there are more widely spaced paired holes, suggesting that they were once affixed to a cap.

Tomb 2 also contained two gold square openwork plaques, the larger one measuring 3.5 inches to a side (Figure 2.11), and the smaller one measuring about 3 inches to a side (Figure 2.12). Both are pierced by wire to suspend circular gold, and each wire stalk was twisted several times so that it extends away from the surface of the plaque and moves more freely. Additional holes appear at the four corners for attachment to clothing, most likely a cap. The openwork design consists of an X in the center, while the four corners contain vague but discernable images of phoenixes and dragons. In fact, the orientation of the animals suggests that the plaques were tilted 45 degrees from the position in which they are pictured here.<sup>75</sup>

Aside from the cap ornaments, it is worth noting the presence of a 5.5 inch long crescent-shaped plaque (Figure 2.13) that—judging from the sets of four holes at the upper edges—may have been worn as a pectoral. The sheet gold is thicker than usual and

<sup>&</sup>lt;sup>75</sup> Chen, "Fangshen," 24.

inlaid with a rectangular piece of mottled green jade, which is secured in place by a plate fastened with rivets. On either side of the jade are engraved images of winged animals that the excavation report identifies as phoenixes. The edges of the plaque are lined with large bosses, which in turn have several tiny bosses protruding from them. Crescentshaped pectorals like this one appear in a variety of media at the same sites where gold cap ornaments have been discovered.

Sun Guoping suggested a late third to mid-fourth century date for Tomb 2 at Fangshen, as well as Tomb 8, where two openwork blossoming tree *buyao* and a crescent inlaid with white jade were supposedly discovered. "Tomb 8, Beigou 北溝, Fangshen, Zhangjiyingzi Commune 章吉營子公社, Beipiao county" was also mentioned in an article by Dong Gao 董高 in the same conference volume, but neither author cited the sources of this information, and no excavation report or photographs have ever been published.<sup>76</sup> Remarkably, the enigmatic Tomb 8 was still mentioned in every subsequent study of *buyao* and gold cap ornaments. The same aura of mystery surrounds the sites Sun described as "Wangfenzi, Chaoyang county" 朝陽縣王墳山 (which could perhaps be Wangzifenshan) and "Xituanshan, Chaoyang county" 朝陽縣西團山.

Regardless of these inconsistencies, it seems likely that 88M1 at Shi'ertai, Tomb 2 at Fangshen, and the next two tombs discussed below belong to the Jicheng period, i.e. sometime between Murong Hui's move into the Daling River Valley in 289 but before Murong Huang had relocated the capital to Longcheng.

<sup>&</sup>lt;sup>76</sup> Dong Gao, "Chaoyang diqu chutu Xianbei maju de chubu yanjiu," in *Liaoning sheng kaogu bowuguan xuehui chengli dahui huikan*, ed. Liaoning sheng kaogu bowuguan xuehui (Shenyang: Liaoning sheng kaogu bowuguan xuehui, 1981), 18-120.

### 2.4 Lamadong, Sijiaban, Nanbajia, Beipiao, Liaoning

Further north, near Sijiaban 四家板 village and nine miles south of Beipiao, is the Lamadong cemetery (Figure 2.14). Its tombs are neatly arranged in twelve rows and spread out over about 2.5 square miles. The Daling River cuts across them, running from the southwest to the northeast, but the vast majority of the tombs—382 to be exact—lie on the west side (Figure 2.15).<sup>77</sup> Locals have been collecting earth from Lamadong for agricultural purposes since the 1960s and 70s, and the first tombs were uncovered in the process. Surveys were conducted after a tomb containing gilt bronze horse trappings was found in 1989. Fourteen tombs were discovered in 1992 and another thirty-seven in 1993.<sup>78</sup> Sixty-six more tombs were excavated between 1995 and 1997, and 369 more were added to that number in 1998. Of those excavated in 1998, 355 belonged to the Three Yan period.<sup>79</sup> However, one of the most important gold artifacts came to light during the earlier digging seasons.

Twenty-two of the twenty-three tombs excavated in 1992-93 date between the late third and mid-fourth century, from the period between the migration of the Murong into the Daling River Valley in 289 and the establishment of the Former Yan state in 337. With the exception of Tomb 23, these were all single burials, but their sizes and grave goods vary widely. All of the tombs were rectangular vertical pit burials with wooden coffins, except for Tomb 19, which also contained a sarcophagus. The skeletons of the deceased lay face-up with limbs outstretched and heads oriented to the northeast.

<sup>&</sup>lt;sup>77</sup> Wan Xin, "Liaoning Beipiao Lamadong mudi 1998 nian fajue baogao," *Kaogu Xuebao* 2004.2 (2004):
209.

<sup>&</sup>lt;sup>78</sup> Zhang and Tian, "Lamadong," 1.

<sup>&</sup>lt;sup>79</sup> Wan, "Lamadong," 209.

The one exception to the standard layout was Tomb 7, a reburial in which only the skull survived. The skull lay in the middle of the coffin with a gold step-sway ornament above it (Figure 2.16).<sup>80</sup> In keeping with Murong burials at other sites, Tomb 7 was also furnished with gold finger rings, a gold crescent-shaped plaque (no photos of which have been published), a string of turquoise beads, a ceramic woman's toilet case, and cow bones. Judging from the location of the last two items, the pit shaft probably once had a head niche that has since been destroyed.

The gold step-sway ornament follows the same basic shape of those described above: a square base with sloping shoulders and a raised central ridge, and above it, two large stalks joined at the top and a smaller central branch that projects slightly forward. Three thin wires branch outward from each of the side stalks, while a seventh branch emerges from the top. The shorter central branch is riveted onto the front—it is unclear whether this is a modern repair or the original structure—and terminates in three branches. Loops at the end of each of the branches hold droplet-shaped leaves that are rather large in relation to the rest of the ornament, like those seen at Wangzifenshan. The base is pierced on its four corners to allow for its attachment to the front or side of a cap.

A few features distinguish this ornament from those seen at Fangshen and M8713 at Wangzifenshan. First, the base does not have any openwork designs and is not lined with small raised bosses. Second, the branches are quite straight and have not been twisted into loops at intervals for the addition of more leaves. (Based on the description of a single leaf at the end of a long wire, it seems possible that the ornament in 88M1at Shi'ertai is closer in appearance to this one.) Finally, the wire forming the loops that hold

<sup>&</sup>lt;sup>80</sup> Zhang and Tian, "Lamadong," 1.

the leaves has been wound more securely, sometimes forming a double loop. This fact may account for the survival of all ten of its leaves. However, the simplicity of the design and overall sparseness of the branches point to less accomplished craftsmanship, the lower relative rank of the ornament's wearer in relation to those of the other tombs, or imitation at several removes.

In addition to Tomb 7, the early excavations at the Lamadong cemetery revealed a wealth of metal ornaments and horse trappings decorated with swaying elements, as well as some more mystifying objects. In Tomb 17, another large-scale tomb, a bronze deer-shaped plaque sat on in the chest area of the male occupant. Horse trappings and iron armor, saddle cantle covers with droplet-shaped leaves, and horse trappings with swaying leaves were also uncovered from the same burial. Even middle-sized tombs, like Tomb 9, contained gold earrings, silver hairpins, and a gold needle.<sup>81</sup>

The 1998 excavations were much larger in scope and included a number of important findings, such as an openwork gilt bronze belt with hanging leaf-shaped attachments and swaying circular leaves in Tomb 196. Various tombs contained a total of 13 earrings with pendant leaves—nine of them in gold and silver, and four in copper. The pair in from M266 consists of a central wire with two tiers of radiating branches ending in loops with pendant pentagonal leaves, while those from M17 possess three tiers. Notably, 103 bubble ornaments with holes for attachment to clothing were uncovered in various materials.

The Lamadong site differs from many other Jin period sites in scale, as well as the layout and structure of its tombs. To begin with, the tidily arranged tombs in the zone

<sup>&</sup>lt;sup>81</sup> Zhang and Tian, "Lamadong," 1.

west of the river alternate between male and female occupants, suggesting that they might be the tombs of soldiers and their wives.<sup>82</sup> Moreover, unlike the typical trapezoidal pit tombs of Liaoxi, in which the head is wide and the foot is narrow, the Lamadong tombs are regularly shaped rectangles without head niches. These features, along with strong affinities between Lamadong ceramics and their Eastern Han counterparts, point to the persistence of Central Plains influence in the area and a probable late third to mid-fourth century date.<sup>83</sup> Later tombs, in contrast, follow more closely the standard blueprint for Liaoxi Murong tombs described above.

## 2.5 Tombs 1 and 2, Tiancaogou, Xiyingzi xiang, Chaoyang county, Liaoning

Such is the case with two tombs at Tiancaogou, in Xiyingzi 西營子, 16 miles outside of Chaoyang (Figure 2.17).<sup>84</sup> The first was uncovered by farmers in 1989, and a second one in better condition was found nearby in the course of digging a trench for the mostly-destroyed first tomb. The two single-chambered stone tombs were laid out on a roughly north-south axis with their doors oriented to the west. Tomb 1, constructed of layered stone with stone planks forming the cover, had a niche on the western part of the north wall (Figure 2.18). The tomb once held a wooden coffin with iron nails and fittings, and some of the contents of the eastern side of the coffin were preserved in their original positions. However, most of the contents of the western side did not survive, with the exception of one cow bone (Figure 2.19). Tomb 2, discovered just south of Tomb 1, was constructed in the same manner but on a smaller scale (Figure 2.20). The tomb held a wooden coffin, as well as some traces of red lacquer vessels, several fragments of cow

<sup>&</sup>lt;sup>82</sup> Zhang and Tian, "Lamadong," 1.

<sup>&</sup>lt;sup>83</sup> Wan, "Lamadong," 235.

<sup>&</sup>lt;sup>84</sup> Wan, Wang, and Zhang, "Tiancaogou," 33-41.

bones, and partial remains of the skull of the occupant, who may have been female based on the jewelry she wore (Figure 2.21).<sup>85</sup>

Tomb 1 and Tomb 2 each contained seven ceramic gray ware vessels—four at the head, in the area where the niche is usually located in Liaoxi area Xianbei tombs, and three at the feet. Aside from slight variations in surface decoration, the ceramics in the two tombs were largely the same. In addition to similarities in burial customs and tomb structure, there are also striking parallels between their abundant luxury grave goods.

Tomb 1 contained two step-sway cap ornaments that closely resemble those described above. The first ornament is taller, standing at a height of 10.7 inches (Figure 2.22). It consists of a roughly square sheet gold base with rounded shoulders. The base is decorated with a simple openwork pattern almost identical to the one seen in the Fangshen ornaments, and lined with small raised bosses on the edges and around the openwork. It is surmounted by two groups of branches, the first projecting forward and dividing into three short branches—each with two loops and with a total of five remaining leaves—and the second taller and tipped slightly backwards. The latter is composed of two large branches that rejoin at the top to become a single branch. Each side has five long branches with three to seven loops for the 31 remaining droplet-shaped leaves, but four of the branches are damaged. The base and trunk of the second ornament from Tomb 1 (not pictured) are slightly larger, but ten of the surviving 11 branches are broken, reducing the overall height to 5.6 inches. The construction is almost identical, but the central branch that tips forward is missing. Only seven leaves remain on the ornament, but 16 other leaves were found scattered nearby.

<sup>&</sup>lt;sup>85</sup> Wan, Wang, and Zhang, "Tiancaogou," 35.

Only one ornament, 7 inches tall, was recovered from Tomb 2 (Figure 2.23). Although the base is nearly identical to the two in Tomb 1 and the Fangshen examples, the upper portion is different. A thin central trunk zigzags upwards, and at the top, middle, and bottom, flattened branches projecting outward from it at right angles. The ends of these flattened branches divide and then subdivide again into more delicate branches, from which hang one or two flat leaves. 35 leaves survive, but 19 are larger in size and 16 of them smaller.

The Tiancaogou tombs also contained three square plaques. One plaque from Tomb 1 is rather damaged but closely resembles the two square openwork plaques from Fangshen (Figure 2.24). At 3.4 inches long, it is approximately the same size as well. The plaque is a sheet gold square with openwork patterning and circles stitched to the surface using gold wire. The second plaque from Tomb 1 measures 3.5 inches long and has an openwork design of paired dragons and phoenixes (Figure 2.25). The edges and raised diagonals are decorated with paired rows of small bosses, but there are no pendant leaves attached to the surface. A third square plaque (not pictured) was found in Tomb 2, under the skeleton's abdomen. At 2.8 inches long and 2.3 to 2.5 inches wide, it is slightly smaller and simpler in design. The borders and diagonals are raised, and two holes have been punctured in the top edge for rivets to pass through, presumably to attach it to fabric.

As mentioned before, crescent shaped ornaments in a variety of media often accompany gold cap ornaments. Tomb 2 held one 5 inch long semicircular plaque that consists of two pieces of sheet gold riveted together and is decorated with openwork and repoussage (Figure 2.26). The front holds a half-moon shaped cell for inlay that is lined with gold wire and granulation, but the stone is now missing. 16 smaller inlay cells run along the outer border. This ornament, when considered as a part of a larger set of gold objects, calls to mind the crescent-shaped ornament with jade inlay found at Fangshen.<sup>86</sup> However, the extensive use of granulation and inlay suggest foreign manufacture.

The excavators believe that Tiancaogou should be later than the Fangshen tombs, which contain more evidence of contact with Han China, but not later than the establishment of the Former Yan. In other words, they probably date to the late third to early fourth century.<sup>87</sup>

## 2.6 Tomb of Feng Sufu, Xiguanyingzi, Beipiao county, Liaoning

The step-sway ornaments of the latest date come from the tomb of Northern Yan official Feng Sufu (d. 415) located in Xiguanyingzi 西官營子, 26 miles northwest of Beipiao and 43.5 miles north of Chaoyang (Figure 2.27). The burials of Feng's and his wife were discovered in September of 1965 at the foot of Jiangjun Mountain 將軍山, and more than 470 objects were preserved in his tomb (Tomb 1). The two burials are located very close to one another and probably once occupied the same tomb enclosure. A third tomb possibly belonging to Feng's son was found forty meters away, but was largely destroyed by looting.<sup>88</sup>

Feng's tomb sat atop a mound 6.5 meters tall and was oriented east to west. Following Xianbei custom, a niche on the western wall of the tomb held offerings: a glazed ceramic *hu* and a gray ware *guan*, and on top of them cow leg and rib bones (Figure 2.28). Inside was a rectangular sarcophagus made by spreading stone slabs across the tamped earth floor, horizontally stacking stones to form the four walls, and

<sup>&</sup>lt;sup>86</sup> Wan, Wang, and Zhang, "Tiancaogou," 33-38.

<sup>&</sup>lt;sup>87</sup> Wan, Wang, and Zhang, "Tiancaogou," 38-41.

<sup>&</sup>lt;sup>88</sup> Li Yaobo 1973: 2-28.

laying heavy stone slabs across the top to form the roof. The interior was plastered and painted with images of celestial bodies, swirling clouds, directional animals, and fragments of images of a dog and a crowned Figure (Figure 2.29). Inside of the sarcophagus were the fragmentary remains of a trapezoidal lacquered wooden coffin, which had mostly decomposed by the time of excavation (Figure 2.30). Only a few partial images of winged figures, architecture, and clouds survive. There is no skeleton, but a few very small teeth of a child were preserved.

The contents of the tomb are an excellent indicator of the extent of commerce between the Xianbei and their immediate neighbors to the South, the Chinese, as well as their more distant neighbors to the west, along the Silk Road and Steppe Route. One small jade cup, several mostly disintegrated lacquer objects, and two inkstones and ink cakes discovered in the tomb are all thought to have originated in China. Trade, rather than local manufacture, probably also accounts for the presence of a glass bowl, cup, duck-shaped pouring vessel, alms bowl, and vessel fragment.

The more typically Xianbei elements of the tombs include 40 ceramic vessels, primarily simple gray wares with banded decoration. There were 27 bronze vessels, including three cauldrons of the footed type with handles used for cooking by nomads across Asia, iron tools and 230 pieces of armor, weaponry, and horse trappings. The stirrups unearthed in Feng's tomb are the earliest known in China. Other metal items include insignia, chariot fittings, and four seals (Figure 2.31), which clearly identify the titles held by the tomb occupant, allowing scholars to link him to a historical figure in early texts who was known to be a member of the Murong Xianbei nobility.

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The seals—one in gold and three in gilt bronze—are discussed above in the second part of Chapter 2.<sup>89</sup> Feng Sufu was the younger brother of Feng Ba, who became king of the Northern Yan state and the second ruler at the time of the founding of the Northern Yan dynasty. According to Feng Ba's biography in the *Jin shu*, Feng Sufu was from Xindu 信都 in Changle 長樂 and his father once led anarmy under Murong Yong of the Western Yan. During his career, he successively held the six titles, four of which are inscribed in the seals. It is recorded that he died in 415, at the age of about 30 or so, and this is the date now assigned to the tomb.<sup>90</sup>

The 91 costume items buried with Feng Sufu are a testament to his elevated social status and political power as an aristocrat and military leader. However, at this point we see a drastic change in design and decorative motifs, as well as major advancements in manufacturing techniques. The most striking ornament, a variation on the step-sway described thus far, consists of several component parts and reaches an overall height of 11.5 inches (Figure 2.32). On the bottom are two half-inch-wide gold strips that cross in the center to form an X and then hang down on the four sides. Upon close inspection, one can see that each strip is pierced with three sets of four holes and roughly even intervals between the intersection at the center and their ends. These holes would have allowed for attachment to a fabric cap using thread or gold wire. The fact that the very ends have no holes suggests that the now-missing cap folded upward at the edge, and they were tucked into the cuff to prevent them from scraping the head of the wearer. It is believed that the

<sup>&</sup>lt;sup>89</sup> Hucker entries 352 and 6039.

<sup>&</sup>lt;sup>90</sup> Li, "Feng Sufu mu," 15.

shortest strip would have been the front and that two other ornaments found in the tomb would have been attached to this frame.

Just above the intersection of the strips, a rivet affixes them to a 3.5-inch-tall finial (which Sun Guoping calls a "blossoming top"). An upward-facing bowl-shaped base sits stop a hollow compressed sphere, to which the flattened bases of six wire branches are secured by rivets. Three loops are twisted into each wire at even intervals, and a gold leaf hangs from each of the loops. At the front of the cap (or the bottom of the forward-facing strip) sits an openwork "mountain-shaped" plaque that is 2.7 inches tall. In profile, it is similar to the square plaque with rounded shoulders seen at Fangshen, Wangzifenshan, and other sites (Figure 2.33).

In this case, the openwork has been embellished with wires surrounded by rows of regularly-sized granulation that reveal the relatively high level of skill of its artisan as compared to the goldwork in other Murong tombs. A few shapes can be discerned in the openwork—a heart in the center, a spoked wheel above, and parallel lines along the edges—but analogy with later examples and textual evidence have led scholars to classify it as a cicada (*chan* 蟬). Two large, dull stone eyes in the center were pierced like beads and affixed using wire, rather than surrounded by bezels. Most publications provide illustrations with both eyes, but it is now on display in the Liaoning Museum in Shanyang with only one. This plaque seems to provide a link between the design of the earlier flowering trees from Liaoning described above and several gold ornaments with cicada motifs from Jin tombs in other parts of China that will be discussed below.

There are three more sheet gold plaques that represent variations on this shape, replacing the rounded shoulders with pointed peaks at the center of the upper edge and at the corners. The first is also decorated with openwork and attached eyes (Figure 2.34). Again, thin gold wire and granulation have been added to the surface to give the openwork more texture. Both of the openwork ornaments were accompanied by a slightly larger liner piece that is flat and undecorated, with the same silhouette and a row of pierced holes running around the outer edge for attachment.<sup>91</sup> A second plain undecorated plaque in the same shape is believed to be backing plate for the openwork because a line of holesruns round the edge (Figure 2.35).

The final gold ornament from Feng's tomb, and certainly the most controversial, is also mountain-shaped and stands 2.7 inches tall and 3.3 inches wide at the top (Figure 2.36). The surface is covered in a repoussé image of a figure in long robes seated cross-legged on a throne with attendants on either side. In the background are a flaming aureole and a border consisting of sawtooth patterns and vegetal scrolls. The robed seated figure has been identified by some as the Buddha, but Buddhism was probably not widespread in northwestern Liaoning at the time it was made (Figure 2.37). At the four corners of the plaque and on the peak in the center of the upper side, there are pairs of holes for attachment to fabric.

Interestingly, the repoussé decoration was not at all visible. Gold wire was stitched back and forth across the front of the design, and on the reverse side, the wire was twisted into loops for the suspension of small gold discs. Like the openwork plaques from Fangshen and Tiancaogou, the wire used to attach the discs has been twisted several times, creating a stronger stalk and placing more distance between the plaque and the discs. It is interesting that this unique figural motif was completely hidden from view,

<sup>&</sup>lt;sup>91</sup> Li, "Feng Sufu mu," 10.

both by the stitching on the front and by the gold discs on the back. Furthermore, because the discs are raised, the ornament must have been attached to fabric with the opposite side facing down.

The identity of this icon and the reason for its being obscured by gold leaves continue to puzzle scholars. However, I would propose that fascination with this iconography has obscured the more important question of whether these three-peaked gold ornaments were in fact attached to caps. An unadorned objects of a comparable shapes in Tomb 88M1 at Shi'ertai was identified as quiver ornament (Figure 2.38).<sup>92</sup> Such ostentatious treatment of what is essentially a utilitarian object may seem unlikely, but gold wires and leaves also embellished belts, shoes, and horse trappings in elite tombs across northeast Asia. This possibility will be revisited in Chapter 5.

### 3. Xianbei Tombs in Inner Mongolia

#### 3.1 Maolitu, Kezuohou Banner, Inner Mongolia

A small number of gold cap ornaments of have also come to light in the neighboring province of Inner Mongolia. However, the circumstances of their discovery are not ideal. The first that might be considered a relative of the step-sway ornaments is a bird finial from a pair of tombs in Maolitu 毛力吐 village, in Ke'erqin Left Rear banner 科爾沁左翼后旗.<sup>93</sup> Located southeast of Inner Mongolia's Ke'erqin Desert, the tombs came to light in 1978 when the winds swept away the sand that covered them. They were in poor condition when they were discovered and did not survive long afterward. The only objects reported from these graves were a gold bird-shaped cap ornament

<sup>&</sup>lt;sup>92</sup> Sun, Tian, and Zhang, "Shi'ertai 88M1," 30, Fig. 30.

<sup>&</sup>lt;sup>93</sup> Zhao Yaxin, "Kezuohou qi Maolitu faxian Xianbei jin fengniao guanshi," Wenwu 1999.7 (1999): 39-40.

(Figure 2.39) and two ceramic hu incised with two bowstring lines running around the shoulder.

The gold bird ornament stands two inches tall, with a wingspan just under two inches wide. The body is S-shaped and hollow, and it has been punctured with 14 holes, two of them indicating eyes. Slits have been cut on either side of the torso to allow for the insertion of flat sheet gold wings covered with tiny bosses that run around the periphery and across the center. The gold at the tail end of the body was cut to create two flaps, and the tip of a flaring trapezoidal tail decorated with raised bosses and triangle patterns has been inserted between the flaps and secured in place using a round-headed rivet. Underneath the wings, the body is affixed to a circular base by legs made of long strips of gold. The strips pass through slits in the base and are affixed by rivets on either side. Raised bosses also run round the edge of the base and radiate outward from the center.

Several points at intervals along the edges of the tail and wings have been punctured, and fine gold wire has been threaded through them. The wire on the underside of the tail and wings is twisted into loops, from which hang circles of sheet gold, each with a single perforation at the top. Holes in the tail and wings indicate that each originally held five discs, but only eleven survive. In addition, there are four equidistant perforations at the edges of the base that would have been used to attach the ornament to the top of a cap, like the "flowering top" ornament in Feng Sufu's tomb.

In spite of the minimal remains in the tomb and lack of scientific excavation, this seems to be one of the earliest known cap ornaments with pendant leaves. The hu appear to be contemporary with the ceramics of the early to mid-Eastern Han Xianbei tomb

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group at Liujiazi 六家子, in Ke'erqin Left Middle banner 科爾沁左翼中旗. Moreover, the techniques employed—namely the use of sheet gold, small bosses imitating granulation, and gold leaves attached by wire—are consistent with the ornaments discovered in Liaoning. It is interesting to note, however, that the leaves are circular rather than droplet-shaped, relating them to the square plaques from Fangshen and the ornament with repoussé from the tomb of Feng Sufu.

### 3.2 Xihezi, Damao Banner, Inner Mongolia

The remaining four ornaments were found in the earth, but not in a tomb. In 1981, military personnel performing maintenance work at the 西河子公社 in Damao 達茂 banner came across about 1.2 pounds of gold objects buried about twenty inches deep in the earth (Figure 2.40).<sup>94</sup> The small hoard consisted of two gold bovine-headed antlered ornaments and two gold horse-headed antlered ornaments, wrapped up in a gold dragon-headed chain.

The first pair consists of two bovine heads with wire antlers that terminate in hanging leaves (Figure 2.41). Each is almost 7 inches long, weighing between 3.1 and 3.2 ounces. Three rows of granulation run down the center of the keyhole-shaped and terminate in turquoise inlaid nose. The eyebrows and eyes are represented (respectively) by pairs of now-missing droplet-shaped and circular stones set in bezels surrounded by granulation. The face is framed by two rows of granulation enclosing a row of semi-circles containing blue and white stones, many of which are also now lost. Round attachments that also once contained inlay protrude from the sides of the top and bottom

<sup>&</sup>lt;sup>94</sup> Chen Tangdong and Lu Sixian, "Damao qi chutu de gudai beifang minzu jinshi jian," Wenwu 1984.1 (1984): 83-85.

of the face. One of the attachments on each ornament has been damaged and repaired by riveting on a replacement.

A pair of long pointed ears, inlaid with red stones (only one of the original four remains) and bordered by two rows of granulation, is inserted into holes just above the eyes. The pointed top of each ear forms a loop, from which hangs a flat droplet-shaped leaf. Between the holes for the ears are two more holes for the pair of antlers, which divide into four branches—two with five leaves and two with one leaf. The hidden ends of the ears and antlers inserted into the holes are all joined together behind the face and able to move slightly. The nearly identical bovine heads were probably riveted or stitched to the sides of a cap, we were the horse heads.

Although the second pair was made in much the same way as the first, the face is narrower, evoking that of a deer or horse. They are 6.5 inches at their tallest and weigh 2.4 to 2.5 ounces each. A double row of granulation extends from a diamond-shaped bezel, down along the ridge of the snout to a pink triangular inlaid nose. The sheet gold has been pierced on either side of the tip of the nose and under the base of each of the ears to allow the ornament to be affixed to a cap. A pair of dark blue droplet-shaped stones sits on either side of the nose ridge, possibly indicating eyes. Another possibility, however, is that the eyes are represented by one of the two other pairs of bezels above and below them, each of which contains a single sphere of granulation instead of a stone.

Unlike the slightly movable bovine heads, the horns and ears inlaid with pink stones are attached to the head. Oddly, three antlers project upwards, although the one in the center does not divide into smaller branches. All of the antlers are embellished with double rows of granulation, and three droplet-shaped inlaid stones have been added at the six places where the antlers fork. Each antler terminates in a loop for the hanging of a leaf, and one additional hook has been added to the unforked central antler. Every leaf has a border of small raised bosses that simulate granulation. There were originally ten leaves on each ornament, but today each ornament is missing one.

The lack of tomb with other grave goods makes dating these objects highly speculative. The highly accomplished and extensive use of inlay and granulation apparent in these ornaments is not consistent with Murong goldsmithing before the Northern Yan period. In addition, several other features differentiate these ornaments from those described above. First, the leaves and branches are substantially thicker, making the perforations in the leaves slightly ragged at the edges and preventing the branches from being wound into loops. Second, the branches have been flattened out, probably through hammering, and each holds only one leaf. Only at Lamadong do we see straight branches with a single leaf at the ends. Third, we do not expect to see this kind of near perfect symmetry and this level of precision and regularity in details like the embossed dots on the leaves.

The excavation report assigns the Xihezi ornaments a Northern Wei date, supposing that they were buried during the Revolt of the Six Garrisons, beginning in 524. <sup>95</sup> James Watt, on the other hand, places them in the third to fifth century, without indicating a dynasty.<sup>96</sup> In fact, their location is closer to Pingcheng (modern Datong  $\pm$  $\boxed{\blacksquare}$  in Shanxi), the capital of the Northern Wei from 398 to 493. Although strictly

<sup>&</sup>lt;sup>95</sup> Chen and Lu, "Damao," 85.

<sup>&</sup>lt;sup>96</sup> Watt, James C.Y., ed., *China: Dawn of a Golden Age* (New York: Metropolitan Museum of Art, 2004), 128.
speaking the leadership was descended from the Tuoba branch of the Xianbei, the Northern Wei population was really a confederation of different steppe ethnicities— Murong artisans were absorbed by the Tuoba just as many Xiongnu were once absorbed by the Xianbei power. Thus it is possible that these ornaments represent a continuation of Xiongnu and Murong traditions under Tuoba rule, in Tuoba territory. Alternatively, they could have been fashioned by Xiongnu artisans, who had a penchant for inlay and granulation, and later repaired by less technically skilled Murong or Tuoba owners.

### 4. Tombs in the Nanjing Area

Although the original scope of this study was limited to northeast China, it became clear in the course of my research that there was an important relationship between gold cap ornaments discovered in Murong Xianbei tombs and those discovered in the Eastern Jin capital of Jiankang (today's Nanjing). This section introduces two southern tombs that contained both mountain-shaped cap ornaments with cicada designs and, separately, droplet-shaped sheet gold leaves. It should be noted that several others may exist, but they await further study as a group.

#### 4.1 Nanjing University

The most complete group of cap ornaments were excavated in April of 1972 at Nanjing University on the southern slope of Gulou Hill 鼓樓崗, about 650 feet northeast of the foundations of the Ming 明 dynasty drum tower.<sup>97</sup> The two-chambered tomb was oriented at 171 degrees and had been looted several times. The tomb structure was

<sup>&</sup>lt;sup>97</sup> Nanjing Daxue Lishi Xi Kaogu Zu, "Nanjing Daxue beiyuan Dong Jin mu," Wenwu 1973.4 (1973) : 36-50. Reprinted and revised in Jiang Zanchu, ed., *Changjiang zhong xiayou lishi kaogu lunwenji* (Beijing: Kexue chubanshe, 2002), 139-153.

substantially different from the Northern tombs, and its special features included two successive doorways at the entrance, a sizeable side chamber, arched ceilings in the passageway and side chamber, a vaulted ceiling in the main chamber (popular in largescale Nanjing tombs), and vertically oriented brickwork that contrasts with the typical local V-shaped patterning (Figure 2.42).

As a result of looting, the ceilings have largely collapsed, and the remains were in disarray. However, the presence of nails and lacquer and wood fragments in both rooms suggest the presence of coffins. There seem to have been three tomb occupants. An iron knife and sword indicate the probable location of a man on the east side of the back of the main room, while openwork gold plaques and droplet-shaped gold leaves on the west side may have belonged to a woman. More gold plaques and droplet-shaped gold leaves in the passageway between the rooms may indicate a second woman's burial in the side chamber (Figure 2.43).

Among the grave goods were 58 ceramics objects, which mainly consisted of grayware. Closest to the man's coffin were a ceramic base shaped like a recumbent dragon, a ceramic inkstone, and a celadon shaped like a mythological animal called a *bixie* 避邪. A recumbent sheep base sat on the west side of the main chamber and the side room held a ceramic recumbent tiger base. In addition to 32 bronze objects, three glass items, beads in various materials, and some Han coins, the excavators discovered four openwork gold plaques, ten petal-shaped gold pieces, a gold bead, two silver bubble ornaments, and 32 droplet-shaped sheet gold leaves.

The vaulted ceiling of the tomb is common in Western Jin architecture, and the side chamber appears rather early in Six Dynasties tombs of the Nanjing region. The

ceramics, however, suggest that an early Eastern Jin date would be more appropriate. The identities of the occupants remain unknown, but they do not seem to be members of the aristocratic Wang  $\Xi$  and Xie 謝 clans, some of whose tombs have already been uncovered. However, the fact that such a large tomb was located so close to the Eastern Jin imperial mausolea suggests that its occupants must have been of high rank or noble blood. The same conclusion might also have been reached based on the rich grave goods alone.

One of the gold plaques is a 1.6-inch-tall openwork sheet and follows the nowfamiliar shape of a peaked square with sloping shoulders (Figure 2.44). Although it was originally called a "dragon head" in the excavation report, a reprinting of that article in 2000 added a correction, identifying it as a cicada.<sup>98</sup> Like the ornament in the tomb of Feng Sufu, the insect's eyes are rendered as two large hemispheres, although here they are gold rather than stone. The openwork is in slight relief, allowing the granulation to lean against raised ridges rather than an attached piece of wire. The cicada's forelegs or antennae are made from spheres of receding size, and the pattern overall is far easier to recognize than on Feng Sufu's ornament. A sawtooth pattern made from small triangles of granules runs around the border.

The square plaque, measuring 1.2 inches per side, is almost entirely filled by a menacing face with a mouth opened to reveal a large set of teeth. The inlaid eyes are surrounded with wire bezels and a ring of granulation, bit their stones are now missing. Tiny of ears and striations running outward from the face like tufts of fur both lend credence to the original report's supposition that this is a tiger face. However, variations

<sup>&</sup>lt;sup>98</sup> Nanjing Daxue Lishi Xi Kaogu Zu, "Nanjing Daxue," in Jiang, *Changjiang*, 150-151.

on this demonic face surface in tomb painting, roof tiles, and a wide range of other contexts in Chinese (especially northern) tombs.

Finally, there are two compressed mountain-shaped plaques, 1.1 inches tall and 1.5 inches wide. Each contains an openwork image in profile (one facing right, one facing left) of a rider atop an animal with a body made from large spheres of receding size. Each had one large inlaid eye, but all that the remains are the bezel and surrounding granulation. Based on the long thin torso and curling tail, the excavators called these creatures dragons. Similar granulated openwork plaques of mounted dragons have also been uncovered in M2112 at the ancient city of Wuchang 武昌 (today's Echeng 鄂成) in Hubei (Figure 2.45) and in the tomb of Zhang Zhen in Suzhou 蘇州, Jiangsu (Figure 2.46).<sup>99</sup>

The gold droplet-shaped ornaments and many of the sheet gold leaves were discovered by the front doorway, the west wall of the main chamber, and the entrance of the side chamber, i.e. closer to the remains of the female occupants than the male occupant. This has led the excavators to conclude that these are the components of women's hair ornaments. The plaques, on the other hand, were discovered near a long strip of sheet gold with a total of five bezels missing their inlay. The strips total 2.7 inches in length and one end has a hole in it and a tiny gold rivet. There are also fragments of lacquered leather on the back of the strip, indicating that it was probably once part of a leather object. Not far away, a rectangular bronze piece was found, and Jiang Zanchu 蔣贊初 believes that this was once the cover of the hat. The hat would have been edged in gold strips, with the four plaques arranged around the hat with the

<sup>&</sup>lt;sup>99</sup> Nanjing Daxue Lishi Xi Kaogu Zu,"*Nanjing Daxue*," in Jiang, *Changjiang*, 151, and Watt, *China*, 111.

cicada on the front, the tiger on the back, and the dragons on the sides. Chapter 5 will present some arguments for different arrangements of cap ornaments.

## 4.2 Tombs 2 and 6 at Xianheguan, Qixia district, Nanjing, Jiangsu

In 1998, the Nanjing Municipal Museum discovered a group of Six Dynasties period tombs in the eastern suburbs of Nanjing, at Xianheguan 仙鶴関 in the city's Qixia 栖霞 district (Figure 2.47). Three brick tombs (Tomb 2, Tomb 3, and Tomb 6) sat on a small earthen mound on the southeastern side of the mountain date to the Eastern Jin period, and their contents reveals certain connections to the Nanjing University tomb.<sup>100</sup> The tombs are oriented with their entrances toward the south and form two rows with Tomb 2 and Tomb 3 in front, and Tomb 6 behind them (Figure 2.48). The stone epitaphs of Gao Song 高崧 and his wife, Lady Xie 謝, were discovered in Tomb 2. Certain shared features, such as the presence of brick coffin beds and lack of wooden doors and water drainage sewers, suggest that the three tombs belong to members of a single noble family.

The positioning of the tombs in relation to one another have led their excavators to believe that Tomb 6 belonged to Gao Song's father, Gao Kui 高悝, and his wife, while M3 is probably the tomb of his son, Gao Qi 高耆, and his son's wife. According to historical records, Gao Song and Gao Qi had comparable societal status, so it makes sense that their tombs should be about the same size. These findings are also consistent with the early, middle, and late Eastern Jin dates assigned to Tomb 6, Tomb 2, and Tomb 1, respectively, on the basis of tomb architecture and ceramic remains.

<sup>&</sup>lt;sup>100</sup> Jia Weizhong, Wang Zhigao, and Zhang Jinxi, "Jiangsu Nanjing Xianheguan Dong Jin mu," *Wenwu* 2001.3 (2001): 5-40.

Like the Nanjing University tomb, Tomb 6 consists of a single chamber with vaulted ceiling, approached by a sloping passageway (Figure 2.49). The remains of two wooden coffins were found inside, but there is no trace of either skeleton (Figure 2.50). However, presence of an inkstone, belt hooks, a bronze crossbow apparatus, and other weapons among the wood fragments on the east side suggest that this coffin belonged to a male occupant. The coffin on the west side is believed to belong to his wife because it contained a higher concentration of gold, silver, and precious stone jewelry and ornaments, as well as a gold thimble.

The most notable among the ornaments is an openwork cicada plaque that bears a striking resemblance to the Nanjing University example (Figure 2.51). The shape is roughly two inches square, with a peaked top and sloping shoulders. Again, slight repoussé holds granules in place, while edge is decorated with a sawtooth pattern executed both in openwork and granulation. There are two unadorned flat circles that must have once held inlaid stones for eyes, but it is unclear how they were attached. In addition, the same coffin held gold hairpins, rings, beads, bracelets, a bell, an ear pick, a thimble, animal-shaped ornaments, flower-shaped ornaments with inlay and granulation, and five droplet-shaped leaves. Other notable parallels with the Nanjing University tombs include a glass bowl, a crystal bead, and amber beads and ornaments. These items were located in the female tomb occupant's coffin, in the upper portion of which an almost complete crescent-shaped mica ornament with pierced holes along the border was also found.

The tomb of Gao Song and Lady Xie (Tomb 2) is smaller in scale than Tomb 6 but is also a brick single-chambered tomb with a passageway in front. Two wooden

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coffins were relatively well preserved, but only a few teeth of their occupants survive. Both were accompanied by epitaphs that revealed the coffin on the east side to be that of Gao Song, and the one of the west side to be Lady Xie. Grave goods in and in front of the coffins and in the southwest corner of the chamber include ceramics and lacquer vessels, bronze and iron weapons, mirrors, and coffin nails, fifteen jade ornaments and ritual objects, and 68 gold bracelets, hairpins, pendants, and other ornaments—most with relatively high gold content.

Only one of the gold objects in Tomb 2 approaches the preceding cap ornaments in shape: a damaged, roughly petal-shaped ornament that stands less than an inch tall (Figure 2.52). It has a flat base and pointed top edge similar to the mountain-shaped ornaments discussed above, and its openwork design is covered with granulation. In addition, there were eight flower-shaped pieces with inlay cells and heavy granulation that were probably sewn to clothing, one sheep-shaped ornament with a hole at the abdomen for attachment, and five circular openwork ornaments. Three of these held swirling patterns and were overlaid with granulation, but the two with loops at the top (indicating their use as pendants) were decorated with two confronted birds, and with four pairs of "curled leaves" that evoke the bases of the decorated tree ornaments from Fangshen, Tiancaogou, and Wangzifenshan (Figure 2.53). Finally, as we might expect, 30 droplet-shaped pierced leaves ranging in size from were discovered in a group near the entrance of the chamber.

Sheet gold leaves, almost always droplet-shaped with a single pierced hole for attachments, appear throughout southern tombs. Because of their diminutive size and lack of illustrations in excavation reports, even experts in the goldsmithing traditions of

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northeast China have paid little attention to them, but their occurrence is fairly frequent in the south. For example, they have also been found in the tombs of Yan Lin 顏綝 at Laohu Mountain 老虎山 in Nanjing and the 375 CE a lady of the Liu 劉 clan buried in Changsha 長沙, in Hunan 湖南.<sup>101</sup> More recently, nine leaves were detected near the hole made by looters at the end of the passageway of Wen Jiao's 溫羨 mid-4<sup>th</sup> century tomb at the Guojia Mountain 郭家山 aristocratic cemetery, in the Xiaguan 下關 district of Nanjing (Figure 2.54).<sup>102</sup>

# **5.** Tombs in Between

The gold leaf phenomenon was by no means limited to the north and south among the most recent discoveries is a Western Jin tomb in the Dasima 大司馬 cemetery, near Weihui 衛輝 in Henan, which held five droplet-shaped leaves.<sup>103</sup> Gold ornaments also appear throughout the intermediary zone from Shandong and Henan to Gansu.

#### 5.1 Linhe, Shunyi district, Beijing

An openwork cicada cap ornament now in the collection of the Capital Museum was uncovered in Linhe 臨河 village, in the Shunyi 順義 district of Beijing (Figure 2.55).<sup>104</sup> Although the details of its excavation are unknown, the detail in published photographs reveals much about how it was made. The two-inch-tall mountain-shaped plaque is made of sheet gold decorated with repoussé, openwork, and granulation and inlay, although many of the gold granules and all of the original stones are missing. Upon close

<sup>&</sup>lt;sup>101</sup> Feng Yi, "Shandong Linyi Xiyanchi jie Jin mu," Wenwu 2005.7 (2005): 36.

<sup>&</sup>lt;sup>102</sup> Nanjing shi bowuguan, "Nanjing beijia Dong Jin Wen Jiao mu," *Wenwu* 2002.7 (2002): 19-33.

<sup>&</sup>lt;sup>103</sup> Bai Bin, Dang Zhihao, Zhao Zhenjiang, Fu Bingbing, Huo Daqing, Yu Mengzhou, Hu Songhe, and Liu Bingbing, "Henan Weihui Dasima mudi Jin mu (M18) fajue jianbei," *Wenwu* 2009.1 (2009): 15-21.

<sup>&</sup>lt;sup>104</sup> Cui Xue'an, ed., *Jinyinqi juan* (Beijing: Beijing chubanshe, 2004), 51.

inspection, it appears that the sheet gold was either smoothed over an armature of wires in the form of a cicada or pressed into the recesses of a matrix to create raised lines. Later, the interstices were cut out, and the removed material could have been cut into strips for the bezels or melted to form the granulation.

The recycling of scraps makes sense when one considers the value of the material, but it is shocking to think that such highly prized ornaments could have been produced in multiples. On the other hand, this represents a creative solution to the problem of how to transfer one's design with limited tools, and the widespread use of molds would account for the regularity of the cicada ornaments across China.

## 5.2 Tombs 1 and 2, Xiyanchi Street, Linyi, Shandong

One site discovered in Shandong seems to represent the transition between the northern and southern techniques and styles. In 2003, two tombs were excavated on the former residence of Wang Yi 王義, on Xiyanchi Street 洗硯池街 in Linyi 臨沂.<sup>105</sup> Both tombs should be dated to the end of the Western Jin to the beginning of the Eastern Jin, i.e. fourth century. Tomb 1 is peculiar in its structure for either the Yan or Jin states (Figure 2.56). It consisted of two parallel rectangular brick chambers with arched ceilings. Their doors occupied the south wall, beyond which was a brick wall that held an area for offerings of ceramics, bronze money, clam shells, etc. The east and west chambers together contained over 270 items, and among them were five cap ornaments referred to by the excavators as *dang* (a term that we shall return to in the next chapter).

The east chamber contained two small wooden coffins and traces of lacquer that might have belonged to a third. The first was located against the south wall and housed

<sup>&</sup>lt;sup>105</sup> Feng, "Linyi," 36.

the skeleton of a child around two years old. The second projected at an angle from the northwest corner and held the remains of an infant no more than one year old. One gold cap ornament lay between the head and waist area of each of the coffins, and a third sat in a pile of ceramic vessels on the west wall. The west chamber contained one larger coffin along the south wall, and outside it may more traces of lacquer, possibly indicating additional coffins (Figure 2.57). The one that remained held the body of a 6- or 7-year old child who wore hairpins, beads, and a gold finger ring, and who may have been male judging from the two knives at his sides. A crossbow also sits nearby. One cap ornament lay on the floor close to the head of the coffin, and another rested near the head or chest area.<sup>106</sup>

Only two of the five are described and pictured, and both are cicada ornaments. They largely resemble the one form Xianheguan in shape and construction, with the exception of a few details. Both ornaments from Linyi have a thick patina resulting from the corrosion of a bronze backing plate, and they lack sawtooth borders and upwardpointing legs lined with spheres of receding size. They differ from each other in a few respects as well. The one from the east chamber is more heavily corroded and has lost has lost its eyes (Figure 2.58), while the one from the west chamber retains its hemispherical gold eyes (Figure 2.59).

Two adult skeletons survive in Tomb 2, a single-chambered vaulted tomb about 115 feet from Tomb 1, the identities of its occupants are unknown. Because the tomb was robbed twice, its contents are in disarray, and only a few luxury items in gold, bone,

<sup>&</sup>lt;sup>106</sup> There are inconsistencies between the tomb report and the line drawings of the east and west chambers. The former states that there were four in the east chamber and only one in the west chamber. The drawings, however, clearly picture three in the east chamber and (in separate drawings) two in the west chamber.

agate, crystal, mica, and pearl survive. No cicada ornaments remain, but there is one gold peacock-shaped ornament decorated with openwork and repoussé, and seven other fragments of gold ornaments with traces of granulation (Figure 2.60). Interestingly, eight thin, flat, droplet-shaped gold leaves with pierced ends were also found separately in Tomb 2, but not in Tomb 1 (Figure 2.61).

#### 5.3 Tomb 60M1 at Xindiantai, Dunhuang County, Gansu

Cicada cap ornaments seem to have been in use throughout the territory that had once belonged to the Han Empire. Perhaps the most distant example surfaces in a Jin tomb in Dunhuang county, Gansu.<sup>107</sup> Two tombs were excavated in 1960 near Xindiantai 新店台, about nine miles east of the city of Dunhuang (Figure 2.62). Tomb 60M1 occupied the southwest corner of a gravel enclosure that probably designated a family cemetery (Figure 2.63). It was a relatively large single-chambered tomb flanked by two side niches, and it held a single body with its head oriented to the east. There are no brick tombs in this area, and it is instead carved from conglomerate rock.

Although it had been looted, it still contained *guan* with valuable inscriptions and the only gold object found in the enclosure (Figure 2.64). The ceramics reveal that the tomb belongs to Si Xinrong 汜心容, the wife of Zhang Hong 张弘. The biography of Zhang Gui 軌 in the Jin shu reveals that Zhang died in 351, which the inscriptions record was 18 years before her death in the  $13^{th}$  year of Shengping 升平, or 369 CE. It is peculiar that she was not interred with her husband, but the excavators speculate that he might have been on a military campaign abroad when he died.

<sup>&</sup>lt;sup>107</sup> Ma Shichang and Sun Guozhang, "Dunhuang Jin mu," Kaogu 1974.3 (1974): 191-199.

The gold cicada cap ornament was located in the head area of the coffin and measures about two inches tall (Figure 2.65). It is quite damaged, but what remains is consistent with the standards set by the other described above. The only striking difference is that the edge of the plaque has a wide border with vegetal patterns and clusters of three bezels that once held inlaid stones, not unlike the groups of stones on the antlers of the flowering ornaments discovered at Xihezi, in Inner Mongolia.

This pattern clearly held a special significance for people of this period, and we even see a faint echo of it in a plaque discovered in the Northern Qi tomb of the Ruru princess (Figure 2.66).<sup>108</sup> Undoubtedly, more of these cap ornaments will come to light with each new year of excavations.

#### 6. Objects in Museum Collections

#### 6.1 The Muwentang Collection, Hong Kong

While excavated materials provide more information about the culture that produced a given artifact, museum objects without provenance should not be dismissed out of hand. In fact, the single largest assemblage of gold cap ornaments is to be found in the Muwentang 沐文堂, the private collection of Hong Kong 香港 art collector Simon Kwan. Kwan and Sun Ji published an excellent catalogue of the nearly one thousand Chinese gold objects, and although the provenance of the Muwentang gold is unknown, the dates have been carefully assigned on the basis of comparison to countless excavated examples.

<sup>&</sup>lt;sup>108</sup> Tang Chi, "Dong Wei Ruru Gongzhu mu bihua shitan," Wenwu 1984.4: 10-15, Pl. 5.4.

Two of the earliest objects, which may date as early as the Eastern Han dynasty, are a small plaque just over an inch tall and a cicada about twice that size. The plaque has holes at each of the five corners, suggesting that it was once attached to a cap (Figure 2.67). The pentagonal sheet of hammered gold is decorated with cloud scrolls made from curled wires and small areas of granulation. The border consists of an outer row of granulation and two concentric wires containing repeating triangles made of three granules each.<sup>109</sup> The cicada has inset stones for eyes and an openwork torso and wings covered with wire and granulation (Figure 2.68). The back is damaged but appears to have been attached to a bronze object. Although it may not be a cap ornament itself, it may reveal a fairly early precedent for the use of cicadas in gold clothing ornaments.

In five other ornaments, the pentagonal shape and the now-familiar cicada décor are combined. These vary in size from one and a half to three inches tall, and few are in poor condition, but they follow the same design for the most part. The sloping shoulder is slightly wider than the base and comes to a point in the center. In almost all cases, the gold openwork is supported by a backing plate made of bronze, which is less stable than gold and more susceptible to decay (Figures 2.69, 2.70, 2.71, 2.72, and 2.73).

In addition to the cicada ornaments, there are several of a similar shape that contain other animals or figures. The most common after the cicada is an openwork design that may be read either as two confronted birds or as a single bird with two heads. The three examples stand from one and a half to two and a half inches tall and at first glance resemble the cicada ornaments (Figures 2.74, 2.57, and 2.76). However, they vary more strongly in their details. For instance, the largest is shaped more like a soft-edged

<sup>&</sup>lt;sup>109</sup> Sun and Kwan, *Zhongguo gu dai jin shi*, 264-265, 268-269, 287-299; Figs. 119, 123-124, 141-145, 146-153.

petal than a pentagon with angular shoulders. The birds' wing and tail feathers sweep up in delicate scrolls that are undoubtedly harder to execute than the geometric cicada patterns. The openwork is overlaid with granulation of varying sizes, and wire is sometimes used to define contours. In all three cases, densely granulated areas are broken up by bezels, some of which still retain turquoise and other stones. The two larger ornaments have rather busy central designs and simple sawtooth borders, while the smallest one has a less ornate center and a larger border dominated by vegetal scrolls and bezels in groups of three, like that seen on the cicada ornament from Dunhuang.

In addition to the bird ornaments, there is one square openwork plaque decorated with the growling face of a fantastic beast (Figure 2.77). It was made in much the same way as the others—sheet gold openwork in slight relief was overlaid with granulation, but there the bezels for stones and the outer decorated border have been omitted. The fanged beast is only one and a half inches tall and may have been grouped with other ornaments, like the four-piece assemblage from Nanjing University, which consists of a cicada, a "monster mask," and ornaments of Figures riding animals with serpentine bodies.

The Muwentang Collection also has a pair of Figures riding beasts that mirror each other (Figure 2.78). Each is an inch and a half wide rectangle that tilts slightly upwards in the direction of the scene's motion and has sloping shoulders and a semicircular protrusion instead of a peak. The animals—which could be read as dragons, tigers, or simply hybrid creatures imagined by the artist—have inlaid stone eyes and long, thin torsos ending in coiling tails. The human figures sit astride them have long hair or headdresses and possibly wings. A third plaque, still under two inches, consists of the

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more traditional pentagonal shape enclosing a heavily abstracted dragon or tiger with a striated body (Figure 2.79). Small holes in the corners clearly indicate their attachment to some other material. All three of the animal plaques lack decorated borders, but the lower left corner of the abstracted one contains a small section of sawtooth pattern.

Finally, two other pairs of ornaments in the Muwentang Collection are strikingly similarity to the leaf-covered square openwork plaques in the Fangshen tombs. These are sheet gold circles, just under two inches in diameter, with very simply cut radiating openwork consisting largely of triangles (Figures 2.80 and 2.81). They are pierced at intervals, and small circular discs have been attached to the surface using twisted wire. The radiating triangles running along the borders should not be misunderstood as part of the design—they were probably intended to hold in place a backing plate in another material.

## 6.2 Kempe Collection

Most studies of Chinese gold have ignored Western collections, but at least one demands our attention. One of the finest collections of Chinese gold and silver in the West was assembled by Swedish industrialist Dr. Johan Carl Kempe (1884-1967), who bequeathed it to his two daughters after his death in 1967. It was supposed to remain on display in Sweden but instead was auctioned off for just over 18 million dollars on May 14, 2008, at Sotheby's in London. Although the auction results have not been made public, these objects are most likely now in the private collection of Sheikh Saud Al-Thani of Qatar, who purchased 99 of the 126 lots for sale.<sup>110</sup>

<sup>&</sup>lt;sup>110</sup> Souren Melikian, "Whiff of Mystery Hangs over Sale of China Objects," *International Herald Tribune* (May 23, 2008).

A few items are of interest, even if their current whereabouts are unknown.<sup>111</sup> There is a mountain-shaped plaque cicada just over 1.5 inches tall that consists of a gold openwork frontal affixed to a bronze plate by tabs (Figure 2.82). The lines forming the design are raised and traces with lines of granulation in a range of sizes. In the center, two pieces of turquoise have been attached, forming the eyes. Much like the example from Dunhuang, the outer edge is decorated with bezels that once held stones—although here they occur singly rather than in groups of three. The most interesting departure from tradition in this ornament is the formation of ridges along the edges of the openwork lines. This innovation solves a number of technical problems, including the question of how to keep a row of granules straight.

This piece has been grouped with three other openwork plaques with granulation in the Kempe ex-collection that closely parallel the sets excavated from the Jin tomb at Nanjing University and preserved in Simon Kwan's collection. All of them are of equally diminutive size and could easily have been sewn onto the front or sides of caps. Two of them are wider than they are tall and take the form of a man mounted on a dragon or tiger, one with a turquoise stone for the silhouetted animal's eye (Figures 2.83 and 2.84). The style and craftsmanship (e.g. the size and arrangement of the granulation) are markedly different though, and it is clear that they were not intended to exactly mirror one another.

The last item in the group of four is a square openwork gold plaque with a demonic-looking creature facing forward in the center (Figure 2.85). On the four sides,

<sup>&</sup>lt;sup>111</sup> Bo Gyllensvärd, *Chinese Gold & Silver in the Carl Kempe Collection* (Stockholm: Nordisk Rotogravyr, 1953), 77-80; Figs. 17-20.

one can just barely make out the abstracted, slender bodies of the directional animals. The most easily recognizable is vermillion phoenix at the top, whose head is shown in profile with a beak and large eye. Its subject recalls the snarling animal face plaque in the Simon Kwan collection and in the Nanjing University tomb. As the third example of such a grouping, it may indicate the custom of wearing or burying sets together.

## 7. What are they? Where are they from? Where are they going?

Now, having assembling this group of gold cap ornaments, we can begin to explore their historical significance and address the following questions: Are these objects the same as the *buyao* and *dang* described in Chinese records? Are there clear Han precedents in the visual record as well? What do these gold cap ornaments tell us about interaction between Han and non-Han populations in the third to fifth centuries and who, exactly, was emulating whom?

#### CHAPTER 3: BUYAO, DANG, AND THE SECONDARY EVIDENCE

# **1. Introduction**

When gold step-sway ornaments were first discovered in Murong tombs half a century ago, scholars struggled to determine what exactly they were. Although the presence holes for attachment to fabric or leather pointed to their identification as cap ornaments, little else was known about them. Prototypes were immediately sought in similar head ornaments from other cultures, textual descriptions, and visual representations in other media. Today, this diverse evidence lies at the center of the debate over their geographical origins and social significance.

Two classical Chinese terms mentioned in the previous chapter typically arise in these arguments: *buyao* 步摇 ("step-sway"), and *dang* 壋. Written allusions to these terms predate the Xianbei presence in Northeast China, so if the excavated step-sway ornaments can be shown to be descended from either category, then the tradition can legitimately claim Chinese roots. However, crowns decorated with sheet gold leaves were also characteristic of ancient cultures stretching from the Mediterranean to Japan, and a strong case has also been made for foreign origins. This chapter will examine the evidence that the Murong absorbed the wearing of *buyao* and *dang* from Han China and demonstrate how that some of the material that has previously been used to support the case for Chinese origins in fact points to underlying connections to the West.

#### 2. Secondary Sources

The earliest available literary sources on traditional costume and headgear date to the Zhou and Han dynasties. Although the Zhou dynasty *Li ji* 禮記 (*Classic of Rites*)

primarily deals with the organization of the Zhou state and its rituals, it also outlines rules of dress and comportment for the emperor and his court. The Zhou li 周禮 (Rites of Zhou), which first appeared in the Western Han dynasty, delineates the appropriate clothing and caps for all members of the court attending highly formalized occasions as well. Individual items of personal adornment are described in greater detail in two early second century CE dictionaries: the Shiming 釋名 (Explaining Words) attributed to Liu Xi 劉熙, and the Shuowen jiezi 說文解字 (Explaining Simple and Analyzing Compound Characters) compiled by Xu Shen 許慎.<sup>112</sup>

However, the most important and frequently quoted literary sources are the official dynastic histories. The *Han shu* (*Book of Han*) 漢書, written by Ban Biao 班彪 (3 – 54 CE) and completed in the early second century CE by his son Ban Gu 班固 (32 – 92 CE), contains several references to cap and hair ornaments that are repeated in subsequent texts. A few centuries later, the Liu-Song period historian Fan Ye 范曄 (398-445) compiled the *Hou Han shu*. Although its format followed the *Han shu*, in a departure from his predecessors, he included twenty additional chapters by Jin scholar Sima Biao 司馬彪 (d. c. 306) that were collectively called *Xu Han shu* (*Continuation of the Book of Han*) 續漢書.<sup>113</sup> However, the continuation of the *Han shu* included ethnographies of major non-Chinese groups like the Wuhuan and Xianbei, as well as a new treatise called the *Yufu zhi* 興服誌 ("Record of Chariots and Robes") which laid out

<sup>&</sup>lt;sup>112</sup> On the dates of these texts, see Michael Loewe, ed., *Early Chinese Texts A Bibliographic Guide* (Berkeley: University of California, 1993), 293-297, 24-32, 424-442.

<sup>&</sup>lt;sup>113</sup> B.J. Mansvelt Beck, *The Treatises of Later Han: Their Author, Sources, Contents, and Place in Chinese Historiography* (Leiden: E.J. Brill, 1990).

the rigidly hierarchical official dress code of the Han dynasty. This section was reproduced in the *Shiliuguo chunqiu*, and although much of it has been lost, significant sections were reproduced in the *Jin shu*, completed in 648, as well as the *Bei shi* 北史 (*History of the Northern Dynasties*) by Tang dynasty scholar Li Yanshou 李延壽.<sup>114</sup>

The Yufu zhi in its various incarnations remains one of the keys to identifying the personal adornments excavated from tombs and depicted in contemporary paintings and sculpture. Conversely, one would expect visual representations to confirm the accuracy of the historical texts. In reality, however, word and image do not always correlate with one another. Paintings preserved in situ, especially in tombs, can be dated with some accuracy, but they are usually produced in an abbreviated style that makes details hard to discern. In contrast, the exceedingly rare Tang and earlier silk handscrolls attributed to famous artists like Gu Kaizhi 顧愷之 (c. 344 – 406 CE) and Yan Liben 間立本 (c. 600-673 CE) were intended for display and are meticulously executed, but they should be treated with some skepticism because they may be copies updated with fashions of later periods. Nonetheless, some generalizations about historical dress can be made based on the overlap between the textual histories and illustrations that have been preserved.

We know, for example, that during the Han dynasty men and women wore loosefitting garments that hid most of their bodies and revealed only their heads, hands, and sometimes feet. Examples of the typical male official court costume appear throughout the Eastern Han tomb of a high-ranking official uncovered in 1957 in Wangdu 望都

<sup>&</sup>lt;sup>114</sup> W. G. Beasley and E. G. Pulleyblank, eds., *Historians of China and Japan* (London: Oxford UP, 1961).

county, Hebei province (Figure 3.1).<sup>115</sup> On the west wall of the front chamber, several officials wear loose robes with billowing sleeves that falls to the mid-calf. Underneath, a rather shapeless pair of pants bunch at the ankles. One of the six officials pictured on the west wall is identified by an inscription as a *menxia zeicao* 門下賊曹, and he wears a voluminous white robe edged in black that extends all the way to the ground, covering the trousers entirely.<sup>116</sup> Detailed images of women are less common in Han tombs, but they too wear belted flowing robes with wide sleeves and a full skirt. Some of the most official-looking portraits are engraved in the *Biographies of Exemplary Women (Lienü zhuan)* 列女傳 on the Eastern Han dynasty Wu family shrines 武梁祠 in Jiaxiang 嘉祥 county, Shandong province (Figure 3.2).<sup>117</sup>

After the fall of the Han, however, men's attire underwent major changes as a result of contact with foreign populations on China's northern and western borders. Although the loose-fitting garment persisted in certain traditional contexts, such as occupant portraits of the deceased on the rear walls of tombs, the amorphous masses of fabric began to be abandoned in favor of more closely cut robes or tunics that fell to the knees, revealing more snugly fitting pants visible below.<sup>118</sup> This change can be observed at a relatively early date in the horse-riding Northeast where the earliest horse stirrups in China were discovered. For instance, the figures painted in an offering scene in the wall paintings of the Eastern Jin tomb at Yuantaizi near Shi'ertai in Chaoyang county, wear

<sup>&</sup>lt;sup>115</sup> Hebei sheng wenwu yanjiusuo [Hebei Provincial Cultural Relics Research Institute], *Hebei gudai muzang bihua* [*Wall Paintings of the Ancient Tombs of Hebei*] (Beijing: Wenwu Press, 2000), 41, 44, Figs. 26 and 29.

 <sup>&</sup>lt;sup>116</sup> Charles O. Hucker, A Dictionary of Official Titles in Imperial China (Stanford: Stanford UP, 1985).
<sup>117</sup> Wu Hung, The Wu Liang Shrine: The Ideology of Early Chinese Pictorial Art (Stanford: Stanford UP, 1989) 264-265, Fig. 126.

<sup>&</sup>lt;sup>118</sup> Yoshito Harada, *Chinese Dress and Personal Ornaments in the Han and Six Dynasties* (Tokyo: Toyo Bunko, 1967): 29.

short robes and tight-fitting sleeves (Figure 3.3).<sup>119</sup> Although horses had been used to pull chariots in the Zhou and Han dynasties, it was not until in the first centuries after the Han that cavalry became a mainstay of the army, necessitating a riding costume that would allow the rider to sit comfortably astride a saddle and hold the reins without long sleeves getting caught in them. Boots also became more common accessories from this time onward.

In the Zhou dynasty, most men let their hair grow long, and initially both men and women wore their hair loose down their backs. By the Han dynasty, however, it had become standard to tie it back, wrap it around a simple hairpin (usually a *ji* 笄), or cover it with a cap. Women had typically worn their hair in ponytails in the Zhou dynasty, but by the Han the most common hairstyle consisted of two buns, which were either tightly wrapped and worn high on the head, or loosely wrapped and worn low.<sup>120</sup> The *Yufu zhi* of both the Hou Han shu and the *Jin shu* relate that palace ladies of the Western Han through Jin dynasties sometimes adorned their hair with *buyao*.

## 3. Ladies' Buyao

The classical texts state that *buyao* were worn by empresses and ladies of the Chinese court, as well as by men and women of the Wuhuan and Murong Xianbei tribes (who were generally thought to have the same cultural customs because of their common Donghu origin). The earliest dictionaries, however, define *buyao* in terms of their structure, without offering any information about who wore them. The *Shi toushi* 

<sup>&</sup>lt;sup>119</sup> Li Qingfa, "Chaoyang Yuantaizi Dong Jin huamu," Wenwu 1984.6 (1984): 40, Pl. 6.2 top.

<sup>&</sup>lt;sup>120</sup> Chen Maotong, ed., *Zhongguo lidai yiguan fushi zhi* [Chinese Historical Systems of Dress and Personal Adornment] (Tianjin: Baihua wenyi chubanshe, 2005) 35-36, 69.

(Explaining Head Ornaments) 釋頭飾 section of the Shiming relates, "The top of a buyao

has hanging beads, and when one takes a step, they sway"(步搖, 上有垂珠, 步則搖

也).<sup>121</sup> This image is elaborated slightly in the description of an official's dress in the

Jiang Chong zhuan ("Biography of Jiang Chong") 江充傳 in the Han shu:

Chong wore gauzy diaphanous robe, and the overlapping curved panels of his robes hung down in back. He wore on his head a sheer head covering and a *buyao* cap, and fluttering feather tassels.

充衣紗縠襌衣,曲裾後垂交輸,冠禪纙步搖冠,飛翮之纓。122

It is significant that Jiang Chong's headgear should include feathers, as these became a

common feature of head ornaments in the Han and succeeding periods.

Regrettably, these two sources give little information about what the lower part of

the buyao looked like or how it may have been attached to a guan (cap) 冠. For this we

turn to the Yufu zhi of the Hou Han shu:

When empresses dressed to visit the ancestral shrine, they wore dark purple on the top and black on the bottom, silkworms, and greenish black on the top and pure white on the bottom. The dress code was all dark clothing, and silk ribbons were used to hide the edges of the collar and sleeves. [They wore] fake chingons, *buyao*, hairpins, and ear ornaments. Their *buyao* used gold for the mountain-shaped frontal piece, and white pearls were strung on the intertwining cassia branches. [They wore] a sparrow and nine flowers, and the six beasts: the bear, tiger, red bear, heavenly deer, *bixie*, and the grand cow from Nanshan.

皇后謁廟服,紺上皁下,蠶,青上縹下,皆深衣制,隱領袖緣以絛。首飾有假結、步搖、簪、珥。步搖以黃金為山題,貫白珠為桂枝相繆,一爵九華,熊、虎、赤羆、天鹿、避邪、南山豐大特六獸。<sup>123</sup>

<sup>&</sup>lt;sup>121</sup> Liu Xi, *Shiming shuzheng bu* [*The Commentary and Supplementary of Explaining Words*], Bi Yuan and Wang Xianqian eds. (Beijing: Zhonghua shuju, 2008), *juan* 15, "Shi Toushi [Explaining Head Ornaments]," 160.

<sup>&</sup>lt;sup>122</sup> Ban Gu, *Han shu* [Book of Han] (Zhonghua shuju, 1960), *juan* 45, "Jiang Chong zhuan [Biography of Jiang Chong]," 2176.

<sup>&</sup>lt;sup>123</sup> Hou Han shu [Book of the Later Han], by Fan Ye, juan 120, "Yufu xia [Record of Chariots and Clothing, Pt. 2]," 3676-3677.

The commentary explains that the last section refers to the *fuji liujia* 副笄六珈, a set of ornaments worn by the empress that consisted of six animals attached to hairpins.<sup>124</sup> Qing scholar Wang Xianqian 王先謙 (1842-1918), relying on the commentary of Chen Xiangdao 陳祥道 (1053–1093) of the northern Song, adds:

Han *buyao* use gold to make a phoenix, and the lower part has a rim. The front part has hairpins, six stones in different colors are attached and hang down, and when one moves, it sways.

漢之步搖,以金為鳳,下有邸,前有笄,綴六采玉以垂下,行則動搖。125

The general consensus among these authors is that *buyao* ornaments consisted of an upper portion with winding branches, a lower part that was probably attached to a hairpin of some kind, and hanging beads that may have included pearls. The beads must have been elevated off the hair in order for their swaying to be visible, yet the sources do not elucidate how the beads were attached and what they looked like specifically.

In spite of these significant gaps in the early texts, when the first gold ornaments were unearthed at Fangshen in 1956, excavators in China immediately ascribed them to the category of *buyao*.<sup>126</sup> Subsequent scholars looked to images of women's headdresses in a few surviving paintings of the Han and Jin periods as evidence of the tremendous popularity of *buyao* at court. Among the earliest examples is an image on a painting of the early second century BCE that was placed over the body of the Marquise of Dai 戴侯 whose tomb was discovered at Mawangdui 馬王堆 in Changsha, Hunan province.<sup>127</sup> In the central register, a woman standing in profile leans on a cane. In spite of her stooped

<sup>&</sup>lt;sup>124</sup> Sun Ji, "Buyao, buyao guan, yu yaoye shipian," Wenwu 1991.11 (1991): 55.

<sup>&</sup>lt;sup>125</sup> Sun, "Buyao," 55.

<sup>&</sup>lt;sup>126</sup> Chen, "Fangshen," 24-26.

<sup>&</sup>lt;sup>127</sup> Sun Zuoyun, "Changsha Mawangdui yihao Han my chutu huafan kaoshi," Kaogu 1973.1 (1973): 54-16.

posture and fragility, she is dressed impressively, with floor-length robe of swirling colors and a delicate hair ornament projecting from her forehead (Figure 3.4). The details are difficult to decipher, but it does seem to consist of twisting branches bedecked with suspended beads.

Similar hair ornaments are donned by various figure in the British Museum and Beijing Palace Museum versions of Gu Kaizhi's (c. 345 - 406) "Admonitions of the Court Instructress Scroll" (*Nüshi zhen tu*) 女史箴圖, a handscroll that illustrates appropriate comportment for ladies as established by courtier Zhang Hua 張華 (232 – 300 CE). Both are later copies of Gu's original work, the former ink and color on silk and believed to date to the Tang dynasty (Figure 3.5), the latter a monochrome ink painting on paper from the Song 宋 dynasty (Figure 3.6).<sup>128</sup> In the British Museum scroll, almost every lady of the court wears a pair of ornaments that project vertically from the top of the head. The base of each ornament, outlined in a reddish brown color, has a thick stalk surmounted by a flower or with four petals. From its center unfurl several delicately curling lines painted with the lightest hand in dark pink. Additional S-shaped scrolls added above them could perhaps be read as abstracted profiles of birds with long tails. The Palace Museum scroll has analogous adornments, but the upper portion of the ornaments is bushier, with less distinct lines.

One might doubt the integrity of copies that date to the seventh century at earliest, but a screen illustrating the same text was excavated in Datong, Shanxi province, from

<sup>&</sup>lt;sup>128</sup> Wu Hung, "The *Admonitions* Scroll Revisited: Iconology, Narratology, Style, Dating," Shane McCausland, ed., *Gu Kaizhi and the Admonitions Scroll* (London: The British Museum, 2003), 89-99.

the Northern Wei tomb of Sima Jinlong 司馬金龍, who died in 484 CE (Figure 3.7).<sup>129</sup> The ladies of the court again wear hair ornaments, but in place of curling lines, there are small bouquets of yellow. They are rendered with circles of dots—some bolder and larger, some lighter and smaller—but lack Gu Kaizhi's characteristic S-curls and birds. In both cases, however, the images seem to evoke a variety of jewelry that would quiver and catch the light with the wearer's movement.

The imagery of birds and flowers comes together in a Tang dynasty handscroll entitled "Court Ladies with Flowers in their Hair" (*Zanhua shinii tu* 簪花仕女圖), which is attributed to Zhou Fang 周昉 (ca. 730-800 CE) and is now housed in the Liaoning Provincial Museum in Shenyang (Figure 3.8). A court lady wears her hair bound up on her head, with gold hairpins inserted near her neck and her bun, which holds an enormous flower. As she leans down to play with a Pekinese dog, the pendant strands of an ornament inserted into the front of her coiffure fall forward. It is made from five branches painted in light yellow, atop which are perched two birds and three open flowers or leaves.

This pairing of bird and feather imagery with descriptions of women's bejeweled head ornaments appears in other early sources, the most famous case being the description of the ethereal goddess in his famous "Nymph of the Luo River" (*Luo shen fu*) 洛神賦 by Wei dynasty poet Cao Zhi 曹植 (192-232):

<sup>&</sup>lt;sup>129</sup> Shanxi sheng Datong shi Bowuguan and Shanxi sheng wensu gongzuo weiyuanhui, "Shanxi Datong Shijiazhai Bei Wei Sima Jinlong mu," *Wenwu* 1972.3 (1972): 20-33, 64, 89-92.

She drapes herself in the shimmering glitter of a gossamer gown, wears in her ears ornate gems of carnelian and jade, bedecks her hair with head ornaments of gold and kingfisher feathers, and adorns herself with shining pearls that illuminate her body.<sup>130</sup>

披羅衣之璀粲兮, 珥瑤碧之華琚。戴金翠之首飾, 綴明珠以耀軀。

Brilliant blue kingfisher feathers, which continued to be a prominent feature of imperial headgear for centuries afterwards. Four crowns belonging to the two consorts of the Wanli 萬曆 Emperor were excavated at Dingling 定陵 in Beijing (Figure 3.9). All of them are encrusted with pearls, gems, and enamel imitation kingfisher feathers.<sup>131</sup> With this association in mind, Sun Ji reinterprets the abovementioned passage from the *Yufu zhi* of the Hou Han shu in light of this association, noting that "one jue and nine hua" 八 爵九華 (recorded later in the *Beitang shuchao* 北堂書鈔 and *Taiping yulan* 太平禦覽 as eight instead of one) should not be taken at face value. *Jue* and *hua* should be understood as stand-ins for the homophonous words sparrow (*que* 雀) and flower (*hua* 花).<sup>132</sup> Although this argument is not particularly convincing on its own, the archaeological find from Gansu confirms a very early relationship between *buyao*, birds, and flowers.

In 1984, a gold flower-shaped gold ornament was uncovered in a Han dynasty tomb in Hantanpo 旱灘坡, near Wuwei 武威 (Figure 3.10).<sup>133</sup> The lower portion consists of four elongated sheet-gold leaves, each with a loop of wire at the tip that would have held a dangling leaf or bead (all of which are now lost). Eight stems compose the upper portion, four of them terminating in open-petaled flowers in bloom, three in buds

<sup>&</sup>lt;sup>130</sup> Xiao Tong, *Wen xuan, or, Selections of Refined Literature*, Vol. 3, trans. David R. Knechtges (Princeton: PrincetonUP, 1996) 355-412, 371-372.

<sup>&</sup>lt;sup>131</sup> Wang Xiuling, "Ming Changling hutu dihou fushi (san)," *Shoucangjia* 2009.9 (1009): 29-36.

<sup>&</sup>lt;sup>132</sup> Sun Ji, "Buyao," 57.

<sup>&</sup>lt;sup>133</sup> Zhongguo Banben Tushuguan, ed., *Zhongguo jinyin boli falang qi quanji: Jinyin qi* (Hebei: Hebei Meshu Chubanshe, 2004) 71, 177, 212.

resembling inverted pomegranates, and one in a bird. At the center of each of the open flowers sits a flat gold bezel surrounded by granulation. The bird holds a ring in its beak, from which hangs a sheet gold disk. The Hantanpo discovery provides three-dimensional evidence for the thick stalk and long wide petals on the ornaments pictured in the British Museum's handscroll, the bunches of delicate yellow flowers on Sima Jinlong's screen, and the birds on the British Museum and Liaoning Provincial Museum handscrolls. Thus, it is clear that *buyao* did exist, that they were worn by ladies of the court as early as the Han dynasty, and that they were portrayed with some degree of accuracy in Chinese historical records.

It is also evident that the descriptor in the dynastic histories was not arbitrary. The *buyao* described in the *Yufu zhi* has branches from the *gui* 桂, or the cassia tree (Figure 3.11). Cassia is an evergreen of the laurel family and its bark is the source of Chinese cinnamon (*Cinnamomum cassia*). It is similar to but not identical with the less pungent true cinnamon (*Cinnamomum zeylanicum*), which is native to Sri Lanka. Cassia was traded along the maritime Spice Route that crossed Asia from the seventh century CE onward, but its use and value are attested much earlier. In the fifth century BCE, Herotodus wrote that Arabian traders acquired kasie from fierce birds that collected sticks of the bark from an unknown distant land and kept them in their nests.<sup>134</sup> It also fascinating that both the Classical and Han Chinese worlds associated cassia with birds, and that both drew upon the branches of trees in the laurel family (Lauraceae) as the inspiration for elite head ornaments: the wreaths that connoted victory in ancient Greece and Rome and the gold head ornaments of empresses and nobility in China.

<sup>&</sup>lt;sup>134</sup> Andrew Dalby, *Dangerous Tastes: The Story of Spices* (Berkeley: University of California, 2000) 36-37. 104

Several aspects of the cassia plant's morphology are directly quoted in the images of *buyao* described above. The bases of the paired ornaments in the British Museum's Admonitions scroll are very close to the contours of the cassia flower, which have a fairly tall receptacle and appear to have three sepals when viewed from the side. The bright yellow flowers emerge from the tree's branches in small bouquets like the ones atop the heads of the ladies on Sima Jinlong's screen. The bunches of pink flowers of the Admonitions scrolls are similar in conception, and it is worth noting that the young leaves of the cassia are sometimes dark pink or red instead of green. While the curling lines may be pure fantasy, they also might refer to the stamen and pistil.

The gold Hantanpo ornament captures other details of the anatomy of the cassia tree and flower. First, when the flower blossoms, the petals emerge at right angles from the slightly bulbous receptacle, which houses the plant's ovary. Second, in addition to the open flowers, there are small hollow spheres with small tooth-like projections on one side that capture a later stage of development, after the flower petals have been shed and a fruit shaped like a blueberry or pomegranate has developed. Third, the leaves at the base of the ornament are pictured as long and thin with a vein running down the center—an image consistent with the leaves of the cassia, although the latter are sometimes wider or more pointed at the tips. Also comparable is the detail of orientation: the stalks of the Hantanpo flowers point upward while the leaves droop downward, as is the case of the cassia plant. Only the flat gold pendant discs do not seem to reflect an observed detail of the cassia plant.

There is also some question as to whether these are the same decorative elements mentioned in the texts. In his dissertation, Jiang Nan raised the important point that the historical sources describing *buyao* specifically mention beads (*zhu* 珠)—not leaves (*ye* 葉).<sup>135</sup> I would argue first that we cannot know today what was considered to be a zhu at the time of the writing of the original *Yufu zhi*, or the subsequent quotations of it in the *Jin shu*, *Wei shu*, and *Bei shi*. The word zhu may have been understood to mean any pierced object strung on wire, whether that was a traditional stone or metal bead or a sheet gold leaf. The ornaments pictured in Ladies with Flowers in their Hair, for instance, have both droplet-shaped pendant elements and two yellow circles covered in dots that undoubtedly represent gold beads with granulated surfaces. In spite of the word-for-word repetition of the words "strung white beads" in later versions, the visual record tells us that the style of *buyao* ornaments evolved over time.

It may be that stone beads pierced with holes were the dominant decorative impulse when the Mawangdui banner was painted In the Western Han dynasty, but they were then largely replaced by sheet gold shapes a few centuries later. Indeed, the continuation and gradual transformation of this ornamental tradition is demonstrated by a headdress excavated in 1986 from the Liao dynasty (907 – 960) tomb of the Princess of Chen 陳 at Qinglongshan 青龍山, in Inner Mongolia's Naiman banner, that consists of a headband of pearls, two carved amber dragons, and pendant leaves like those seen Zhou Fang's painting (Figure 3.12).<sup>136</sup> Between the Liao and the creation of the Ming dynasty headdresses from Changling, however, tastes appear to have shifted back to a preference for beads.

<sup>&</sup>lt;sup>135</sup> Jiang, "Zhongguo dongbei," 1.

<sup>&</sup>lt;sup>136</sup> Hsueh-man Shen, ed., *Gilded Splendor: Treasures of China's Liao Empire (907-1125)* (New York: Asia Society, 2006) 152, Cat. 27.

Moreover, physical properties could account for the preservation of the gold components of a headdress and the disappearance of its beads. The beads used are supposed to have been pearls, which are composed primarily of calcium carbonate and are especially soft and susceptible to decay. Pearls rank at only 2.5 out of 10 on the Mohs Scale, whereas turquoise ranks at 5 to 6 and jade at 6 to 7. Close inspection of the headdress from the tomb of the Princess of Chen reveals that the wires that once connected the leaves to the cloud-shaped pieces once held pearls and other beads, but they have since degraded, leaving behind only wires with wrapped ends and empty middle sections. The ornaments in Jin dynasty tombs may have met with the same fate. In any case, the lack of excavated and positively identified *buyao* in Han dynasty women's tombs makes it difficult to ascertain the extent of the use of pearls.

Turning to the archaeological remains that have survived, it appears that gold leaves were quite a popular decorative element in post-Han women's *buyao*. Several of the Jin dynasty tombs in the Nanjing area discussed in the previous chapter have yielded gold leaves in or near female burials. A tomb dating to the first half of the fourth century was unearthed at Nanjing University, and although it had been looted, the approximate locations of some objects are known. Thirty-two droplet-shaped gold leaves in two sizes were scattered on the west side of the chamber near the wife's remains and in the passageway of the side chamber, possibly indicating a second female burial there.<sup>137</sup> Excavations of the 356 CE tomb of Lady Xie, Tomb 2 at Xianheguan in the eastern suburbs, yielded thirty droplet-shaped gold leaves, and five more were found outside the

<sup>&</sup>lt;sup>137</sup> Jiang Zanchu, "Nanjing Daxue," 148.

coffin in Tomb 6 where her mother-in law was interred.<sup>138</sup> Finally, nine droplet-shaped gold leaves with pierced tips came to light in the tomb of Jin minister Wen Jiao and his wife (Tomb 9) at Guojiashan, in the Xiaguan district of Nanjing.<sup>139</sup> In many cases the tombs were robbed, and a few gold and silver objects near the hole made by looters are all that survive.

This custom of dress seems to have been widespread throughout Central and Southern China during the centuries following the Han. Gold leaves have also surfaced in the tombs of Lady Xu 徐 in Luoyang in Henan province (297 CE) and Lady Liu 劉 in Changsha in Hunan province (375 CE), and eight leaves of two sizes (only five of them complete) were found in a fourth century CE tomb on Xiyanchi Street in Linyi, Shandong province (Figure 2.62).<sup>140</sup> Several of three tombs also contained colored stone beads in the form of animals and fragments of gold foil shaped into flowers and peacock tails, complicating attempts to determine the design of post-Han women's buyao on the basis of grave goods in precious materials. In order to answer this lingering question, some scholars have turned to the leaf-covered step-sway ornaments from Liaoning.

## 4. Men's Buyao

According to the dynastic histories, buyao were worn not only with Chinese women, but also by male and female elite members of certain non-Chinese groups. The "Account of the Wuhuan" (Wuhuan zhuan 烏桓傳) in the Hou Han shu gives the following account:

 <sup>&</sup>lt;sup>138</sup> Jia, Wang, and Zhang, "Xianheguan."
<sup>139</sup> Nanjing shi bowuguan, "Wen Jiao mu."

<sup>&</sup>lt;sup>140</sup> Feng, "Linyi."

When Wuhuan women reach the age for marrying, they grow their hair long, divide it into buns, and ornament it with gold and jade, and like in China use hairpins and *buyao*.

婦人至嫁時乃養髮,分為髻,著句決,飾以金碧,猶中國有簂、步搖。141

Because the dynastic histories make little or no cultural distinction between the Wuhuan and Xianbei tribes, it has been assumed that Xianbei women also wore *buyao* in their hair. The passage implied that the wearing of gold and jade ornaments was a Chinese practice worthy of emulation.

Within a few centuries, the Jin shu had linked the wearing of buyao to the male

rulers of Yan states as well. The "Chronicle of Murong Hui" (Murong Hui zaiji 慕容廆

載記) in the Jin shu offers an explanation of Murong leader Mohuba's adoption of the

practice:

"At that time, the Yan dynasty often wore *buyao* caps. Mohuba saw them and was fond of them, and thereupon desired that his hair be capped as others had done before him. As a result, everyone called it *buyao*, which was later misheard and rendered as Murong."

時燕代多冠步搖冠,莫護跋見而好之,乃歛髮襲冠,諸部因呼之為步搖,其後 音訛,遂為慕容焉。<sup>142</sup>

The implication is the same as the preceding quotation about the Wuhuan: the barbarians observed a Chinese custom, admired it, and imitated it. These passages are the basis for the argument that the Northern and Southern *buyao*—that is, the step-sway ornaments from Murong territory and Chinese *buyao*, respectively—must have closely resembled one another. However, the more recent excavations shed new light on this Sino-centric reading of history. Photographs of droplet-shaped gold leaves, published for the first

<sup>&</sup>lt;sup>141</sup> Hou Han shu, juan 90, "Wuhuan zhuan [Account of the Wuhuan]," 2979.

<sup>&</sup>lt;sup>142</sup> Jin shu [Book of Jin], by Fang Xuanling, in Ershisi shi [The Twenty-four histories] (Beijing: Zhonghua shuju, 1997), juan 108, "Murong Hui zaiji [Chronicle of Murong Hui]," 2803.

time in recent excavations reports, show that the Southern examples are pierced at the tip, whereas the Northern examples are pierced at the opposite end.

This distinction highlights the fact that at least two independent ornamental traditions involving pendant sheet gold leaves coexisted in Chinese during the third to fifth centuries CE, when the Jin dynasty had dominion over Central and Southern China and the Murong dominated the Northeast. The headdress from the tomb of the Princess of Chen, given the shape of its leaves, demonstrates the persistence of the Northern tradition, but the Southern petal shape seems to have died out after the Jin. This is a very different picture of history from the one conveyed in the *Wuhuan zhuan* and the *Murong Hui zaiji*, and it should serve as an important reminder that relying too heavily on secondary literary and visual sources can impede scholars' ability to see clearly the excavated objects themselves.

Although other funerary goods in the tombs of various northern nomads do suggest imitation of Chinese models, this particular case exemplifies Chinese adaptation—namely, Chinese historians' application of familiar terminology (*buyao*) to foreign objects for which they previously had no name. One of the primary reasons for this misinterpretation was the excavation in 1965 of the tomb of Feng Sufu, the Northern Yan official who died in 415 CE. Feng's was one of the first Yan dynasty tombs uncovered, and consequently, it has provided a blueprint for the analysis of earlier Murong tombs excavated at later dates. In fact, the Northern Yan technically was not a Chinese dynasty, and the circumstances of Feng's burial indicate a much stronger Chinese cultural influence in the Daling River Valley than is seen in earlier periods. Although Feng's wooden coffin was trapezoidal in shape, the slabs of the stone sarcophagus that enclosed it were decorated in imitation of Han conventions: the top interior is covered with scrolling clouds and constellations, and circles containing a red bird and a hare indicate the sun and moon. The west wall also contains images of timber frame architecture, complete with bracket sets and columns. The grave goods included the typical steppe-style footed cauldron, horse stirrups and armor, but also ink, an inkstone, and gold and gilt bronze seals with Chinese official titles—rare signs of possible literacy in Chinese.

#### 5. Men's *Dang*

The grave goods made in precious metals are fragmentary and often harder to identify, but a gold openwork plaque (Figure 2.33) is almost certainly a local imitation of an element of aristocratic Chinese costume called a *dang*. Another object found in the same area consists of two strips of sheet gold of different lengths crossed in an X, and at its top sits an inverted bowl with project branches with fluttering pendant leaves (Figure 3.13). Reconstructions place these objects on the same cap, with the plaque sitting at the front above the forehead, the crossed strips across the center, and the leafy branches at the very top of the head like the *buyao* worn by ladies of the Chinese court. This purely hypothetical headdress looks like a deconstructed version of the gold ornaments from Liaoning discussed in the previous chapter. To archaeologists and scholars, it seemed to provide a missing link: the Murong must have merged Chinese women's hair ornaments and plaques from Chinese men's caps, resulting in the Murong *buyao*. Unfortunately, the chronology is completely flawed: Feng's tomb postdates all of the other Murong tombs, and his cap cannot have been the intermediary step between traditions.

Nonetheless, the plaque on the cap does seem to have been copied at several removes from the gold *dang* which figured prominently into official costumes worn at court in China. Whereas women in dynastic China used hairpins to insert gold ornaments into their coiffures, the gold components of men's costumes were usually plaques attached to various types of caps or belts. The ornaments excavated from Murong tombs have holes where they were probably sewn to fabric or leather caps. One of the most comprehensive studies of men's headdresses in ancient China was undertaken by Kyusoon Choi 崔圭順, who divided men's headgear into three essential types according to their function: *jin* 巾 (hair wraps whose main function is holding back the hair), *mao* 帽 (hair wraps that keep out the cold), and *guan* (caps that function primarily as decoration).<sup>143</sup> Commoners tended to wear lower and flatter caps, while the nobility wore taller ones.<sup>144</sup> Hierarchical status was also conveyed by the use of *bian*  $\hat{+}$  and *mian* 冕, caps specifically worn by the upper echelons of society. *Bian* and *mian* were at times interchangeable, but mian later came to include caps assigned to the lower ranks as well.<sup>145</sup>

Regulations about official dress established in the reign of Han Mingdi 明帝 (28–75 CE) in 59 CE were recorded in the *Yufu zhi* of the Hou Han shu, along with specifications about the design, measurements, and ceremonial uses of various caps. For instance, *mianguan* 冕冠 with black exteriors and green and red interiors were worn by emperors and officials during the major sacrifices. These are depicted in Han and later

<sup>&</sup>lt;sup>143</sup> I translate *guan* 冠 as "cap" rather than "crown" throughout to avoid Western connotations about crowns. <sup>144</sup> Chen, *Zhongguo lidai yiguan fushi zhi*, 29.

<sup>&</sup>lt;sup>145</sup> Choi, Kyu-soon, *Zhongguo Lidai Diwang Mianfu Yanjiu* (Hualian, Taiwan: National Dong Hwa University): 152.
paintings and engravings, and one Ming example has been preserved in the tomb of emperor Wanli's Dingling Mausoleum at in Beijing (Figure 3.14).<sup>146</sup> The cylinder that sat directly on the head probably covered a bun, and it was was topped by a rectangular board that extended in front of the face and behind the head. Strands of beads (*liu* 旒) hung from the front and back edges, and the number of liu indicated the rank of their wearer. The emperor's mianguan had the greatest number of strands of beads, made from white jade, and the Three Excellencies (*san gong*) 三公 and Marquises (*zhu hou*) 諸侯 had fewer strands, made from green jade.<sup>147</sup>

Descriptions of a few caps in the *Yufu zhi* mention gold frontal plaques that show clear Han precedents for the Southern cap ornaments outlined in the previous chapter, rather than the Northern ones. The *tongtian guan* 通天冠 emerged in the Eastern Han dynasty and is described in this way:

The *tongtian guan* is nine *cun* tall and stands vertical, but the top is slightly slanted, and the bottom is formed from a rolled iron arch. In the front is a mountain-shaped frontal piece and a bamboo tube that has been unfurled to form the peaked center of the cap (*shu*). It is commonly worn while riding in a carriage."

通天冠高九寸,正豎,頂少邪卻,乃至下為鉄卷梁,前有山,展筒為述,乘輿 所常服。<sup>148</sup>

This description is consistent with the emperor's headdress seen in seven of the portraits pictures in the famous Thirteen Emperors Scroll, a silk handscroll in the Boston Museum of Fine Arts that is attributed to Yan Liben of the Tang dynasty. The cap of Jin Wudi 晉 武帝 (r. 265 – 290 CE) has a gold cicada plaque with a red background, and twelve strands ending in white beads are suspended from the board across the top (Figure 3.15).

<sup>&</sup>lt;sup>146</sup> Wang Xiuling, "Ming Changling hutu dihou fushi (yi)," Shoucangjia 2009.9 (2009): 17-24.

<sup>&</sup>lt;sup>147</sup> Chen, Zhongguo lidai yiguan fushi zhi, 54, and Beck, Treatises of Later Han.

<sup>&</sup>lt;sup>148</sup> Chen, Zhongguo lidai yiguan fushi zhi, 55. Hou Han shu, "Yufu zhi," juan 120, 2665-6.

The emperors in this painting who wear caps with a "mountain-shaped" plaques at the front are Guangwudi (r. 25 – 57 CE) of the Han dynasty, Wendi 文帝 (r. 220 – 226 CE) of Wei, Dadi (r. 22 – 252 CE) of Wu 吳, Zhaoliedi 昭烈帝 (r. 221 – 223 CE) of Shu Han 蜀漢, Wudi 武帝 (236–290) of Jin, Wudi 武帝(543–578) of Northern Zhou 北周, and Wendi 文帝 (541–604) of Sui 隋. Although this handscroll is thought to have been originally painted in the seventh century CE, just after the reign of the last emperor depicted, the diversity of regional styles and the variations of the cap over time convincingly suggest the continued use of the *tongtian guan* throughout the Eastern Han through Sui periods. Significantly, the earliest emperor pictured wearing this cap is Guangwudi of the Eastern Han, whose reign ended just two years before Mingdi's reforms and whose costume choices may have influenced the latter's dress code.

All of the plaques in the Thirteen Emperors Scroll are adorned with the cicada motif. Persistence begs the question of whether court dress—and in particular, gold cap ornaments—were mass produced or standardized in any way. A memorial to the throne recorded in the commentary of the *Yufu zhi* raises a complaint that the court-mandated costumes of officials residing outside the court were inconsistent with the rules. B.J. Mansvelt Beck notes that the *Yufu zhi* contains no references to an agency regulating their production or to the court's bestowal of uniforms, and thus concludes that only the costumes of the emperor, his family, and his closest officials would have been produced under direct court supervision.<sup>149</sup> The continuity of the headdresses in this painting over

<sup>&</sup>lt;sup>149</sup> Beck, Treatises of Later Han, 265-6.

the centuries could also point to their production by a specialized court workshop-a

question that we shall return to in the next chapter.

The Yufu zhi offers a more vivid account of the wu guan 武冠 (Military Cap),

which also contained a gold cicada plaque:

Yufu zhi on the wu guan 武冠 (Military Cap):

The *wu guan*, also called the *wubian daguan*, was worn by various military and civil officials. Palace Attendants and Regular Palace Attendants added gold *dang* that enclosed cicada designs and marten tails as ornaments, and they called it the "Zhao Huiwen" cap. Hu Guang explained: "King Wuling of Zhao imitated barbarian dress. He adorned his head with gold *dang*, and in front he inserted a marten tail to indicate noble office. When Qin destroyed Zhao, [Qin] bestowed Lord [Zhao]'s cap on the courtiers close to the throne."

武冠,一曰武弁大冠,諸武官冠之。侍中、中常侍加黃金璫,附蟬為文,貂尾 為飾,謂之「趙惠文冠」。胡廣說曰:「趙武靈王效胡服,以金璫飾首,前插 貂尾,為貴職。秦滅趙,以其君冠賜近臣。」<sup>150</sup>

The connection between Wuling (r. 326 - 299) and his son Huiwen (r. 299 - 266) is not

made explicitly clear in this passage, and later historians have commented on the

discrepancy. Cai Yong 蔡邕 (132–192) wrote in Solitary Decisions (Duduan 獨斷):

The Grand Tutor Hu Gong [Guang] said: King Wuling of Zhao imitated barbarian dress. He was the first to adorned his head with marten (or sable or squirrel) and cicadas. When Qin destroyed Zhao, [Qin] bestowed Lord [Zhao]'s cap on Palace Attendants.

太傅胡公說曰: 「趙武靈王效胡服, 始施貂蟬之飾, 秦滅趙, 以其君冠賜侍 中。|<sup>151</sup>

These two passages insinuate is that Wuling was famous for adopting elements of foreign

dress, namely the use of gold *dang* and the insertion of a fur tail at the front of his

headdress. His son carried on the tradition by adopting modes of self-ornamentation, and

<sup>&</sup>lt;sup>150</sup> Hou Han shu, juan 120, 3668; Beck, *Treatises of Later Han*, 248-9; and Harada, *Chinese Dress*, 28.

<sup>&</sup>lt;sup>151</sup> Beck, *Treatises of Later Han*, 249.

when Qin vanquished Zhao in 222 BCE, they too adopted the use of this cap for high-

ranking officials.

In addition, the he guan 鹖冠 (Fighting Bird Cap) has its roots in the Warring

States period and was also associated with Wuling:

The *wu guan*, commonly called the grand cap, is encircled by ribbons but has no branches. [When] the cord is made from green ties and a pair of tails from the he bird is added vertically on the left and the right, it is called a *he guan*. . . . *He* birds are courageous pheasants that don't stop (fighting) each other until one is dead, and for this reason King Wuling of Zhao used it to recognize brave soldiers. Qin subsequently instituted this system.

武冠,俗謂之大冠,環纓無蕤,以青系為緄,加雙鶡尾,豎左右,為鶡冠 云。。。。鶡者,勇雉也,其對一死乃止,故趙武靈王以表武士,秦施之焉。 152

The usage of the he guan was carried on by Qin military officers, but from the Han

dynasty onward they were also worn by officials and palace eunuchs, although in a

modified version with added marten tails, gold dang, cicada designs, etc. that set them

apart from those worn by ordinary military officials.

The Han dynasty sources tend to contradict one another on the question of exactly

what the gold dang on the tongtian guan, wu guan, and he guan looked like. The Shi

toushi section of the Shiming offers a definition:

[Ornaments that] pass through the ear and use beads are called *dang*. This [practice] originated with the Man and Yi. Man and Yi women were licentious and fond of running, so they used these ear pendants with inlaid stones to nail them down. Now the Chinese simply copy them.

穿耳施珠曰璫,此本出於蠻夷所為也。蠻夷婦女輕淫好走,故以此琅璫錘之 也,今中國人俲之耳。<sup>153</sup>

<sup>&</sup>lt;sup>152</sup> Beck, Treatises of Later Han, 252, and Hou Han shu, juan 120, 3670.

<sup>&</sup>lt;sup>153</sup> Liu, Shiming shuzheng bu, juan 15, "Shi Toushi [Explaining Head Ornaments]," 162.

Here, *dang* are treated as hoops or ear pendants rather than gold plaques sewn onto the front of official caps. Sun Ji explains this as the mistaken use of character *dang* 璫 signify ear pendants called *langdang* 琅當 that originated in the West. However, *dang* was again used to connote the gold plaques by the Jin dynasty, when the *Yufu zhi* was first written.<sup>154</sup>

It is also during the Jin dynasty that there seems to have been an explosion in their popularity. *Dang* with cicada, bird, tiger, dragon, and other motifs have been excavated in Jiangsu, Shandong, Hebei, and Gansu, and are held in private collections in Hong Kong, the United States, and Europe.<sup>155</sup> These are the sheet gold openwork plaques described in the previous chapter, which are often covered with granulation, filigree wires, and inlaid stones (Figures 2.44-46, 51, 55, 58, 59, 65, 67, 69-80, 82-85). In general, they exhibit a high level of technical skill, and the regularity of the cicada designs distributed over a broad geographical expanse strongly implies that they were either manufactured in a centralized workshop, as the memorial discussed above suggests, or copied from a well-made original.

The plaque in the tomb of Feng Sufu is not particularly well made, nor does it resemble a cicada. Unlike the Southern examples, the surface is not raised as though it had been pressed over a mold or into the recesses of a matrix. In applying the granulation, the artist consistently relied on lengths of wire to support the granules, which have a tendency to jump around when heated. The openwork also lacks the delicate, lacy quality of the Southern examples, and there are no bezels for inlaid stones. The sawtooth and

<sup>&</sup>lt;sup>154</sup> Sun and Kwan, *Zhongguo gu dai jin shi*, 58-59.

<sup>&</sup>lt;sup>155</sup> For example, five were uncovered in Tomb 1 at the former residence of Wang Yi on Xiyanchi Street in Linyi, in Shandong province. Feng, "Linyi."

floral borders have been omitted, and the attached eyes are the only element that suggests a cicada. There is no trace of the distinctive cicada anatomy—including a beak, antennae, segmented thorax, six legs, and striated tail (Figure 3.16)—that is so clearly represented in the Southern examples. The craftsmanship and design indicate an artisan who was not familiar with the techniques used to manufacture the standard *dang* of the South, and who also was not familiar with cicadas. In other words, the plaque was probably made by a Murong artisan in imitation of a model that he did not understand. Although cicadas are found in Liaoning today, they subsist on moisture and nutrients from the roots and branches of trees and may have been unfamiliar to a people originally from the steppe.<sup>156</sup>

The Chinese may have valued cicadas for their song or the renewal symbolized by the emergence of the adult from the skin of the adolescent insect, but they were not the only culture who associated them with the upper classes. Cicadas are mentioned repeatedly in the literature of ancient Greece and Rome, where they were prized second only to honey-producing bees. In addition to being linked to mythology about Apollo, the Muses, Athena, and the Nymphs, cicadas were cherished for their song, which intensified during the hottest days of the summer, leading to their association with the rising of Sirius, the brightest star in the night sky. It is not difficult to imagine that the meticulous Chinese astronomers noticed the same phenomenon.

Cicadas also graced the brooches and coins of Athens, where they were taken up as a symbol of the Athenian people's local origins because the adolescents seemed to materialize out of the ground.<sup>157</sup> (In fact, their eggs are laid on branches, and when they

<sup>&</sup>lt;sup>156</sup> Frank E. Lutz, *Field Book of Insects* (New York: G.P. Putnam's Sons, 1948), 73-77.

<sup>&</sup>lt;sup>157</sup> Ian C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter: University of Exeter, 1988), 97, 101, 103.

emerge, they fall to the ground and burrow into the soil, only to resurface 13 to 17 years later.<sup>158</sup>)

Athenian historian Thucydides (c. 460 - c. 395 BCE) specifically mentions that in earlier times, Athenian and Ionian men wore golden cicada ornaments in their hair.<sup>159</sup> Although somewhat later in date, the cicada clasp on a gold oak leaf crown in the British Museum (1908.414.1) verifies this claim (Figure 3.17). This fourth century BCE crown was purchased in 1908 and is said to have come from a tomb on the Dardanelles, the straight in Northwest Turkey that connects the Aegean Sea to the Sea of Marmara (Figure 3.18). It consists of two stems made from sheet gold tubes fastened together at the front by a small split pin fastener covered by repoussé insect that has previously been identified as a bee claim. However, I believe to be a cicada because of its stunning likeness to the gold cicada *dang* from China. The stems are wrapped with strip-twisted wires holding individual leaves, and in several places they are also pierced by wires carrying sprays of eight leaves and seven or eight acorns each. The acorns are dieformed and soldered together at the edges, as are the bodies of two additional cicadas which sit on either side of the crown. Wings with raised veins have been formed separately and soldered onto their backs (Figure 3.19).<sup>160</sup> A second similar example in the Altes Museum in Berlin (8.11,1) takes the form of an olive wreath with a cicada sitting atop a flower at the center (Figure 3.20).<sup>161</sup>

<sup>&</sup>lt;sup>158</sup> Lutz, *Field Book*, 74.

<sup>&</sup>lt;sup>159</sup> Beavis, *Insects*, 97.

<sup>&</sup>lt;sup>160</sup> Ogden and Williams, *Greek Gold*, 106-107, Cat. No. 60.

<sup>&</sup>lt;sup>161</sup> Gertrude Plazt-Horster, *Altes Museum: Ancient Gold Jewelry*, trans. Michael Vickers and Mira Hofmann (Mainz am Rhein: Verlag Philipp vof Zabern 2002), 58-59, Cat. No. 35.

The cicada clasp that sat at the front of the British Museum crown is particularly revealing because it demonstrates clearly how the Chinese *dang* could have been formed. Most likely a matrix was shallowly carved from clay, wood, or stone, and the thin sheet gold was pressed into it to form a relief plaque. The edges were trimmed down along the contours, and in the case of the Chinese cicada plaques, additional material was cut out using a knife or chisel. This extra scrap material could then be cut down further to make the shavings used for granulation, a surface decoration technique that will be discussed in greater depth in Chapter 5.

# 6. Conclusion

To review, this chapter has presented the visual and textual evidence employed to make the case for the Chinese origins of the gold Murong cap ornaments. However, by looking a little more closely, I have reached several new conclusions. First, while it is clear that *buyao* with fluttering leaves did exist and were used by women at the Chinese court, they were not the inspiration for the Murong ornaments. Second, the ornaments described in the Chinese sources paired imagery of birds and cassia trees, an association that is not specific to China because it is also recorded in Classical Greek texts. Third, the reconstruction of the cap ornaments in Feng Sufu's tomb does not prove that the Murong ornaments were hybrids of Chinese women's and men's headgear, although the plaque element did derive from the *dang* used in Han and Jin court dress. Fourth, the textual descriptions of Chinese official caps reveal that the gold *dang* was ultimately introduced by nomads in the Warring States period. Fifth, the remarkable parallels between the subject, style, function, positioning, and construction techniques of the gold

cicadas from the Classical world suggest and Liaoning's Daling River Valley suggest that the prototypes for Chinese *dang* ornaments lie further to the west than scholars have recognized until now.

All of the revelations above point to the role of steppe nomads in the Warring States period as a vehicle for the transportation of new modes of dress, iconography, and goldsmithing skills from the lands to the west of China. The next chapter will explore the argument for the western origins of the gold cap ornaments from and elucidate the real origins of their leaf-covered branches and openwork bases.

### **CHAPTER 4: DIGGING UP THE ROUTES OF TRANSMISSION**

### 1. Introduction

The preceding chapter examined gold objects referred to as *buyao* ornaments in the Chinese standard histories, as well as images in later painting of women wearing headdresses with movable flowers and leaves. These have commonly been regarded as evidence that the Murong adopted the Chinese *buyao* design. It was ultimately concluded, however, that *buyao* were essentially a Chinese phenomenon, and that Chinese authors' application of the term to Murong headgear with some shared properties cannot be accepted as evidence of the Chinese origins of the tradition. Consequently, several questions must be reconsidered: What are the Murong "step-sway" ornaments? Where did they come from? Were they inspired by the leaf-covered gold crowns of Mesopotamia? If so, where did this custom of dress come from?

In this chapter, I shall begin to address these questions by first introducing several gold crowns decorated with pendant sheet gold elements that have been excavated from tombs stretching from Eastern Europe to Japan. These have traditionally formed the basis of the argument for the Western origins of the gold Murong cap ornaments. However, because the scarcity of complete crowns in Central Asia does not furnish a complete picture of the routes of transmission of gold headgear traditions, the next section of this chapter will investigate the distinctive feature of the crowns' design: the sheet gold leaves and discs that were attached to their surface. Some of these once adorned headdresses, while others were either stitched directly onto clothing or dangled from necklaces, ear pendants, or other jewelry. In the last section, I will consider the

validity of the argument for transmission from the West in light of broader similarities in the material cultures of Eurasia and the diverse levels of goldsmithing technology exhibited by the leaves and discs under discussion.

### 2. Gold Crowns, Diadems, and Headdresses

Several attempts have already been made to trace the formal, iconographic, and stylistic properties of Murong ornaments to the West. In her 1988 study of the origins of the gold crowns and jewelry of Silla, Young-sook Pak recognized steppe nomads as the link between metalworking in Korea and the Middle East, and she suggested the possibility that Liaoning lay upon that route of transmission. Other arguments concerning the origins of the step-sway, discussed already in Chapter 2, include Sun Ji's 1991 theory that the ornaments' design gradually spread from Western Asia to Inner Mongolia and Liaoning, where it was absorbed by the Murong Xianbei and later passed on to Korea and Japan.<sup>162</sup> This idea was further elaborated in 1996 by Xu Bingkun, who traced use of swaying gold leaves (*yaoye*) back to Mesopotamia and identified this fashion as a distinctive feature of the horse-riding cultures that swept across East Asia in the first millennium BCE.<sup>163</sup>

In 2003, Wan Xin referred to this phenomenon as the Swaying Leaf Culture (*yaoye wenhua*) in recognition of the defining feature of its goldwork, and this concept was subsequently taken up by Jiang Nan, who produced the first comprehensive study comparing the "*buyao*" from Northeast China to the gold crowns and jewelry of Korea. Qi Dongfang, on the other hand, has taken a localized view of the question, placing the

<sup>&</sup>lt;sup>162</sup> Sun, "Buyao."

<sup>&</sup>lt;sup>163</sup> Xu, Xianbei, Sanguo, Gufen, 153-160.

Murong ornaments into the more immediate context of Xiongnu and Xianbei goldsmithing.<sup>164</sup> All these studies, which focus primarily on East Asia, have laid the essential groundwork for a more far-reaching survey that includes the gold head ornaments of the ancient Near East, the Eastern Mediterranean, and Central Asia.

Because representations of the step-sway ornaments with square bases and projecting leafy branches are entirely absent from the visual record, one of the greatest mysteries surrounding the Murong gold ornaments is how they were worn. It has generally been accepted that they were stitched to the front of fabric caps like Chinese dang, but there is a great deal of evidence to both support and contradict this claim. Most notions about how the ornaments were worn are in fact not predicated on the details of their excavation but rather on comparisons with related objects produced by their neighbors a few centuries later. The primary evidence comes in the form of sheet gold and gilt bronze crowns with attachments imitating tree branches, antlers, and feathers that have been excavated from Three Kingdoms sites in Silla, Paekche, Koguryŏ, and Kaya, as well as Kofun sites in Japan. A later tradition of openwork gold crowns, minus the quivering leaves, also developed on China's northern steppe during the Liao 遼 dynasty (907 – 1125 CE).<sup>165</sup> The Three Kingdoms and Kofun period crowns have been the subject many important studies by Korean and Japanese scholars, but a full investigation of them is beyond the scope of this dissertation.

None of these crowns exactly replicates the distinctive openwork square bases surmounted by wire trees that lie at the center of this study, but several possess structural

<sup>&</sup>lt;sup>164</sup> Qi, *Tang dai jinyinqi*.
<sup>165</sup> Shen, *Gilded Splendor*.

features that relate them to the Murong ornaments. For example, the gold strips and leafcovered finial from of Feng Sufu's tripartite headdress find parallels in a fifth-century gold crown from the Lucky Phoenix Tomb (Seobongchong) 瑞鳳塚 in Silla now displayed in the Kyongju 慶州 National Museum (Figure 4.1)<sup>166</sup> and a fifth century CE gilt bronze crown from Kaya, excavated from Tomb 37 at Pisan-dong 飞山洞 in Taegu 大邱 that now resides in the Hoam Art Museum (Figure 4.2).<sup>167</sup> Both consist of a band that encircles the head, with five branches or antlers in two styles that project from it vertically. Fluttering sheet gold discs are attached by wire to raised bosses covering the surfaces of the bands and branches. At the center, two perpendicular strips cross over the top of the head, and atop their intersection sits a stalk with radiating wires terminating in loops, which must have once held discs or leaves like those decorating the surface.

However, it is dangerous to project what is known about later costume and metalwork traditions from other regions onto the chronologically earlier and culturally distinct Murong. For this reason, Korean, Japanese and Liao materials will not be considered at length here. Instead, what follows is an overview of the crowns, diadems and headdresses west of Liaoning that in terms of their imagery, style, and use of pendant sheet gold elements could possibly be considered the precursors of the Murong cap ornaments.

# <u>2.1 Ur, Iraq</u>

Xu Bingkun, in his study of the interrelationships between ancient China, Korea and Japan, suggested that the earliest extant relatives of the Murong ornaments are gold

<sup>&</sup>lt;sup>166</sup> Young-sook Pak, "The Origins of Silla Metalwork," Orientations 19.9 (1988): 44-53.

<sup>&</sup>lt;sup>167</sup> Daegu National Museum, *The Daegu National Museum* (Daegu: Daegu National Museum) 65.

headdresses preserved at the royal cemetery of Ur, which had become the most important city-state of Mesopotamia by the third millennium BCE.<sup>168</sup> The site, located near the city of Nasiriyah in southeastern Iraq, dates to c. 2650 to 2550 BCE and was excavated in the 1920s and 1930s by British archaeologist C. Leonard Woolley. Among the most astonishing finds was the tomb of a queen named Puabi (PG 800) that was discovered alongside a partially looted burial probably belonging to her husband (PG 789). PG 800's tomb chamber was located directly atop PG 789 and contained the skeletons of a woman just under five feet tall and three attendants (Figure 4.3). She donned an elaborate headdress, beads in precious metals and semi-precious stones, a beaded cape and a belt with suspended rings, amulets and cylinder seals, and ten gold finger rings.<sup>169</sup> The adornments of all of those interred at Ur were concentrated around the head, and they ranged from modest hair ribbons to the intricate, multi-layered headdress of Puabi Puabi, which consisted of a large coiffure or wig wrapped with gold ribbons, three wreaths with pendant gold leaves, a wreath with suspended gold rings, and a gold comb topped by rosettes inserted at the back of the head (Figure 4.4).<sup>170</sup>

The second headdress in Puabi's Puabi tomb was a diadem consisting of a ground of lapis lazuli seed beads, with gold appliqués made by wrapping thin gold foil over a substrate in another material (Figure 4.5). Curiously, this diadem has not been acknowledged in Chinese studies of the Murong step-sway ornaments, in spite of its strong thematic links to several of the much later gold crowns discussed below. There

<sup>&</sup>lt;sup>168</sup> Xu, Xianbei, Sanguo, Gufen, 153-154.

<sup>&</sup>lt;sup>169</sup> Richard L. Zettler, The Burials of a King and Queen," in *Treasures from the Royal Tombs of Ur*, eds. Lee Horne and Richard L. Zettler (Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 1998), 35.

<sup>&</sup>lt;sup>170</sup> Holly Pittman, "Jewelry, in *Treasures from the Royal Tombs of Ur*, eds. Lee Horne and Richard L. Zettler (Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 1998), 89-90.

are four pairs of animals (stags, bearded bulls, gazelles, and rams) interspersed with plants and concentrated near the ends of the beaded band. Aubrey Baadsgaard identifies the plants as branches of date palms and fruiting date palms, and bunches of crab apples. She has also observed that at 37 inches, it is far too long to be a diadem, even if there was a sizeable wig underneath.<sup>171</sup> It seems not to be a belt because one covered in rings and hung with strands of beads was found at her waist, and it measures only 25 inches.<sup>172</sup>

The leaves in the wreath from Puabi's Puabi and other female tombs differ sharply from the Murong leaves in their size, level of detail, and the plants they were modeled after. Puabi's Puabi tomb headdress displays two types of leaves. The first, grouped in threes, is long, narrow, and incised with veins (Figure 4.6). These are generally agreed to belong to the willow tree whose most common variety is the *Salix alba*. Leaves of the second variety, found in a total of twelve tombs, are short and broad, hang individually and have been incised with a central vein and slightly offset subsidiary veins running away from it at a downward angle (Figure 4.7). Whereas Woolley identified these with the beech tree, Naomi Miller has associated them with the poplar (*Populus euphratica*), in part because these two species both grew in the moist habitat of the Euphrates River.<sup>173</sup> More recently, M. Tengberg, D.T. Potts, and H.-P. Francfort have shown them to be the leaves of the sissoo tree or Pakistani rosewood (*Dalbergia sissoo*). This classification accounts for their long acuminate (pointed) tips, which are sometimes strung with carnelian beads.<sup>174</sup>

<sup>&</sup>lt;sup>171</sup> Aubrey Baadsgaard, Trends, Traditions, and Transformations: Fashions in Dress in Early Dynastic Mesopotamia (Ph.D. diss., University of Pennsylvania, 2008), 223-227.

<sup>&</sup>lt;sup>172</sup> Baadsgaard, Trends, 188-189.

<sup>&</sup>lt;sup>173</sup> Naomi Miller, "Plant Forms in Jewellery from the Royal Cemetery at Ur," *Iraq* 61 (2000): 149-151.

<sup>&</sup>lt;sup>174</sup> H.-P. Francfort, D.T. Potts, and M. Tengberg, "The Golden Leaves of Ur," Antiquity 82 (2008): 925-936.

Although, the majority of leaves from Puabi's Puabi headdress bear little resemblance to the plain and vaguely formed leaves on the Murong tree ornaments, a more simplified variety of leaves does appear on a 31-inch-long necklace from Ur in the Louvre (AO 11509), in which tubular lapis lazuli beads are interspersed with pendant gold rings and leaves (Figure 4.8). While the leaves retain the sissoo silhouette, their surface treatment is limited to a single fold running down the center. <sup>175</sup>

# 2.2 Mochlos, Crete, Greece

Many of the decorative conventions presumed to have began in Mesopotamia may also be observed in pre-palatial Crete, particularly in the gold materials excavated from the island of Mochlos in eastern Crete that date to the Early Minoan II (2900 – 2300/2150 BCE) and Early Minoan III (2300/2150 – 2160/2025 BCE) periods. The cemetery at Mochlos, excavated in 1908 by Richard Seager, consists of 23 burials: 17 small tombs covering the hillside and six stone burial chambers running along a ledge beneath the cliff face to the northwest. The majority of gold objects were recovered from the second group which may be subdivided into two house complexes consisting of Tombs 1/2/3 and Tombs 4/5/6. Most of these were at least partially looted in antiquity, but Tombs 2 and 6 still held assemblages of gold (Figures 4.9 and 4.10).<sup>176</sup>

Tomb 2 is a long, narrow chamber, and at its far end were preserved stone and ceramic vessels, weapons, and a confused heap of gold ornaments intermixed with human remains. The gold objects included several long strips, diadems pierced at the ends and decorated with repoussé patterns of dots, hoop earrings, a raised boss, sheet gold cut into

<sup>&</sup>lt;sup>175</sup> Françoise Tallon, *Les Pierres Précieuses de l'Orient Ancien des Sumériens aux Sassanides* (Paris: Réunion des Musées Nationaux), 54, 57, 59, Fig. 13.

<sup>&</sup>lt;sup>176</sup> Richard B. Seager, *Explorations in the Island of Mochlos* (Boston: American School of Classical Studies at Athens, 1912), 13-18.

geometric, armlets, beads, chain, a cruciform shape, and several ornaments in the shape of leaves. The latter included droplet-shaped pendants with integrated bails that might have hung from the lower edge of a diadem, sprays of elongated leaves edged in raised dots whose stems have been twisted together, individual leaves that are slightly broader towards the tip and have been incised with a central vein, two matching hairpins terminating in flowers (probably crocuses), and a fine gold chain with long pointed leaves hanging at intervals and in a bunch at the bottom.<sup>177</sup>

The best preserved remains in Tomb 6, believed to be the oldest at Mochlos, were also found in a heap against the back wall of the long chamber, having been covered in Antiquity when the adjacent wall collapsed over them. The grave goods included vessels in clay and stone, a silver cup, a tiny bronze lion, silver pendants, an ivory cylinder seal, necklaces of stone beads, an unidentifiable ivory object, gold foil cut into various shapes, a large sheet gold disc, and two long gold chains with single leaf pendants at the bottom. Several leaves—ranging from small pendants to larger ones for attachment to diadems—and a few floral hairpins were uncovered from Tombs 4, 5, 19, and 21 as well.<sup>178</sup>

These assemblages of gold ornaments have been investigated in detail by Jane Hickman who tabulated that the tombs at Mochlos altogether yielded eight flower pins (which may have been used as clothing fasteners or hairpins) and more than 50 individual leaves in a variety of shapes. Both exhibit a wide range of surface decoration and have been identified as lily, crocus, and daisy petals, or leaves of the olive and willow trees.<sup>179</sup> It is interesting to note that at both Ur and Mochlos, the contours of leaves, their size,

<sup>&</sup>lt;sup>177</sup> Seager, *Mochlos*, 22-37.

<sup>&</sup>lt;sup>178</sup> Seager, *Mochlos*, 50-56.

<sup>&</sup>lt;sup>179</sup> Jane Hickman, Gold before the Palaces: Crafting Jewelry and Social Identity in Minoan Crete (Ph.D. diss., University of Pennsylvania, 2008), 146-154.

their associated fruits, and the presence or absence of incised veins allow for the discernment of their species. This is a tendency that persists in the Mediterranean where classical Greek crowns can easily be recognized as oak or laurel. The same cannot be said, however, of the mass-produced scales we shall see at Troy or in the leaves of Central, North, and East Asia, where specificity through naturalistic depiction appears to have been far less important.

In regard to the state of these objects when they were interred, Hickman has noted that crumpled gold scraps and several objects in Tomb 2 that "showed evidence of hard usage, cutting, or breakage" suggest either the ritual destruction of the tomb occupant's personal belongings or usage not as adornments but as bullion, the second scenario being the more likely of the two.<sup>180</sup> This usage is entirely divorced from the elaborate costuming for death that one finds in the tomb of Queen Puabi Puabi. Other significant differences exist between the Early Minoan goldwork and its precursors—Hickman has remarked on the relatively low level technical skill in Crete, where goldsmiths relied more on mechanical joins and repoussage than on advanced techniques like copper diffusion bonding and granulation.<sup>181</sup> Significant advances seem to have been made by the Middle Minoan II period though.

Although the leaves and diadems described above were not attached to one another, their close association is confirmed by the discovery during the cleaning of Tomb 4/5/6 in 1971 of a crushed silver cup (Figure 4.11) containing numerous individual gold leaves and a gold diadem with projecting "antennae" (Figure 4.12), all of which are

<sup>&</sup>lt;sup>180</sup> Hickman, Palaces, 64.

<sup>&</sup>lt;sup>181</sup> Hickman, Palaced, 244-245.

now housed in the Archaeological Museum of Agios Nikolaos in Crete.<sup>182</sup> The pairing of the diadem and leaves in a single container may indicate that they were worn together. Repoussé dots run in parallel rows along the upper border of the diadem and form the contours of a repeated animal shape, of which the bottom half is missing. Three strips have been inserted through horizontal slots to form vertical antennae that bulge slightly at the top and terminate in points, and they too are covered with rows of dots. The leaves vary in profile, some being long and pointed like the willow leaves seen at Ur, and others are shorter or even heart-shaped. One cannot help but think ahead to the crown from the fifth century CE Lucky Pheonix tomb in Silla, whose branches terminate in similar buds and are lined in raised dots and covered with fluttering discs.

### 2.3 Troy, Turkey

One of the most prolific sites for gold leaves is the city of Troy whose remains reveal eight phases of occupation reaching back to 3000 BCE. In 1983, the controversial German businessman Heinrich Schliemann unveiled "Priam's treasure," a collection of artifacts that he believed to date to the Trojan War of the twelfth century BCE. More than a dozen more "treasures" would emerge from his unscientific endeavors, but the circumstances of their so-called excavation were shady at best. It was later proven that these objects were far older than Schliemann had thought: in view of several studies on the relative chronology of the treasures of Troy, Mikhail Treister has suggested that the

<sup>&</sup>lt;sup>182</sup> Costis Davaras, "Early Minoan Jewellery from Mochlos," *Annual of the British School at Athens* 70 (1975): 101-114.

"treasures" date to the middle to the third quarter of the third millennium BCE, i.e. the second of the eight phases of occupation.<sup>183</sup>

Thirteen of Schliemann's treasures are stored in the Pushkin Museum of Fine Arts in Moscow, and they include gold diadems, earrings, hair ornaments, bracelets, torques, beads, pendants, and pins. Two complete diadems in Treasure A consist of a horizontal chain of hammered wire (20 inches long) with dozens of additional chains in two lengths hanging below (Figure 4.13). Each chain link has been threaded with a rather coarsely cut ovoid or droplet-shaped pierced leaf with a crease down the center, creating the overall impression of golden fish scales or golden feathers (Figure 4.14). The fold or folds in the center of most leaves seems to ensure that they stack neatly on top of one another. Some of the individual leaves at Troy are more carefully articulated and take on more conventional leaf shapes (Figure 4.15).

Given the discovery of casting molds and crucibles at Troy II, the vast quantity of gold uncovered there, and the occasional presence of distinctively Trojan items at other sites in the region, Mikhail Treister has suggested that Troy was a major center of jewelry production in western Anatolia and throughout the Aegean around 2500 to 2250 BCE."<sup>184</sup> The use of thin gold foil, hammered wire, granulation, and soldering to create filigree demonstrate the high level of skill of Trojan goldsmiths who may have learned much of their trade directly or indirectly from the craftsmen at Ur.<sup>185</sup> George Bass has observed

<sup>&</sup>lt;sup>183</sup> Mikhail Y.Treister, "The Trojan Treasures: Description, Chronolgy, Historical Context," in *The* Treasure of Troy: Heinrich Schliemann's Excavations, eds. Franco Anbrosio and Marisa Inzaghi, 225-229 (Moscow: Pushkin Museum, 1996). <sup>184</sup> Treister, "Trojan Treasures," 230.

<sup>&</sup>lt;sup>185</sup> Treister, "Trojan Treasures," 231-2.

parallels in the goldsmithing of the two civilizations as well.<sup>186</sup> Once again, it is tempting to compare hoops with pendant leaves and leaf-covered chains of a pair of basket earrings (Figures 4.16 and 4.17) to the ones suspended at either side of the Silla crowns, or to ear pendants from the fifth to seventh century CE Hwangnam Great Tomb (Hwangnamdaechong 皇南大塚) in Kyongju (Figures 4.18 and 4.19).

Unfortunately, a considerable gap exists between the leaf-covered gold headdresses of the third millennium at Troy and Ur and the next clear example, which dates to c. 400 BCE. It is not likely that mining sources were cut off in this period because other types of gold objects like jewelry, vessels, and decoration for weapons do survive in second millennium tombs. It may be that this style of headdress fell out of fashion temporarily, or that the tombs likely to hold leaf-covered headdresses were known to looters and were stolen long ago. Perhaps they still remain under the earth and have not yet come to light. However, there is one other possible explanation for the dearth of headdresses with pendant leaves: new goldsmithing techniques for mass production came into use in the Near East and the Aegean at this time, and the fundamental technological change may have been accompanied by an increased propensity for the recycling of gold.<sup>187</sup>

# 2.4 Arzhan 2, Tuva, Russia

At one site dated to this intermediary period, no evidence of gold leaves or discs has been reported. However, it is still worth noting for the sheer quantity of gold it contained. Arzhan 2, excavated between 2000 and 2002, is located on the upper course

 <sup>&</sup>lt;sup>186</sup> G.F. Bass, "Ur and Troy: Gold Links between Two Ancient Capitals," *Expedition* 8.4 (1966): 27-39.
 <sup>187</sup> Mikhail Y. Treister, *Hammering Techniques in Greek and Roman Jewellery and Toreutics* (Boston: Brill, 2001), 373-376.

of the Yenesei River in the Tuva region of southern Siberia. The site consists of a tomb mound over 250 feet across and is believed to date to the seventh century BCE. By far the most elaborate burial was Tomb 5, a square chamber lined with wooden logs that contained over 5,700 gold objects (Figure 4.20). At the center lay a 40- to 45-year-old man and a 30- to 35-year old woman, both with bronze mirrors laid on their chests, iron daggers near their waists, and capes decorated with thousands of small molded gold plaques of panthers. The man wore a large gold torque, tall boots, and a quiver, and both husband, while the woman wore beads around her neck, earrings with granulation, a gold pectoral, and a miniature gold cauldron suspended by a chain from her belt (Figure 4.21).

The remains of headdresses ornamented with gold were found above the heads of both husband and wife. He probably wore a cap, onto which were sewn four flat sheet gold plaques of seated horses and a stag soldered to a plaque would have been placed at the top of the head (Figure 4.22). The woman's headdress included two nearly identical horses, and the facial details of all six horses were added with wires inlaid with stones or paste. She also wore two gold hairpins measuring 12 and 14 inches that were impressed with an animal frieze and topped with an extremely detailed stag and a stylized creature that has not been identified (Figure 4.23). The hairpins and long coiled sheet gold strips seem to imply that she wore a tall headdress, a feature sometimes seen in Siberian women's headgear and closely connected with tomb of the "Golden Man" at Issyk Kul described below. Parallels between that burial and the woman in Tomb 5 at Arzhan 2

<sup>&</sup>lt;sup>188</sup> K. Chugunov, A. Nagler, and H. Parzinger, "Arzhan 2: La Tombe d'un Prince Scythe en Sibérie du Sud: Rapport Préliminaire des Fouilles Russo-allemandes de 2000-2002," *Arts Asiatiques* 59 (2004): 5-29.

lend weight to the controversial proposition that the former may have in fact been a woman.

# 2.5 Issyk Kul, Kazakhstan

About 40 Saka tomb mounds have been uncovered at the site of Issyk Kul in Kazakhstan, about 31 miles east of Almaty. Little is known about the precise identity of the tribes collectively called Saka, except that they were Iranian-speaking nomads who partially or completely overlapped the Scythian tribes of the Central Asian steppe and Northern Caucasus. The most remarkable of the Saka tombs at Issyk Kul was the late fourth to early third century BCE burial of the so-called "Golden Man." The grave mound was about 20 feet tall and almost 200 feet in width, and although the wood-lined main chamber had been looted, a chamber hidden on the south side remained intact. Inside, atop a gold-covered textile, lay the skeleton of a 17- or 18-year-old youth wearing a conical cap, torque, armlets, rings, a long sword and dagger, and over 3,000 gold plaques (Figure 4.24).<sup>189</sup> The gender of the tomb occupant has been the subject of some debate. On the basis of the headdress' resemblance to bridal garb worn in modern Kazakhstan, ne scholar believes that it might be a priestess warrior.<sup>190</sup> This possibility, once dismissed as the "fanciful commentary of militant feminists," may deserve reconsideration in light of the Arzhan 2 discovery.<sup>191</sup>

The occupant wore a short red leather caftan completely encased in gold appliqués, with a cloth shirt edged in gold at the sleeves and collar underneath (Figure 4.25). The pants consisted of leggings sewn into tall leather boots, also covered in gold

<sup>&</sup>lt;sup>189</sup> Iaroslav Lebedynsky, *Les Saces: Les "Scythes" d'Asie, VIIIe Siècle av. J.C. – IVe Siècle apr. J.C.*,(Paris: Editions Errance, 2006), 93-94.

<sup>&</sup>lt;sup>190</sup> Jeannine Davis-Kimball, "Chieftain or Warrior Priestess?" *Archaeology* 50.5 (1997): 40-41.
<sup>191</sup> Lebedynsky, *Les Saces*, 95.

appliqués, and the caftan was held closed by a leather belt decorated with plaques in the form of elk and elk's heads. A conical headdress just over two tall feet tall sits atop the head (Figure 4.26). It is ornamented with plaques of mountain leopards and horses, and a pair of winged ibex protomes sitting back to back. At the very tip stands a gold ibex on a rectangular plaque with holes at the corners, where it would have been attached to the fabric. The three-dimensional elements are all formed by wrapping gold foil over a carving in a less costly material—in most cases wood.<sup>192</sup>

Other details that merit attention are two long, vertical ornaments, each consisting of two feathers made from wood wrapped in gold (Figure 4.27). Wrapped in gold strips resembling the strips on candy canes, the arrows extend alongside the feathers and terminate in rhombuses simulating the feather fletching on arrows. In addition, two hairpins are thought to have been inserted in the sides of the headdress (Figure 4.28). They consist of iron shafts surmounted by wooden birds wrapped in gold. Five short lengths of gold wire have also been wrapped around the hairpin and bent so that they form five pairs of branches with loops at the ends. Out of all the spectacular objects excavated from this tomb, these six-inch-tall hairpins evoke the Murong gold ornaments most strongly. Although their branches stand empty now, it is easy to imagine that at one time they would have held droplet-shaped gold leaves like the ones excavated in the Kargaly Valley, about 200 miles northeast of Issyk, which date to the second century BCE to the first century CE (Figure 4.29).

<sup>&</sup>lt;sup>192</sup> Kemal Akišev, *Drevnee Zoloto Kazachstana* (Almaty), quoted in *Adam: L'Uomo D'Oro: La Cultura delle Steppe del Kazakhstan dall'Età del Bronzo alle Grandi Migrazioni*, eds. Antonini, Baipakov, and Popescu (Rome: Bagatto Libri, 1983), 42-43.

Reconstructions of the headdress from Issyk imagine the hairpins inserted into the sides, but it is not entirely clear how they would have interacted with other elements. A similar "West Asian" hairpin of uncertain provenance in the collection of Jill Sackler may point to the independent use of such hairpins (Figure 4.30). Dated to the sixth to fifth century BCE and identified by Young-sook Pak as Scythian, it is made up of a copper shaft with a wrapped gold bird at the top and three horizontal tiers of sheet gold flowers. Hollow seeds or leaves hang by wires from the tips of the flowers, and the excess space between the loops of wire implies the presence of now-lost beads.<sup>193</sup> The pendant elements bear a strong resemblance to the spear tip-shaped beech nuts and vertically striated fennel seeds commonly used as pendants on Greek necklaces and earrings of the fifth to fourth century BCE,<sup>194</sup> and these appear centuries later among the art of the Sarmatians as well.

### 2.6 Pazyryk, Siberia, Russia

A slightly different expression of this impulse to decorate surfaces with gold leaves or discs appears at the Siberian site of Pazyryk. The approximately forty tomb mounds excavated here by Paul Rudenko in the 1920s were once dated to the fifth century BCE but are now assigned to the third century BCE.<sup>195</sup> The larger tombs each consist of a rock-covered earthen mound up to 150 feet across which sits atop a burial chamber lined with wooden logs.<sup>196</sup> The use of gold at Pazyryk—which was in fact an alloy called electrum that contained up to twenty percent silver—is applied much more

<sup>&</sup>lt;sup>193</sup> Pak, "Silla Metalwork," 47, Fig. 5.

<sup>&</sup>lt;sup>194</sup> Ogden and Williams, Greek Gold, 42.

<sup>&</sup>lt;sup>195</sup> E. V.Stepanova, "Evoliutsiia konskogo snariazheniia i otnositel'naia khronologiia pamiatnikov Pazyrykskoi kul'tury," *Arkheologicheskie vesti* 13 (2006): 104.

<sup>&</sup>lt;sup>196</sup> Sergei I. Rudenko, *Frozen Tombs of Siberia: The Pazyryk burials of Iron Age Horsemen* (Berkeley: University of California, 1970), 13-14.

sparingly than at Arzhan, in spite of the fact that it was probably mined from a single source in the Altai Mountains.<sup>197</sup> As we saw in the three-dimensional objects at Issyk, gold was often hammered into foil or leaf and applied to objects in other material like wood and leather as a cost-cutting measure. In addition to foil-covered wooden carvings, several leather saddle ornaments from Tomb 3 had openwork gold leaf patterns with red lacquer in the interstices that recall the lacy patterns seen on the crown from Tomb 6 at Tillya Tepe, discussed below.<sup>198</sup> A gold pendant earring with granulation and inlaid stones from Tomb 2 provides at least one example of gold imported from abroad, but this was the exception rather than the rule (Figure 4.31).<sup>199</sup>

While actual metal crowns were not uncovered in the tombs, pointed crowns are depicted on the heads of female figures in a felt wall hanging (Figure 4.32) and in a saddlecloth (Figure 4.33) from Tomb 5. The actual head coverings excavated at Pazyryk are more modest, though. A woman's headdress in Tomb 2 is covered in rhomboid openwork leather appliqués and surmounted by a diadem of thick leather that has been cut and molded into the shape of roosters, rather than the ethereal and ambiguously shaped birds that top hairpins throughout Central Asia (Figure 4.34).<sup>200</sup> Tombs 2 and 3 contained tall men's headdresses with flaps of fabric hanging down over the ears and neck, and gold-covered leather discs as decoration. A third man's head covering, made of felt and closer to a hat or helmet, was found on the floor of Tomb 3 (Figure 4.35). The surface was painted with images of monsters and partially covered with red lacquer leather scales that might be considered leaf-shaped. A gold-covered finial was once

<sup>&</sup>lt;sup>197</sup> Rudenko, *Frozen Tombs*, 208-209.

<sup>&</sup>lt;sup>198</sup> Rudenko, Frozen Tombs, 157 – 159.

<sup>&</sup>lt;sup>199</sup> Rudenko, Frozen Tombs, 106.

<sup>&</sup>lt;sup>200</sup> Rudenko, *Frozen Tombs*, Pl. 65.

poised at the top, but all that remains now is the base, made up of four gold-covered leather crenellations.<sup>201</sup>

As for the animal imagery we have seen on the headdresses at other sites, it appears at Pazyryk as well, albeit in unexpected forms. Horse masks topped with stag antlers and stag heads were uncovered in Tombs 1 and 5, respectively, while masks in Tombs 1 and 2 were surmounted by caprid heads with birds standing on their necks (Figure 4.36).<sup>202</sup> It is interesting that in this funerary context, domesticated animals are transformed into undomesticated ones. These masks were cut from fur, dyed, and ornamented with cut gold discs. Although they are not attached by wires, their presence on the men's and horses' headdresses suggest that the swaying gold leaf tradition was familiar to the Scytho-Siberian nomads of the Altai in the third century BCE.

### 2.7 Aluchaideng, Inner Mongolia, China

At approximately the same time, China was fragmented into several small kingdoms, and the nomadic Xiongnu tribes were growing in power on the Mongolian Steppe. The Warring States period remains of the Xiongnu have been preserved at a number of sites in the tablelands of central Inner Mongolia's Ordos Dessert. Many of the most remarkable finds in gold and silver resulted from a survey carried out in the vicinity of Aluchaideng 阿魯柴登.<sup>203</sup> Unfortunately the details of the individual tombs and their contents remain obscure because the grave goods were published as a group rather than by tomb. Nevertheless, Aluchaideng merits special attention for the discovery there of a

<sup>&</sup>lt;sup>201</sup> Rudenko, Frozen Tombs, 90-19, Pl. 155B.

<sup>&</sup>lt;sup>202</sup> Rudenko, *Frozen Tombs*, 179-86, Pl. 119-122.

<sup>&</sup>lt;sup>203</sup> Guo Suxin and Tian Guangjin, "Neimenggu Aluchaideng faxian de Xiongnu yiwu," Kaogu 1980.4 (1980): 333-338.

gold crown, earrings with pendant leaves, and some of the earliest known instances of granulation in China.

Most likely worn by a tribal leader or chieftain, the headdress consists of two parts, a gold diadem and a gold cap surmounted by an eagle that together weigh about 2.5 pounds (Figure 4.37). The diadem, 6.5 inches in diameter, is made from three ropepatterned semicircular strips terminating in images of recumbent rams, horses, and wolves. It is difficult to determine whether the semicircular bands of the diadem were cast, but given the amount of material that would be required, hollow construction would have been more practical. The textured front and flat back of each band seem to have been formed separately, and the former may have been filled with another material to prevent it from becoming deformed.<sup>204</sup> The longer edges of the front piece were then wrapped over the edges of the back strip and smoothed down. The two lower bands form a ring and are held together by mortise and tenon joints, while an upper band is attached by the insertion of thin tubes into wider ones attached to the lower strip.<sup>205</sup>

The sheet gold cap is a hemisphere comprised of four sections, each of which carries images of wolves and sheep (Figure 4.38). Atop them stands an eagle with a turquoise head in two pieces. A ring of granulation runs around the neck between the two stones, and another line of granules crosses the seam where the tail meets the body. Concave gold circles sit in the eye sockets, indicating that they might at one time have been inlaid with stones. There is a rivet on the underside of the tail, and a pin may have once passed through the holes on either side of the neck, keeping the head in place.

 <sup>&</sup>lt;sup>204</sup> Andrew Oddy, "Jewelry Under the Microscope: A Conservator's Guide to Cataloguing," *Ancient Jewelry & Archaeology*, ed. Adriana Calinescu (Bloomington: Indiana UP, 1996), 185-197.
 <sup>205</sup> Guo and Tian, "Aluchaideng," 334.

Although the bird and its riveted tail immediately call to mind the cap from Maolitu, the Aluchaideng eagle was soldered to the cap rather than riveted. One of the legs has become detached, though, and a dark area is visible at the site of the join.

With regard to construction and style, it should be noted that there are some troubling discrepancies between the constituent parts of the headdress. The eagle's body is constructed of gold so thin that the talons of the hollow feet are slightly crumpled and the wings and tail bounce slightly when the wearer moves. The confronted animals on the cap are typical of Xiongnu animal plaques made using molds, but close inspection of the surface reveals a slightly faceted surface and deeply carved lines made using repoussage and chasing tools. The style of the two components is also markedly different. The cap is abstracted and executed in shallow relief, while the diadem is has greater depth and undercutting. The horns of the rams, for example, are flattened and almost floriated on the cap and twisted and highly textured on the diadem. One wonders whether the cap and diadem were actually united at the time of burial.

On the other hand, as we shall see, it is not unusual for nomadic peoples to mingle styles and metalworking traditions, or even to recycle old decorative elements by incorporating them into new ones. The assortment of gold objects found at Aluchaideng speaks to local artisans' access to a wide range of artistic traditions, whether or not they themselves created them. Some pieces may have arrived there via down-the-line trade from as far as the Mediterranean. For instance, the double loop-in-loop chain among the finds is of a type that was popular in fourth to third century BCE Hellenistic Greece but is

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rarely seen in China before the fourth or fifth century CE.<sup>206</sup> A similar mingling of styles is seen at Xigoupan 西溝畔, another site in the Ordos Region of Inner Mongolia assigned to the Xiongnu.

In addition to the crown, a pair of ear pendants from the same site also exhibits a skilled knowledge of granulation, and at the same time makes use of sheet gold leaves (Figure 4.39). The ear pendants are topped with doubled hoops made from thick wire, and the central portion consists of an oblong turquoise bead covered on the ends by dome-shaped gold caps. Beneath the lower cap is a small tube attached to a gold finding with three projecting rings made of curled flat wire. The caps, the tube, and the finding are all embellished with tiny, regularly-sized granules. An unadorned, truncated, cone-shaped finding hangs from the lowest ring, and a wire soldered to the bottom of it holds three rings, from each of which is suspended an elongated sheet gold leaf. The multiple joints ensure that the ear pendant would have swayed freely, its leaves fluttering and catching the light.

The most obvious point of comparison between these ear pendants and the Murong materials is the use of long pointed leaves that are pierced at one end. However, unlike the Murong cap ornaments, there is a protrusion at the pierced end that doubtless made them more complicated to cut. Their contours are smooth and curl up slightly at the edges, suggesting that they were made using shears or a punch rather by repeated blows of a coarse-edged chisel. Overall, the craftsmanship is surprisingly precise for premodern goldsmithing, and the use of techniques like soldering—most easily observed

<sup>&</sup>lt;sup>206</sup> Emma C. Bunker and Jenny F. So, *Traders and Raiders on China's Northern Frontier* (Seattle: Arthur M. Sackler Gallery, Smithsonian Institution, 1995), 75.

where the wire arcs meet the underside of the truncated cone—indicates a practiced hand. In fact, the manufacture of the Aluchaideng ear pendants is not consistent with anything local seen in China up to this point. Hoop earrings in China—and in later centuries in Korea and Japan—are annular and flattened on the ends, with a small space that would allow them to slide onto the earlobe. The type seen here, more common among Scythian jewelry than in China, loops around about one and a half times.<sup>207</sup> Moreover, the application of a tiny pyramid of granules to the ends of the hoop suggests that in spite of their thickness, they were intended for a pierced ear. This is a feature known in the Greek world but rarely seen in China.<sup>208</sup>

Two pairs with virtually identical backings were uncovered at Tomb 30 at Xinzhuangtou 辛庒頭, a late Warring States period site in the western part of the Yan state's capital Xiadu 下都 in Hebei's Yi 易 county (Figure 4.40).<sup>209</sup> The pendant portion of these ornaments consists of a cone-shaped bead, an octahedral bead with circular facets inlaid with turquoise, and an elongated turquoise beads flanked by conical gold caps. The uppermost bead is further decorated with circular turquoise stones and single granules attached to the lower edge. The loops of wire at the bottom of these ornaments suggest may have held leaves like those seen on the Aluchaideng ear pendants.

In addition, a late Warring States period pair of earrings unearthed at the Shangwang 商王 cemetery in the Linzi 臨淄 district of Zibo 淄博 in Shandong also seems to belong to this group, although its hoops are now lost (Figure 4.41). This site was the capital of the ancient state of Qi, and inscriptions on silver ear cups excavated

<sup>&</sup>lt;sup>207</sup> Sun and Kwan, *Zhongguo gu dai jin shi*, 66.
<sup>208</sup> Jack Ogden, *Jewellery of the Ancient World* (London: Trefoil, 1982).

<sup>&</sup>lt;sup>209</sup> Hebei sheng wenwu yanjiusuo, Yan Xiadu (Beijing: Wenwu, 1996), 684-731, Fig. 417.12, Pl. 33.4.

there suggest a date of about 264 to 221 BCE.<sup>210</sup> The Shangwang earrings are inlaid with turquoise and strung with pearl or bone beads and are made up of three tiers. Wires with beads (many of which are now missing) dangle from each tier, and below them hang smaller turquoise droplets with caps. Tiny pyramids of granules like the ones seen on the ear pendants from Aluchaideng are used intermittently to decorate the surface.

The strongly foreign features seen in the earrings from Aluchaideng, Xinzhuangtou, and Shangwang—and for that matter, Pazyryk—underscore the impossibility of the local manufacture of many gold objects discovered in Xiongnu tombs, including the gold diadem and cap from Aluchaideng.

### 2.8 Xigoupan, Inner Mongolia, China

The same question should perhaps be raised in regard to another Xiongnu tomb located on a sandbar on the eastern bank of the Husitai 虎斯太 River, in Inner Mongolia.<sup>211</sup> The first three of the mounded rectangular pit graves discovered here date to the early Western Han period, while eight additional tombs found later were assigned a slightly later mid- to late Western Han date. Tomb 2 was in the best state of preservation, and both Tombs 2 and 4 contained several pieces of gold jewelry and several gold plaques, some of which were inscribed in Chinese with annotations about their weight.<sup>212</sup> These tombs exhibit a wide range of techniques for forming and decorating sheet gold, but Sophia-Karin Psarras has identified two dominant modes, which she attributes to their

<sup>&</sup>lt;sup>210</sup> Zibo shi bowuguan and Qi gucheng bowuguan, *Linzi Shangwang mudi* (Jinan: Qilu chubanshe, 1997),
129.

<sup>&</sup>lt;sup>211</sup> Guo Suxin and Tian Guangjin, "Xigoupan Xiongnu mu fanying de zhu wenti," *Wenwu* 1980.7 (1980): 15-19, 24.

<sup>&</sup>lt;sup>212</sup> Zhang Jingming, *Zhongguo beifang caoyuan gudai jinyinqi* (Beijing: Wenwu chubanshe, 1995), 47.

respective Chinese and Xiongnu craftsmen.<sup>213</sup> Emma Bunker argues that the more naturalistic plaques were made by Chinese artisans who adapted their bronze-casting traditions to the new medium of gold.<sup>214</sup> The more abstracted plaques may then reflect Xiongnu manufacture, or at the very least a continuation of the steppe tradition of wrapping wooden and bronze objects with gold sheets, as seen at Issyk Kul and Pazyryk.<sup>215</sup>

Tomb 4 contained the fragmentary remains of a headdress made of six pieces of clamshell set in bezels, 62 long sheet gold strips impressed with scrolling vegetal designs, and 15 foliate-shaped sheet gold ornaments (Figure 4.42). The clamshells vary in shape (one large oval, one large pentagonal piece, and four smaller pentagons), and all the bezels are edged in granulation. The sheet gold elements are pierced at the edges, and it is believed that they would have been attached to a fabric or leather cap.

Accompanying the head ornaments were a pair of ear pendants with long hooks soldered to their backs, which would have hung over the top of the ear or passed through the lobe (Figure 4.43). At the top, plaques with granulated borders are subdivided into compartments by flat bezel wires in the shape of stags. One piece of turquoise remains, indicating the use of a mosaic technique sometimes called cloisonné, a term that should not be confused with its more current usage to describe enameling.<sup>216</sup> The lower portion of the ear pendants comprises two parts. The first is an ovoid sliver of jade with an openwork and engraved pattern of Chinese dragons amidst clouds, enclosed in

<sup>&</sup>lt;sup>213</sup> Sophia-Karin Psarras, "Pieces of Xiongnu Art" Central Asiatic Journal 40.2 (1996): 236-238.

<sup>&</sup>lt;sup>214</sup> Emma C. Bunker, *Nomadic Art of the Eastern Eurasian Steppes: The Eugene V. Thaw and Other New York Collections* (New York: Metropolitan Museum of Art, 2002), 29.

<sup>&</sup>lt;sup>215</sup> Joan Aruz, Ann Farkas, and Elisabetta Valtz Fino, eds., *The Golden Deer of Eurasia: Perspectives on the Steppe Nomads of the Ancient World* (New York: Metropolitan Museum of Art, 2006) 130.

<sup>&</sup>lt;sup>216</sup> Bunker and So, *Traders and Raiders*, 74.

granulation-lined bezels (of which one is now missing). The second is a hanging element made of several small square bezels with granulated borders that may have been attached between the plaques and jade pendants.

The plaques and the dangling square cells were made by wrapping a flat bezel wire around stones, soldering the wire to a sheet gold backing plate, trimming down the excess, and then setting the stones. Rings affixed to either side of the squares are attached by means of looped and wrapped wire. The inlay is mostly missing, but a few clamshell squares and what appears to be a reddish-brown paste remain. The paste may have functioned as unbaked enamel, or it might be the remains of a coarse adhesive, like the bitumen used by Sumerians to hold stones in place.<sup>217</sup> This method differs from the traditional Chinese inlay process for bronze, in which the stone is mounted in the casting mold or model and the molten metal flows around its edges.

What is fascinating about the Xigoupan assemblage is its syncretic nature. The mirror image stag plaques at the top have been adapted from Xiongnu belt plaques, while the jade pieces exhibit a typically Han decorative motif. The mingling of recycled elements of diverse origins in a single object (as opposed to a single tomb) is more pronounced here than in our previous examples, and we will see this practice emerge again in Tomb 5 at Tillya Tepe and in the Khokhlach kurgan.

#### 2.9 Tillya Tepe, Afghanistan

In contrast, the contents of the tombs at Tillya Tepe ("Hill of Gold" in Uzbek), near Sheberghan in Afghanistan, suggest at a highly developed local goldsmithing industry. In 1978-79, Russian archaeologist Viktor Sarianidi excavated six graves set

<sup>&</sup>lt;sup>217</sup> Ogden, Jewellery of the Ancient World, 75.

into the side of a hill, uncovering more than 20,000 objects, mostly made of gold (Figure 4.44). A seventh grave was found, but it had to be abandoned as a result of the invasion of the Russian army in 1979.<sup>218</sup> The date of the site has been approximated on the basis of five coins placed in the mouths or hands, a practice believed by the Greeks to finance the journey of the deceased across the rivers Styx and Acheron into the world of the dead. The Tillya Tepe graves contained a Yuezhi obol of Heraios, a Tiberian aureus, and three Parthian coins. The aureus, a Roman coin struck in Gaul between 16 and 37 CE, was the latest in date. The tombs were probably constructed shortly thereafter, around the second quarter of the first century CE.<sup>219</sup>

Tillya Tepe was first settled around 2000 BCE, and there is evidence of fortifications and a temple, which were rebuilt several times. The city eventually declined, was briefly revived around 300 BCE, and was abandoned again until its use as an aristocratic cemetery in the first century CE.<sup>220</sup> During the intervening centuries, large numbers of Greek and Macedonian colonists were settled throughout throughout Bactria (Afghanistan and Northern Pakistan), as a result of its fourth century conquest by Alexander the Great. In 250 BCE, Bactria became an independent but still deeply Greekinfluenced state. However, in 145 BCE and 130 BCE, attacks by nomadic invaders led to the collapse of the state. It is believed that this cemetery belonged to elite members of

<sup>&</sup>lt;sup>218</sup> Viktor Ivanovich Sariandi, "Ancient Bactria's Golden Hoard," in *Afghanistan: Hidden Treasures from the National Museum, Kabul*, eds. Pierre Cambon and Fredrik Hiebert (Washington, DC: National Geographic Society, 2008), 211-218.

<sup>&</sup>lt;sup>219</sup> Véronique Schiltz, "Tillya Tepe, the Hill of Gold: A Nomad Necropolis," in *Afghanistan: Hidden Treasures from the National Museum, Kabul*, eds. Pierre Cambon and Fredrik Hiebert (Washington, DC: National Geographic Society, 2008), 219-231.

<sup>&</sup>lt;sup>220</sup> Sariandi, "Ancient Bactria's Golden Hoard," 214.

the Yuezhi, the second wave of nomadic attackers, who had been driven out of Northwest China by the Xiongnu.

In contrast with other princely nomadic burials in Central Asia, the tombs were simple trenches with wooden planking, a fact that has led scholars to assume that their interment was rushed. The richest burial, Tomb 4, is presumed to be a male warrior, was situated at the top of the mound, inside of the city fortifications. Closest to him were Tombs 3 and 6, rich burials that belonged to a teenager and a woman about 20 years old, respectively.<sup>221</sup> The tomb occupants were bedecked in elaborate jewelry, much of it in the form of appliqués sewn to their clothing or burial shrouds using gold thread. The warrior's burial held several weapons but no helmets or armor, which seems to suggest that they were signifiers of social standing rather than weapons for real use. Although the crown from Tomb 6 has garnered the most attention, it is an object from Tomb 4 that most closely resembles the Liaoning ornaments.

Tomb 4 contained a coffin covered in leather that was painted with black and white and embellished with gold appliqués (Figure 4.45). The skull and forelegs of a sacrificed horse were found on top of the burial, linking it to nomadic burials in Siberia and the Caucasus. The occupant lay on his back, his head oriented to the north and resting on a grooved gold plate. An Indian medallion resembling a coin was found near his ribcage; its Kharoshthi inscription alludes to a Buddhist ruler. An intaglio depicting Hellentistic gods was found nearby. A sword, daggers, and bows and arrows were placed at his sides, and his clothes were covered in gold appliqués. In addition to a gold

<sup>&</sup>lt;sup>221</sup> Véronique Schiltz, "Catalogue," in *Afghanistan: Hidden Treasures from the National Museum, Kabul*, eds. Pierre Cambon and Fredrik Hiebert (Washington, DC: National Geographic Society, 2008), 232-293.
necklace, belt and bracelets, a golden ram and golden tree (Figure 4.46) were found attached to the cast vessels under his head, indicating they were part of a headdress.<sup>222</sup>

The central stalk of the tree is a thick strip of gold that pierces the center of a horizontally oriented sheet gold flower similar to those seen on the West Asian ornament mentioned above. Four thick strips of sheet gold make up the base. Rivets once affixed them to the top of a fabric cap. Wire branches were attached to the central stalk by flattening their ends and wrapping them around the stalk. Soldering might have been employed as well, but it is possible that hammering was sufficient to hold them in place. The result is five tiers, each of which once had about six radiating branches. The ends of the branches are bent into coarse loops, and from them hang additional connective wired strung with a pearl on the center. Finally, sheet gold discs are suspended below.

The ram, which was attached to the headdress by means of rings attached to its feet, bears a striking resemblance to the ones from Arzhan 2 and Issyk Kul, while the tree is closer to the Murong ornaments and ornaments from the Khokhlach crown, described below. The tomb's excavator suggests that the tree and ibex both might have been created earlier, captured as war booty, and deposited in this burial. He has also noted affinities between the tree and others in the Siberian collection of Peter the Great in the Hermitage Museum, which are also square in cross section and have perforated stands.<sup>223</sup> Little is known about the precise site where these trees were found, and photographs of them have not been published. Based on my own observation, the tree and branch structures are similar, but the pendant leaves exhibit a different construction method.

<sup>&</sup>lt;sup>222</sup> Schiltz, "Catalogue," 265-279.

<sup>&</sup>lt;sup>223</sup> Viktor Ivanovich Sarianidi, *The Golden Hoard of Bactria: From the Tillya Tepe Excavations in* Northern Afghanistan (New York: Harry N. Abrams, 1985), 36-37.

Some parallels between this tree and the Murong ornaments are immediately apparent. Loops have been wound into some of the branches mid-way to accommodate the addition of more discs. The extremely regular edges of the gold disks suggest that they might have been made with a punch, a hollow metal tool that would be placed against a gold sheet and struck at the back with a hammer. Likewise, the circles on the surface of the Fangshen plaques curl under slightly at the edges as a result of the punch's impact. On the other hand, the bails by which the Tillya Tepe discs are attached are closer to the gold flower ornament from Hantanpo in Gansu. The larger implications of these minor discrepancies will be addressed later.

It is fascinating to note the variety of styles and goldsmithing techniques at play in this small cemetery. Tomb 6, a pit containing an unlidded coffin on a brick base, held the remains of a woman of about 20 years of age. The gender of the occupant was assumed on the basis of extensive amount of jewelry on the body, the Chinese mirror that lay on the chest, and the lidded cosmetics box in her burial. She lay on her back, with her head oriented to the west, resting on a small silver plate. In her mouth and left hand were gold Parthian coins, and in her right hand she held a gold scepter. She wore an elaborate gold crown, as well as gold clothing appliqués, necklaces, bracelets, earrings, hairpins, and temple pendants.

The gold crown preserved on her head consisted of a horizontal diadem and five detachable tree-shaped elements (Figure 4.47). Rods on the backs of the trees can be inserted into tubes on the back of the diadem. The patterns of the trees have been neatly cut from sheet gold, with smoothly rounded contours that show little sign of the artist's chisel. Four of the trees are the same, with silhouettes birds on the top on either side, but

the central tree is more abstract and has no birds. Instead it is composed of two sets of tree branches reaching across and meeting in the center. The surfaces diadem and trees are decorated with six-petal rosettes with bezels edged in granulation at the center (Figure 4.48). The turquoise inlay survives in about half the flowers. Gold leaves in a variety of sizes are suspended by wire from the tips of each of the petals in the same manner as described above, with intermediary wires that were once strung with pearls.

In addition to the crown and tree, all the tombs contain ornaments decorated with sheet gold leaves, both with and without attached bails. One example stands apart from the others: a pectoral with turquoise and garnet inlay from Tomb 5 that had been sewn into the garment of 20-year-old female occupant (Figure 4.49). The necklace is bound on either end by sheet gold cones decorated with granulation, and its beading includes pieces that resemble two crescents back to back. Tomb 5 was the least opulent of all the burials at Tillya Tepe, and the only gold items were this collar-like necklace, two anklets, two pairs of earrings, a hollow scepter, and a bracelet containing five recycled stones that shows heavy signs of wear (Figure 4.50). These last few items and the other fragmentary carved stone beads and intaglios appear to be much older than the gold bracelet in which they are mounted, suggesting that they retained some talismanic power for their owner.<sup>224</sup>

## 2.10 The Khokhlach Kurgan, Novocherkassk, Russia

Curiously, the crown most often cited by Sun Ji and other Chinese scholars as a possible prototype for the Murong ornaments is a similar pastiche of inherited or acquired elements. Now housed in the Hermitage Museum in St. Petersburg, this second or first

<sup>&</sup>lt;sup>224</sup> Pierre Cambon and Fredrik Hiebert, eds., *Afghanistan: Hidden Treasures from the National Museum, Kabul* (Washington, DC: National Geographic Society, 2008), 280.

century BCE gold crown was unearthed beneath a grave mound discovered by chance in 1864 during the construction of a canal (Figure 4.51). The primary pit grave of the Khokhlach kurgan had been looted long ago, but four caches of additional grave goods had been buried under it and in its walls and remained untouched. The rich array of gold, silver and bronze contents—including clothing appliqués, torques, bracelets, perfume bottles and tableware—have led some to conclude that the tomb's occupant must have been a princess or priestess, and that he primary burial was once occupied by her husband.

Her crown consists of a diadem assembled from three pieces of sheet gold joined by hinges, the surface of which is encrusted with beads, gold cowry shells, sculptural appliqués, and semiprecious stones. The latter include large garnet and red glass cabochons (stones with a rounded, convex surface), and at the center, an amethyst bust of a woman wearing a Greek chiton and a wreath-style crown. On either side of the largest cabochons are two gold eagle relief appliqués inlaid with turquoise and coral.

The upper and lower edges of the diadem are trimmed with alternating pearl and gold beads. Below the lower row of beads are suspended sheet gold rosettes edged in gold wire and three-dimensional leaves in the Greek style. Above the upper row of beads there were once seven trees interspersed with animals walking in a procession towards the center, but several of the animals and trees have been lost. The centermost animals have deer or elk antlers, and they are flanked by a pair of ibexes with curled horns. The feet of the animals and trunks of the trees rest on rods that were probably inserted into tubes at the back to the diadem.

The most curious aspect of the crown's décor is the comingling of styles, namely the "polychrome animal style" seen in the deer, ibexes and eagles, and the strongly Classical style exhibited by the bust at the center and the leaves or seeds that dangle from the lower edge. The most convincing evidence that this crown is composed of repurposed elements is the fact that the settings for the inlaid stones and all of the areas of relief were clearly made separately and then nailed or soldered to the surface of the diadem, even though the decoration could easily have been made far more easily by impressing a single coherent design into the back of a strip of sheet gold.

The aspect of the Sarmatian crown that Sun Ji considered most closely related to the Murong ornaments is the presence of trees along the upper edge.<sup>225</sup> Although Sun's observation was based on shared subject of branches and leaves, their execution does reveal a deeper connection. The wire branches were affixed to the trunks of the trees in the same manner as the the tree from Tillya Tepe: their ends were hammered flat and then wrapped around the trunk, working from the top to the bottom. Smaller branches were attached to the larger branches in the same manner. The petals from the gold flower uncovered at Hantanpo employ the same basic principle of thinning and wrapping the metal, which in theory would not require the use of solder.

The other apparent similarity is the use of swaying gold leaves, but the resemblance is not as strong as one might guess. The heart-shaped leaves have convex surfaces and recessed veins, which—given their uniformity—must have been formed over a mold. The Murong leaves and discs, in contrast, seem to have been cut individually. There is, however, a second gold headdress from the Rostov region of Russia whose leaves are much closer to the simple punched Murong and Korean variety discussed above.

<sup>&</sup>lt;sup>225</sup> Sun Ji, "Buyao," 57, Fig. 4.1.

### 2.11 Kurgan 10, Kobiakovo, Russia

The last headdress under consideration may be the closest to the Korean crowns in terms of conception and assembly. Kurgan 10 in the Kobiakovo cemetery, which dates from the end of the first to the beginning of the second century CE, was excavated in 1987 by the University of Rostov (Figure 4.52). The square pit contained the tomb of a 25- to 30-year old woman who wore clothes edged in gold bracteates at the wrists and ankles, a large gold openwork torque inlaid with stones, and matching bracelets (Figure 4.53). At the center of the openwork torque sits a Western-looking figure wearing a turban, and he is flanked by dragons with elongate bodies, who seem to be engaged in battle with smaller animal-human hybrid creatures. Atop her head are the remains of a red leather headdress decorated with simple sheet gold appliqués depicting deer and birds on either side of a central tree (Figure 4.54). Scattered about in all directions are pierced circular sheet gold discs which presumably would have been attached to the headdress with wire or thread.

The tomb occupant was interred with a small gold perfume bottle like her counterpart in the Khokhlach kurgan, and a bronze mirror and red pigment like those seen at the Issyk burial. All these items point to her identification as a woman, even though she was accompanied also by an iron axe and knife and horse-riding gear.<sup>226</sup> Unfortunately, perhaps because of its late excavation date, this tomb has been largely overlooked in discussions of the Murong ornaments. When considered alongside the Khokhlach and Issyk burials, this tomb points strongly toward the existence of a warrior-

<sup>&</sup>lt;sup>226</sup> L.S. Ilioukov, "Kobiakovo, le Kourgane d'une Princesse Sarmate" in *L'Or des Sarmates entre Asie et Europe: Nomades des Steppes dans l'Antiquité: 17 Juin-29 Octobre* 1995, ed. Abbaye de Daoulas (Daoulas: Abbaye de Daoulas, 1995), 60-66.

priestess or warrior-princess class among the nomadic populations of Central Asia. It also illustrates the western extent of gold headgear that combines pendant gold leaves with imagery of trees, antlers, and birds.

### 3. The Leaves That are Left

From the dates and locations of the gold crowns and headdresses described above, a network of connections begins to emerge. Like the Silk Road, this is not a single route, but one with many branches and detours that remains fairly incomplete. Gold was a prized metal from the earliest times, and because it can be melted down to make new objects without any degradation in quality, little objects as large as headdresses rarely survive except when the tomb has been completely undisturbed. However, as we have seen in China, leaves that decorate headdresses are often so small that they escape the notice of looters. They also may be preserved on small pieces of jewelry, like earrings or pins. The following section gives a brief preliminary survey of sites of gold leaves and discs attached to other objects excavated along the same swath of Eurasia that has been considered above.

#### 3.1 Mallia, Crete, Greece

Perhaps the most famous gold object from Minoan Crete is the wasp or bee pendant the from the Middle Minoan II (1800-1700 BCE) Chrysolakkos cemetery in Mallia in north central Crete (Figure 4.55). Although the first excavations at Mallia were undertaken in 1915 by Greek archaeologists, it was a team from the French Archaeological School at Athens who excavated its palace in the 1920s and 1930s and uncovered its gold objects.<sup>227</sup> The pendant was first published in 1930 by Pierre Demargne, who identified its pair of confronted insects as wasps or bees.<sup>228</sup> Many theories about the exact species of the segmented creatures have been proposed, and many scholars have stalwartly defended the case for bees which were prized for their honey-making in the ancient world.<sup>229</sup> However, a collaboration of classicists and biologists posits that they are the common paper-wasp *Polistes*, depicted holding a miniature version of their nest between them and sharing a bolus of liquid food.<sup>230</sup>

What is more certain is that the goldsmith who fashioned this pendant—which could have been worn as a necklace, pin, or earring—was well-versed in the techniques of cutting, repoussage, hammering, doming, filigree, granulation, and inlay (although the stones once held in the discs have since been lost). While the wasp pendant is usually considered in isolation, Demargne also recognized advances in construction at Mallia in a gold pair of hairpins found in the same year, which were made by joining several petals to a rod (Figure 4.56) rather than mounting a single daisy-shaped cut-out on the top of a pin, as seen at Mochlos. As for individual leaves and petals, the increased complexity of the methods for their attachment is evident in the wrapped bail of a leaf pendant from the same site (Figure 4.57). The development of new techniques appears to have continued throughout the succeeding centuries because we observe similar execution, as well the introduction of inlay technique, a short time later and less than 250 miles away, on the island of Aegina in the Saronic Gulf.

<sup>&</sup>lt;sup>227</sup> Frieda Vandenabeele, Malia: The Palace of Malia and Chersonissos (Athens: Ekdotike Athenon, 1992).

<sup>&</sup>lt;sup>228</sup> P. Demargne, "Bijoux Minoens de Mallia, Bulletin de Correspondence Hellénique 54 (1930): 404-421.

<sup>&</sup>lt;sup>229</sup> Kenneth F. Kitchell, "The Mallia 'Wasp' Pendant Reconsidered," Antiquity 55 (1981): 9-15.

<sup>&</sup>lt;sup>230</sup> Richard A. LaFleur, Robert W. Matthews, and David B. McCorkle Jr., "A Re-Examination of the Mallia Insect Pendant," *American Journal of Archaeology* 83.2 (1979) : 208-212.

### 3.2 Aegina Treasure, Aegina, Greece

In 1891, the British Museum acquired an assemblage of gold grave goods that have come to be collectively known as the Aegina Treasure. The group is comprised of a cup with molded decoration, a large bracelet, five plain rings, several diadems and gold strips, 54 rosette- and spiral-shaped shroud ornaments, two pairs of large earrings with suspended chains ending in discs and owls, a two-headed pectoral with pendant discs, and several necklaces and bracelets beaded with gold and semiprecious stones (Figure 4.58). The precise find site (or sites) of these objects has been hotly contested for over a century, but new archival evidence points to a Middle Bronze Age cemetery close to the south gate of the lower town of Aegina, where the undisturbed tomb of a warrior dating to about 1700 BCE was excavated in 1981.<sup>231</sup>

Three of the gold items illustrate the next step in the development of the pendant gold disc form. The first is a repoussé Master of Animals pendant that would have been suspended by a tube at the top of the figure's headdress (Figure 4.59). He is dressed and position in an Egyptian manner and grasps geese by their necks. The body of the pendant is hollow, having been formed from two identical pieces of sheet metal soldered together at the edges. Holes have been pierced along the bottom edge for the attachment of discs, four of which have integral wires that were wound at the top to form loops. Raised bosses along the outer edge and at the very center of each disc simulates the kind of granulation seen on the wasp pendant from Mallia. The single dot of granulation at the center is less common, but it can be observed on the deer-headed gold ornaments from Damao banner, in Inner Mongolia.

<sup>&</sup>lt;sup>231</sup> Defry Williams, "The Story of the Aegina Treasure" in *The Aigina Treasure: Aegean Bronze Age Jewellery and a Mystery Revisited*, ed. J. Lesley Fitton (London: British Museum Press, 2009), 11-16.

A crescent-shaped pectoral with a head in profile at either end was fashioned in the same manner, except that the eyes and eyebrows were once inlaid with stones; the bottom edge of the pendant is lined with rings rather than holes, and the discs lack granulation (Figure 4.60). In both the Master of Animals and the two-headed ornaments, some of the discs broke and were repaired in Antiquity by piercing the disc with a hole and threading a new wire through it. This does not appear to have been the typical mode of attachment though.

The two pairs of gold and carnelian ear pendants from the Aegina Treasure seem to have been produced by a different workshop (Figure 4.61). They consist of hollow rings inside which stand two confronted dogs atop the backs of two monkeys facing away from one another. Alternating flat discs and molded owls are suspended from chains attached to twelve holes around the perimeter. What sets these ear pendants apart from those of their companions mentioned above is the usage of a single mold to create the front and back of each of the four rings, as well as the fact that a carnelian bead has been threaded onto the integral wires of the discs. This effect recalls the carnelian beads on the tips of the willow and sissoo leaves on Queen Puabi's Puabi crown.<sup>232</sup>

#### 3.3 The Missing Pieces

From about the mid-second millennium to the mid-first millennium BCE, swaying gold leaves or discs become much more sparsely distributed. In spite of the existence of rich gold finds throughout the Mediterranean and Aegean during the Late Bronze Age Near East, their most common incarnation is a relatively large gold disc with a repoussé or mold-impressed design. As these are usually worn as individual pendants

<sup>&</sup>lt;sup>232</sup> J. Lesley Fitton, ed., *The Aigina Treasure: Aegean Bronze Age Jewellery and a Mystery Revisited* (London: British Museum Press, 2009).

or interspersed with beads on a chain, it is debatable whether they should even be considered part of the same phenomenon. However, aside from this context, the usage of discs and leaves in jewelry and as clothing attachments in this period dwindles considerably. At the same time, they disappear from crowns and diadems altogether. It is not until the fifth century BCE that this decorative device gains popularity again, beginning in the Empire and gradually spreading along the steppe to the Black Sea at the Aegean, and to Central and North Asia.

The following list of scattered archaeological finds highlights, assembled from seminal studies of ancient gold jewelry, the troubling gap in the quantity of sheet gold discs and leaves between the early second millennium BCE and the first century CE, when they become a dominant feature at Tillya Tepe:<sup>233</sup>

Necklace with three molded hexagons, gold and blue stone, Elam, Iran, c. 1500-500 BCE, Musées Royaux d'Art et d'Histoire (IR.1245), Bruxelles, Belgium (Figure 4.62)

Pendant with Star Design, gold, Acropolis of Ugarit (Ras Shamra), Syria, c. 1550 – 1300), National Museum of Aleppo (Inv. no. M.8183) (Figure 4.63)

Pendants with rayed stars, gold, Uluburun shipwreck, Turkey, c. 1300 BCE, Bodrum Museum of Underwarter Archaeology (KW 1672 and KW 138), Turkey (Figure 4.64)

Perforated disc with an eight-pointed star, Tell al-Rimah, Iraq, fourteenth to second half of the thirteenth century BCE (Figure 4.65)

Necklace with the head of the Egyptian god Bes, gold, Iran, sixth to fourth century BCE, L. 14 in, Metropolitan Museum of Art (65.169) (Figure 4.66)

<sup>&</sup>lt;sup>233</sup> The following examples are from the following publications: Eric Gubel and Bruno Overlaet, eds., *De Gilgamesh à Zénobie: Proche-Orient et Iran Millénaires* (Bruxelles: Fonds Mercator, 2008); K. R. Maxwell-Hyslop, *Western Asiatic Jewellery c.3000-612B.C.* (London: Methuen, 1979); Joan Aruz, Kim Benzel, and Jean M. Evans, eds., *Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium B.C.* (New York: Metropolitan Museum of Art, 2008); Ellen Rehm, *Der Schmuck der Achämeniden* (Munster: Ugarit-Verlag, 1998); Ellen Reeder, *Scythian Gold: Treasures from Ancient Ukraine* (Baltimore: Walters Art Gallery, 1999); A.M.Leskov, *The Maikop Treasure* (Philadelphia: University of Pennsylvania Museum of Archeology and Anthroplogy, 2008); Darejan Kacharava and Guram Kvirkvelia, eds., *Wine, worship, and Sacrifice: The Golden Graves of Ancient Vani* (New York: Institute for the Study of the Ancient World, 2008).

Necklace with pendant lion heads and discs, gold, Alkhagori, Georgia, second half of the fourth to early third century BCE, Tblisi Museum (Figure 4.67)

Headdress pendants, gold, kurgan 13, near Ordzhonikidze, Dnipropetrovs'ka Oblast', c. 350 – 300 BCE, H. 1.5 in, Institute of Archaeology of the National Academy of Sciences (Inv, no. KP-722/2-3), Kiev, Ukraine (Figure 4.68)

Stag's Head Ornament, gold, second half of the fourth century BCE, Maikop, Russia, Penn Museum (Inv. no. 30-33-14.14), Philadelphia (Figure 4.69)

Gold necklace with Bird and Circular Pendants, gold, Vani, Georgia, second half of the fourth century BCE, L. 10 in, Georgian National Museum (1-2005/10), Tblisi, Georgia (Figure 4.70)

Gold necklace with Stylized Leaf Pendants, gold, Vani, Georgia, second half of the fourth century BCE, L. 27 in, Georgian National Museum (1-2005/11), Tblisi, Georgia (Figure 4.71)

Filigree Earring with Discs, gold and lapis lazuli, Pasargadae, Iran, fifth to fourth century BCE, H. 3 in (Figure 4.72)

Seen together, these objects illustrate the continued use of sheet gold leaves and discs for the decoration of necklaces, earrings, temple pendants, and clothing attachments. As mentioned above, there are several possible explanations for the substantial gap in the archaeological record, and it should be remembered that this list is neither a reflection of the entire body of material produced in Antiquity nor a complete list of what has survived to the present. Regardless, Chinese authors like Sun Ji, Xu Bingkun and Wan Xin have unhesitatingly accepted continuity between the gold crowns of "the West" and the Murong step-sway ornaments. These ostensibly related uses of gold leaves and discs are not uniform in their fabrication though. Upon closer inspection, minute details of construction and assembly allow us to discern several disparate costuming traditions.

# 3.4 Technical Considerations

Considering the gold ornaments in this chapter alongside others discussed in Chapters 2 and 3, we can begin to differentiate pendant sheet gold elements by shape, surface treatment, and the manner in which that are attached to a headdress or pieces of jewelry. Although the most common silhouettes are circles and droplet-shaped leaves, many of the earliest examples from Ur and Mochlos are rendered naturalistically, even allowing us to identify the species of the plants more than four millennia later. On the other hand, more stylized leaves—with dots along the edges and down the center—have come to light at Mochlos, and the mass-produced leaves on chains from Troy are very simple in shape, with a slight fold down the center.

Generally speaking, as one moves away from the Mediterranean and the Near East and towards Northeast Asia, leaves become more abstracted, eventually resulting in the abbreviated shapes seen in the Kargaly Valley, in Liaoning, and throughout China. The striated heart-shaped leaves on the trees of the crown from the Khokhlach Kurgan and the elongated leaves of the Hantanpo ornament might be considered an intermediary step between the naturalistic and abstracted traditions though. At the height of Korean goldsmithing in the fifth and sixth centuries CE, leaf profiles in earrings diversified somewhat, and the repertoire came to include heart shapes, tips pointed like the sissoo, and longer almond shapes. Nevertheless, artisans in East Asia never strove to capture biological details to the same degree as those of Mesopotamia and the Mediterranean. Unlike the wreaths of ancient Greece, the crowns of Korea cannot be identified at a glance as laurel, myrtle, and oak.<sup>234</sup>

Circular discs occur as early as the second millennium BCE in the Aegina Treasure and become a persistent feature steppe gold—including headgear—by at least the fourth century BCE, but their simplicity is deceptive. The unadorned flat gold discs

<sup>&</sup>lt;sup>234</sup> Ogden and Williams, *Greek Gold*, 106-107.

that hang from the crown in Tomb 6 at Tillya Tepe have often been compared to the profusion of circles that cover gold and gilt bronze headdresses in Northeast China, Korea, and Japan. Yet these discs were, generally speaking, attached to the surfaces of the headdresses by three different means that reveal the varying levels of complexity of the goldsmithing traditions from which they emerged. The assorted sheet gold attachments discussed above may also be subdivided according to these varieties of attachment, which I will outline here.

Several of the earliest examples of decorative gold discs both in the Near East and in Northeast China had integral bails, meaning that the wire attaching the leaf to an ornament was integrated into the leaf itself. This effect could be achieved in at least three ways. The first is simply by cutting a bail into the sheet and folding it over on the top, as we see in the leaf wreaths from Ur and the necklace pendants from Ugarit and the Uluburun shipwreck. The second approach is to bunch up the end of a wire and heat it so that a spherical granule forms. The resulting headpin could then be hammered flat into a disc with very regular edges. This process would account for the gradual transition at the point where the discs meet the wires that hang from the Mallia wasp pendant and the two-headed pectoral and Master of Animals pendant in the Aigina Treasure. The third technique is even simpler and can be observed at the sites of Xichagou 西岔溝 and Laoheshen 老河深, two late Xiongnu or early Xianbei sites in Northeast China that have not yet been mentioned.

The second to first century BCE site of Xichagou in Liaoning, like Aluchaideng, is in fact a collection of 63 tombs that were surveyed together in 1956, resulting in the

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discovery of almost 14,000 objects.<sup>235</sup> Among the finds were silver and gold ornaments that have been described as earrings, although they lack earring hooks or hoops, and two small pierced holes on the leaves suggest that they were sewn or affixed to something while pointing upward (Figure 4.73). They are made from block-twisted wire, and one end of the wire has been hammered flat, forming an oval. The rest of the wire has been twisted into a stalk, part of which has been strung with tubular stone beads. Similar ornaments have been uncovered in larger numbers at the first-century-BCE to first-century-CE site of Laoheshen in Yushu 榆树 county, Jilin (Figure 4.74).<sup>236</sup>

What distinguishes the Laoheshen ornaments, however, is their lack of beads and the presence of several loops wound into their stalks that might have once held additional leaves. The same site has yielded a few pendant ear ornaments with straight-edged leaves (Figure 4.75). These are related to a second category of discs formed by cutting or punching the sheet gold into a circle, piercing a hole near the edge, and threading a wire through it. Whether the wire is a long branch with loops wound into it, a stalk that protrudes from the flat surface of an ornament, or a short connector with loops at either end, the piercing of the leaf and threading onto a wire generally ensures that it is able to sway and catch the light.

Discs like these may have been sewn onto garments using thread, but in such cases they usually have two or more holes. Those that fall into this category include the scale-like leaves from Troy, disc from Tell al-Rimah associated with a frit mask of a human face, a pair of ear pendants from a tomb in Ordzhonikidze, the headdress elements

<sup>&</sup>lt;sup>235</sup> Sun Shoudao, "Xiongnu Xichagou wenhua" gu muqun de faxian," Wenwu 1960.Z1 (1960).

<sup>&</sup>lt;sup>236</sup> Jilin shen wenwu kaogu yanjousuo, ed., Yushu Laoheshen (Beijing: Wenwu, 1987).

from Kobiakovo, the gold crown from Tillya Tepe, the Maolitu bird ornament, square, plaques, ear pendants, and a vine-like ornament from Liaoning, the crown from the Phoenix tomb, and square plaques from the Hwangnam tomb and Niizawa Senzuku 新沢 千塚, discussed below. It should be noted that the gold foil circles on the horse masks and other objects from Pazyryk most closely resemble this category, except that they are not perforated and are instead stuck to the surface using an adhesive.

Finally, the third variety of disc has a small bail which is made by bending a short piece of wire into a U-shape and attaching it to the sheet gold circle. The ends of the wire are hammered flat to maximize the area of contact between surfaces. Hammering the wire against the disc may have been sufficient to fuse the two elements, but it also leaves an unsightly blemish on the front of the disc. In most cases, the joining technique employed was probably either soldering or copper diffusion bonding. Discs with attached bails are designed with movement in mind, and they are usually suspended by wire above the surface or below the bottom edge of other ornaments. The examples of this mode of attachment are too numerous to count, but a few that have been introduced above are a necklace and earring from Pasargadae, a necklace from Vani, a necklace from Alkhagori, the hair ornament from Hantanpo, and the Mistress of Animals ear pendants from Tillya Tepe. These bails are rarely if ever seen in Northeast Asia, except for some of the more elaborate Korean earrings that have rings soldered atop hollow pendant pieces. Ornaments from Murong and Southern Chinese tombs, however, never fall into this category.

However, the practice of attaching bails did persist in Xinjiang, near the border with Kazakhstan. A tomb discovered at Boma 波馬 in Zhaosu 昭蘇 county contained a

burial mask, flask, lidded jar, and several ornaments made from sheet gold that in some cases had been inlaid with rubies (Figure 4.76). Dated to the sixth or seventh century CE, just prior to Turkish occupation, these ornaments are thought to have been made by members of a non-Chinese tribe descended from the Wusun 烏孫, Saka, or Yuezhi.<sup>237</sup> Among the less touted objects at this site are two related types of sheet gold ornaments that seem to be earrings, and whose lower portions are composed of three downward-pointing droplet-shapes with attached bails and pendant gold discs.<sup>238</sup> Yet this particular find is an anomaly, and the dating should perhaps be called into question.

The discs on the Boma earrings are unadorned, but many other gold pendant ornaments can be assessed according to their surface treatment. Embellishments added to the leaves and discs described above include incising, doming, folding, repoussé dots, granulation, and beaded wire. These seemingly minor details are extremely informative about the relationships between different decorative traditions. For example, the early appearance of granulated borders on the discs of the Mallia wasp pendant may lead one to ask whether the practice of impressing edges with dots could have been intended as a less time-consuming and more cost-effective substitute for granulation. Or perhaps—as in the case of the repair on one of the bovine-headed ornaments from Xihezi—it was as close to the original effect as the artisan's repertoire allowed him to get.

Another way to simulate granulated borders is to apply beaded wire, as we see in the domed discs of the Achaemenid necklace at the Metropolitan Museum and the slightly later necklaces from Vani and Alkhagori in Georgia. Beaded wire also lines the

<sup>&</sup>lt;sup>237</sup> Wang Binghua, "Gold and Silver Discovered in Boma, Xinjiang," in *The Glory of the Silk Road: Art from Ancient China*, ed. Li Jian (Dayton, OH: Dayton Art Institute, 2003), 15-31..

<sup>&</sup>lt;sup>238</sup> Zhongguo Banben Tushuguan, *Jinyin qi*, 95, Pl. 114.

edges of several ornaments at Tillya Tepe and the rosettes that hang from the lower edge of the Khokhlach crown. Although this technique appears sporadically in individual objects uncovered in Warring States and Han period tombs in China, it did not flourish in East Asia until about the fifth century at which time it became a common feature of beads and pendant elements from Korean tombs, especially in Silla. This technique was also never employed by Murong craftsmen. In the conclusion, I shall explore more the reasons for exclusion of most if not all procedures involving soldering or copper diffusion bonding from the Murong repertoire, as well the broader implications of this lag in technological impediment.

#### 4. Contact, Indigenous Development, or Recycling?

Returning to the questions asked at the outset of this chapter, we should ask, how do the Murong cap ornaments fit into the narrative of gold crowns and swaying leaves outlined above? Do they represent the continuation of a goldsmithing tradition whose roots lie in the ancient Near East? Should they be regarded as an intermediary step between the steppe nomads like the Xiongnu and the impressive goldwork of Three Kingdoms Korea? How do the minute details of leaf construction affect our understanding of the supposed "Swaying Leaf Culture" ?

There are two primary ways of interpreting the evidence supplied above: one asserts the continuity of a decorative technique through communication and the other supposes independent local origination. When identical techniques are observed in adjacent regions within a few generations of one another, it is plausible that artisans with specialized skills either traveled to nearby locations for commercial or political reasons or shared their knowledge with their immediate neighbors. However, when the lag time between objects stretches to several hundred years, there is reason to be skeptical of a direct connection and to support the idea that two separate lines of development yielded visually similar results. The relationship between the Murong ornaments and the leafy gold headgear of the "West" would seem to be such a case.

However, the argument for the transmission of over such massive distances and expanses of time is made more convincing by the wealth of other vessel types, costuming traditions, and decorative motifs that followed a very similar path. The abundant examples cannot all be enumerated here, but several were explored in a 2009 exhibition entitled "Eurasian Winds toward Silla" that was co-organized by the Miho Museum, Okayama Orient Museum, and the Ancient Orient Museum.<sup>239</sup> One of the most easily discernible cases is the rhyton, a horn-shaped drinking vessel that was in use in the Near East and Crete by at least the second millennium BCE (Figure 4.77). Made in a variety of media including ivory, silver, agate, and clay, the rhyton is usually shaped like an animal's head, the decoration is oriented so that the wine emits from a hole in the mouth. These have been unearthed in Minoan Crete, Achaemenid Iran, and the kingdom of Silla (Figure 4.78). This last example from the fifth to sixth century site of the Inyong-sa monastery is of particular interest because it combines the rhyton form with an openwork stand—another feature inherited from the steppe that can be seen nearby in the tomb of

<sup>&</sup>lt;sup>239</sup> Miho Museum, Ancient Orient Museum, and Okayama Orient Museum, eds., *Yūrashiya no fū Shinra he* (Tokyo: Yamakawa, 2009).

Feng Sufu (Figure 4.79) and the Murong tombs at Lamadong (Figure 4.80), as well as a seventh century BCE Faliscan tomb at Narce (Figure 4.81).<sup>240</sup>

The top edge of the bowl from Narce also depicts one of the most captivating recurrent motifs of the ancient world which is composed of a frontal central human figure flanked by animals such as bulls, goats, horses, or geese in profile. The Master or Mistress of Animals appears already in Near Eastern cylinder seals of the third millennium BCE (Figure 4.82),<sup>241</sup> and a female incarnation of this subject (related to the cult of the huntress Artemis) became popular throughout the Mediterranean as Potnia Theron.<sup>242</sup> Both male and female versions are frequently pictured in small items made from precious materials: the gold pendant in the Aegina Treasure (Figure 4.59), a fourteenth century BCE gold pendant from Minet el-Beidha (Syria) (Figure 4.83), a gold plaque from the c. 400-350 BCE Scythian site of Kul Oba in Crimea (Ukraine) (Figure 4.84), and ear pendants from Tombs 2 and 6 at Tillya Tepe (Afghanistan) (Figures 4.85 and 4.86). The Master of Animals theme is a likely source for several previously unexplained images from North China, including a Northern Wei gilt bronze coffin ornament of a figure surrounded by dragons from Northern Wei tombs in Guyuan 固原, in Ningxia (Figure 4.87), and an ornament from Hudong 湖東 in Datong, Shanxi (Figure 4.88), as well as a gold plaque with four horses from the Western Jin hoard found at Xiaobazitan 小壩子灘, in Ulangab League (Inner Mongolia) (Figure 4.89).

<sup>&</sup>lt;sup>240</sup> Whitfield, Roderick, ed., *Treasures from Korea: Art through 5000 Years* (London: British Museum Publications for the Trustees of the British Museum, 1984), 76.

<sup>&</sup>lt;sup>241</sup> Tallon, *Pierres Précieuses*, 97.

<sup>&</sup>lt;sup>242</sup> Peggy L. Day, "Anat: Ugarit's 'Mistress of Animals'" *Journal of Near Eastern Studies* 51.3 (1992): 181-190.

A similar path of transmission can also be constructed for imagery of the Tree of Life, normally portrayed as a plant between two confronted animals like lions, and the grimacing face of a bearded male deity, who is featured as a pendant hanging from the image of the Mistress of Animals from Kul Oba. In addition to these distinctive designs, one also sees the repetition of certain elements of dress, such as extravagant and impractical footwear: a pair of gold cut-outs for the soles of shoes in Tomb 3 at Tillya Tepe, ornately beaded and gold leaf-covered soles on a pair of woman's boots from Tomb 2 at Paryryk, and oversized gilt bronze shoes with repoussé soles from the fifth century Silla kingdom Singnichong tomb in Kyongju. In other cases, however, intermediary examples are harder to detect.

This point is illustrated by the abrupt reappearance of a penannular earring type from the Near East in the Murong tombs at Tiancaogou. Early versions of the earrings, exemplified by the Middle Bronze Age II (1550 – 1350 BCE) earrings from Tell el-'Ajjul in Palestine, are hollow and formed from two joined sheets of gold with two forwardfacing bails soldered to the top. Granulation decorates the surface and sometimes projects from the edges (Figure 4.90). A similar type with pendant discs or leaves inside or below the ring is seen much later at the Achaemenid site of Pasargadae, although the bails have disappeared and the granulation is paired with lacy filigree (Figure 4.91). The earrings from Tiancaogou (Figure 4.92) roughly replicate the rings and bails from Tell el-'Ajjul, while at the same time mimicking the wire and leaves projections that are so popular at Murong sites. These earrings are unlike any others found in East Asia, and there are no clear prototypes from Central Asia. What possible explanation is there for this revival? The answer is simple: the imitation of heirlooms. These clumsy Murong reproductions point to the copying of foreign earrings that had probably arrived in Northeast China via down-the-line trade. Xu Ji recognized this tendency twenty-five years ago—even before most of the Murong tombs had come to light—when he observed that Xianbei tombs contained three categories of material: products connected to Murong Xianbei culture, products imported from the Han, Xiongnu, or other cultures, and products made by the Xianbei but modeled on the craftsmanship of foreign and imported items.<sup>243</sup> A commonly cited example of this recycling phenomenon in Europe is a necklace from Kurgan 8 at the Southern Caucasian site of Trialeti in Georgia, which dates to the early second millennium (Figure 4.93). The necklace is an eclectic assemblage of locally made gold beads with raised bosses, a piece of agate probably from third millennium BCE southern Mesopotamia, a granulated setting with carnelian inlay that is related to examples from Byblos, Elba, and Alalca Höyük.<sup>244</sup>

In considering the role of the Murong in the so-called "swaying leaf" culture, we should think of the Murong along the same lines as the resourceful artisans who united the beads in the Trialeti necklace and the Sarmatian artisans who cobbled together the Khochlach Kurgan crown. These cultures seem not to have possessed the same set of goldsmithing skills as their predecessors or neighbors, yet they were able to mask the deficiencies of their industry by borrowing from others. A contrasting case is provided by the necklace from Tomb 5 at Tillya Tepe (Figure 49), which appears to be a highly adept recreation of an earlier and more rudimentary style. At first glance, the discs at the

<sup>&</sup>lt;sup>243</sup> Xu, Xianbei, Sanguo, Gufen.

<sup>&</sup>lt;sup>244</sup> Aruz, Benzel, and Evans, eds., *Beyond Babylon*, 101-102.

lower edge of this collar-like necklace appear to be constructed in the same manner as the long-necked integral bails suspended from the two-headed pectoral and Master of Animals pendant from the Aegina Treasure. Upon closer examination, however, it turns out that the bails are made from separate wires that have been flattened and bonded to the back of the discs, then wound into loops at that recall the antique style (Figure 4.94).

These examples highlight the importance of examining not only the dispersion of a decorative tradition across time and territory, but also the way in which it is executed. As I have shown here, these seemingly minor differences in the manufacture of gold leaves across Eurasia convey essential information about where direct contact between cultures realistically could have taken place as a result of migration, commerce, or diplomacy, e.g. between Crete and Aegina, between Tillya Tepe and the Caucasus, or between Liaoning and Silla. The same details can also alert us to the disparate artistic repertoires of two groups of artisans separated by a significant gap of time or space. In these cases, it is heirlooms rather than people that act as intermediaries. Thus, even when these mediating objects have been lost, the lack of an obvious trail of archaeological remains between two cultures might not disprove the existence of some connection between them.

Did the Murong artisans look to the leafy wreaths of Ur for inspiration? It is doubtful. Could they have seen gold wire trees with fluttering pendant leaves that originated at Tillya Tepe? It is possible. Moreover, if we dig deeply enough, we may discover that those trees in fact have their own Mediterranean or Near Eastern roots.

### CHAPTER 5: THE "STEP-SWAY," THE STEPPES WAY

## **1. Introduction**

In the previous chapter, we explored the evidence for the Western origins of the gold objects with pendant leaves identified by early Chinese historians as "step-sway" ornaments. In this chapter, we shall return to the objects themselves in order to investigate their form, function, and fabrication. Specifically, this chapter will address the following questions: Which elements demonstrate how they were worn on the body? How exactly were they manufactured? How do the ornaments' design, positioning, and construction impact our understanding of their origins? This chapter will conclude with a discussion of the goldsmithing repertoire of the Murong craftsman in relation to the technologies available outside Liaoning.

## 2. Form and Function

In considering how the gold ornaments were worn, the most logical place to begin is in the graves where the Murong ornaments were excavated. If the decorations were worn on the head, one would expect their location in relation to the tomb occupant's body to corroborate this fact. Surprisingly though, very little information about the positioning of the ornaments is available. The report from Fangshen mentions only that various gold ornaments with attached discs were excavated from a joint male and female burial (Tomb 2).<sup>245</sup> The tomb of Feng Sufu (Figure 2.30) and Tombs 1 and 2 at Tiancaogou (Figures 2.19 and 2.21) are all single burials but the locations of the ornaments are not

<sup>&</sup>lt;sup>245</sup> Chen, "Fangshen."

specified.<sup>246</sup> Only a selection of the contents of Tomb M8713 were reported, and the objects from 88M1 at Shi'ertai (Figure 2.7)—which may or may not have included a "step-sway"—were placed on top of the coffin rather than inside of it.<sup>247</sup> The bird ornament from Maolitu (Figure 2.39) and the bovine- and deer-headed ornaments from Xihexi (Figure 2.40 and 1.41) were uncovered in contexts without human remains.<sup>248</sup> Only in the case of Tomb 7 at Lamadong has the layout of the grave goods been preserved and recorded: the ornament was directly above the skull, which was the only part of the skeleton remaining in the tomb. However, this tomb is unique among the Lamadong finds because it is thought to have been a reburial.<sup>249</sup>

Consequently, the location of the mysterious wire trees with square bases on the body must be determined by way of comparison to related materials like the crowns and diadems described in the preceding chapter. For example, photographs from the excavation of Tomb 6 at Tillya Tepe provide unambiguous evidence for the placement of the gold crown from atop the head, with the central openwork tree inserted into the diadem at the center of the forehead (Figure 5.1). An even closer parallel is found in the headdress ornaments from Kurgan 10 at the Kobiakovo cemetery, which included a single tree (Figure 4.55). Because they were scattered around the head and show no signs of attachment to a diadem, it is thought that they were affixed to a fabric cap.

Yet it is not these gold crowns from lands to the west that are called upon as evidence for the wearing of the Liaoning ornaments at the front of the head. Instead, for reasons explained in Chapter 2, most current scholarship assumes this positioning on the

<sup>&</sup>lt;sup>246</sup> Wan, Wang, and Zhang, "Tiancaogou," and Li "Feng Sufu mu."

<sup>&</sup>lt;sup>247</sup> Sun, Tian, and Zhang, "Shi'ertai 88M1," and Shang, "Wangzifenshan."

<sup>&</sup>lt;sup>248</sup> Zhao, "Maolitu."

<sup>&</sup>lt;sup>249</sup> Tian and Zhang, "Lamadong."

basis of the openwork *dang* of the Han, Jin, and Northern Dynasties periods, as well as a variation that was worn by court officials during Korea's Three Kingdom's period.

## 2.1 Caps, Helmets, and Finials

Before delving into the positioning of the Murong cap ornaments, let us consider the fabric caps to which they were supposed to have been attached. A rough sketch of Murong headgear may be assembled from a few paintings that survive on the walls of tombs, even though the images are often damaged or indistinct. In a scene depicting a husband and wife in the painted Jin dynasty tomb at Yuantaizi in Liaoning, the wife sits on the left wearing a rather elaborate headdress with folded elements and fluttering ribbons (Figure 5.2).<sup>250</sup> On the right, the husband wears a fabric cap with similar pendant fabric strips. Other images of men in the same tomb render men's headgear as conical or domed caps with inserted horizontal elements and fabric hanging at the sides of the face.

An idea of the three-dimensional appearance of these caps can be gleaned from ceramic tomb figurines, although these survive in greater numbers in the Tuoba Xianbei tombs of Inner Mongolia than in the Murong tombs of Liaoning. A very simply rendered six-inch-tall figure was found in a Murong tomb at Qianshan 前山, in Southern Liaoning near Jinzhou, which is believed to date to the Former Yan period (Figure 5.3). In spite of the lack of detail, one can discern atop the head a pyramidal four-sided cap with lines incised at the seams, and long pieces of fabric hanging down over the ears. This

<sup>&</sup>lt;sup>250</sup> Li, "Yuantaizi," 41, Fig. 39.

indistinct picture is sharpened by two guardian figures and a troupe of musicians unearthed at a fifth century CE Northern Wei double burial in Huhhot (Figure 5.4).<sup>251</sup>

The guardians stand at about 16 inches tall and consist of hollow bodies with removable heads and hands. Their helmet-like caps are slightly conical and are edged in red paint. The fabric is gathered at the top of the head and hangs in long flaps at the sides of the face and down the back of the neck. A point emerged just over the brow—a feature not seen in the figurine from Qianshan but visible on the cap of one of the musicians from Huhhot, which range in height from 15 to 19 inches. A standing figure wears a tall conical hat in four sections, with a band around the bottom and a flap of fabric hanging down (Figure 5.5). Where the sections of the hat join together, there are four seams, each consisting of a crookedly incised center line with projecting horizontal lines representing thread. The seams are perceptible on the hats of other musicians, including one seated figure in a red robe whose cap is pointed at the forehead like those of the guardians. Even more structural features of nomad hats are revealed by excavated examples of the hats themselves.

The Xiongnu burials at Noin Ula in Northern Mongolia, excavated between 1924 and 1925, date to about the first century BCE to the first century CE.<sup>252</sup> Tomb 6 contained several well-preserved textiles, including a 14-inch-tall cap quilted with felt and edged in silk (Figure 5.6). The cap was made from two bell-shaped pieces of fabric stiffened with a birch bark lining and stitched together in a thick seam running from the forehead to the neck. Originally it would have been fastened under the chin by the silk

<sup>&</sup>lt;sup>251</sup> Adam T. Kessler, *Empires Beyond the Great Wall: The Heritage of Genghis Khan* (Los Angeles: Natural History Museum of Los Angeles County, 1993), 81-87, Figs. 50 and 51.

 <sup>&</sup>lt;sup>252</sup> Camilla Trever, Excavations in Northern Mongolia, 1924-25 (Leningrad [St. Petersburg]: J. Fedorov, 1932): 42.

ribbons on either side. This cap is similar in height, shape and construction to those pictured on the ceramic figurines, except that it has a wider brim and has been made in two pieces rather than four. Regardless, it is clear that visible seams figured prominently into the design of hats worn by the Xianbei and their immediate antecedents, the Xiongnu.

This fact is of interest here because it may explain one curious feature of the design of the step-sway: a raised ridge that invariably runs down the center of their bases. While one may easily guess at the function of the holes at the corners of the ornaments from Wangzifenshan, Fangshen, and Lamadong—this is where they were sewn or riveted onto the front of a cap—the ridge is almost never mentioned. Presumably, if it had no function, it would have been omitted occasionally, as the non-functional openwork was from the Lamadong ornament. On the contrary, the ridge is always present, conveniently bending over the protruding seams of the woven and felt caps worn by the Murong. The presence of prominent seams may also explain the X-shaped gold strips in the tomb of Feng Sufu (Figure 3.15) and the disc-covered gold strips found at Fangshen (Figure 2.10), would have been perfectly suited to covering the unsightly stitching of the cap.

Helmets, however, imply different positioning though. The domed helmets uncovered at Lamadong Tombs IM17 and IM5 and Shi'ertai Tomb 88M1 consist of strips or scales of iron fastened together by rivets Figures 5.7, 5.8 and 5.9). The latter two examples have more than 30 individual pieces and are surmounted by a finial, which has also been affixed with rivets. Both Caucasian and Chinese origins have been posited for the helmets with peaked brows, but the use of iron scales atop a leather cap has clear predecessors in Parthian cataphract armor.<sup>253</sup> Once again, depictions of these objects in the Northern Wei tombs of the Tuoba Xianbei furnish a more complete understanding of how they originally looked. An 18-inch-tall ceramic figurine of a mounted warrior on horseback from a Northern Wei tomb in the Pengyang 彭陽 district of Xinji 新集 in Southern Ningxia wears a helmet of the first type, which terminates in an undecorated rounded cylinder (Figure 5.10),<sup>254</sup> while the second type is depicted on fragments of painted leather from Tomb 7 at Shaling 沙嶺, near Datong in Shanxi, dated to 435 CE (Figure 5.11 and 5.12).<sup>255</sup>

These paintings reveal that while Xianbei helmets were sometimes decorated with plaques at the forehead, they might also have finials holding a plume of animal hair, feathers, or ribbons projecting from the crown of the head that are akin to the "flowering top" ornaments described by Sun Guoping. The possibility of finials in a Murong context is strengthened by the gold and turquoise eagle cap from Aluchaideng (Figure 4.38) and the early Xianbei gold bird from Maolitu with pendant discs (Figure 2.39). It is also consistent with the leafy finial atop the headdress from the tomb of Feng Sufu (Figure 3.15) and the Korean finials with radiating arms from the Lucky Phoenix Tomb (Figure 4.1) and Tomb 37 at Pisan-dong (Figure 4.2).

At least two additional examples have been uncovered in Murong tombs: an 11.5inch-tall gilt bronze finial with one remaining sheet gold leaf, found at the front end of

<sup>&</sup>lt;sup>253</sup> Lebedynsky, Les Saces, 201-202.

<sup>&</sup>lt;sup>254</sup> Ningxia Huizu Zizhiqu Guyuan bo wu guan, *Yuanzhou gumu jicheng* (Wenwu chubanshe), Pl. 9.
<sup>255</sup> Gao Feng, Li Ye, Zhang Haiyan, Yuan Xinhua, Jiang Weiwei, and Liu Junxi, "Shanxi Datong Shaling Bei Wei bihua mu fajue jianbao," *Wenwu* 2006.10: 15, Fig. 27, and 22, Fig. 47.

the coffin of Tomb 2 at Tiancaogou (Figure 5.13),<sup>256</sup> and a ten-inch tall gilt bronze ornament with attached leaves in the Chaoyang Museum, whose exact origins are unknown (Figure 5.14).<sup>257</sup> However, as noted in Chapter 2, similar objects called *yunzhu* 雲珠 (which fall into Sun Guoping's "bubble ornament" category) were originally placed on a horse's backside, a prime location for ornaments that shimmer or jingle (Figure 5.15).

### 2.2 The Persistence of the Dang

The more popular understanding of the step-sway is that it mimicked the design and positioning of the Chinese *dang*. As we recall, the *dang* was a frontal piece for an official cap that was usually fashioned from gold, often in the shape of a cicada. The tomb of Feng Sufu contained four plaques: two with rounded shoulders that depicted cicadas, and two with peaked upper edges that were plain-faced and held a repoussé seated figure. The first two (Figures 2.33 and 2.34) are clear imitations of the *dang* discussed in Chapters 2 and 3, which are pictures in the Thirteen Emperors Scroll and have been unearthed in Jin dynasty Chinese tombs, especially in the Nanjing region. The third and fourth plaques (Figure 2.35 and 2.36) are of a slightly different type, but they are very clearly pictured at the foreheads of figures in Northern Dynasties tombs. A peaked square with narrowing edges can just be made out in front of the headdress on a Northern Wei ceramic head from Yongningsi 永寧寺 in Luoyang that dates to c. 516 CE (Figure 5.16), and a wall painting of a door guardian from the Northern Qi 北齊 tomb of

<sup>&</sup>lt;sup>256</sup> Wan, Wang, and Zhang, "Tiancaogou," 37.

<sup>&</sup>lt;sup>257</sup> Tian and Li, "San Yan wenhua yiwu," 29, No. 38; 25, Fig. 16.1; 28, Fig. 26.

Lou Rui 婁睿, which dates to 570 CE (Figure 5.17).<sup>258</sup> This peaked shape also constitutes the frontal piece of several Korean crowns, including a fifth century CE silver crown from the fifth century Hwangnam Great Tomb in Silla (Figure 5.18), as well as a two-branched gold crown ornament from the same tomb (Figure 5.19).<sup>259</sup>

Although the four plaques from Feng's tomb compellingly demonstrate the persistence of the *dang* tradition in the fifth century, it should be remembered that these shapes are unknown in the remainder of these tombs, except for a very simple plaque from Tomb M188 that will be discussed below. Otherwise, the next closest examples are the openwork square plaques from Tomb 2 at Fangshen and Tomb 1 at Tiancaogou, which are not pictured in Chinese tomb paintings or figurines (Figures 2.10, 2.12, 2.24 and 2.25). However, they do sometimes appear creased down the center and incorporated into helmet-like crowns from Korea, as in the case of a silver crown also from the Hwangnam Great Tomb (Figure 5.20).<sup>260</sup> A reconstruction of the sixth century court of King Muryong 武寧 (r. 501-523 CE) of Paekje in the Paekche Historical Museum (Figure 5.21) imagines the openwork sheet gold items found in his tomb as ornaments for official caps. Similar but flat fifth century Kofun example with raised bosses and attached leaves was uncovered in Tomb 126 at the Niizawa Senzuku, in Kashihara 橿原, near Nara 奈良 (Figure 5.22).<sup>261</sup>

 <sup>&</sup>lt;sup>258</sup> Du Yusheng, "Bei Wei Yongning sita ji fajue jianbao" *Kaogu* 1981.3 (1981): 212, 223-224, and
 Taiyuan shi wenwu kaogu yanjiusuo, *Lou Rui Bei Qi mu* (Beijing: Cultural Relics Press, 2004), 29.
 <sup>259</sup> Gyeongju National Museum, *Sinbihan hwanggum ui nara Silla hwanggum [The Golden Arts of Silla]*

신비한황금의나라 (Seoul: Sit'i P'at'ŭnŏ, 2001) 47, Cat. 16, and 59, Cat. 24.

<sup>&</sup>lt;sup>260</sup> Gyeongju National Museum, *Silla*, 53, Cat. 20.

<sup>&</sup>lt;sup>261</sup> Kubo Tomoyasu, "Kigiri Kanagu," Nihon no Bijutsu 437 (Oct. 2001), Fig. 1.

When the Murong settled in Northeast China several centuries later, they rode on horseback rather than in chariots, and they invested heavily in the decoration of their horse gear. Murong saddle cantle covers occupy the same highly visible area as the arches on the Pazyryk saddles, but they were usually fashioned form gilt bronze and patterned with openwork or engraved designs of hexagons enclosing figures, dragons, and hybrid creatures (Figure 5.25). On the other hand, the Murong did continue the steppe practice of archery. Thus the discovery near the feet of the occupant of Tomb 88MI at Shi'ertai of a bronze quiver cover with a three-peaked upper rim and perforations along the edges (Figure 2.38) might be understood as an extension of the attachment of square silver openwork plaques to a quiver fastened to the side of a Majiayuan chariot (Figure 5.26).

<sup>&</sup>lt;sup>262</sup> Fang Zhijun, Ma Mingyuan, Zhou Guangji, and Xie Yan, "2006 nian Gansu Zhangjiachuan Hui zu zizhixian zhanguo mudi fajue jianbao, *Wenwu* 2008.9 (2006): 11, Fig. 17, and 60, Fig. 24.

In general, gilt bronze openwork is a hallmark of Murong, Korean, and Japanese bronze accessories and horse trappings, most notably gilt bronze belt plaques and saddle cantle covers. However, the impulse to decorate surfaces with lacy gold plaques arises in Buddhist art as well. At the monastery of Horyūji 法隆寺 outside Nara, openwork plaques linked to one another in a chain form a seventh century CE *keman* 華鬘 (an ornament normally made from fabric) (Figure 5.27) and protect the exposed ends of the cantilever arms supporting the roof eaves on the 710 CE reconstructed seven-story pagoda (Figure 5.28).<sup>263</sup> These ceremonial and architectural functions, combined with the military application mentioned above, cast doubt on the supposition that the square openwork plaques from Fangshen and Tiancaogou were worn at the front of a fabric cap. Moreover, given the breadth of uses for openwork gold plaques in Eurasia in the first millennium CE, we also might question the assumption that the Murong artists borrowed the shape of the bases from Chinese *dang* or whether they were mimicking head ornaments at all.

## 2.3 The Missing Link: Steppe Belts

A common misconception about the seven-or-so gold ornaments with openwork bases and wire branches with swaying leaves on the top is that they represent a direct emulation of *dang*. While the square silhouette with rounded shoulders certainly could have been borrowed from the frontal plaques of Chinese courtiers or the "mountainshaped frontal piece" (*shan ti* 山題) of ladies' *buyao*, the openwork decoration of symmetrical "curled leaves" or "cloud scrolls" does not correspond to any known cap ornaments. Instead, it derives from a source not worn on the head at all: belt plaques.

<sup>&</sup>lt;sup>263</sup> Kubo Tomoyasu, "Kigiri Kanagu," Nihon no Bijutsu 437 (Oct. 2001), Figs. 1 and 4.

These are not the large horizontal buckles with animal combat scenes that one normally associates with the Xiongnu. These plaques run around the entire circumference of the belt and are more diminutive in size.

Sun Ji, in his collected essays on clothing and personal adornment in China, has written on the usage of waist belts in early China. He has noted that loose-fitting pre-Qin Chinese costume did not require belts, and that the earliest belts were simply made of cloth and knotted at the front. However, as horse-riding became more popular in China, there arose a need for more tightly fitted garments, and steppe cultures introduced leather belts that could support hanging elements. By the Spring and Autumn period, curved bronze belt hooks were commonly used to fasten their ends, and sometimes the band encircling the waist was decorated with small plaques, as well.<sup>264</sup> Rows of belt ornaments in clamshell and other materials have been excavated in Henan as early as the late Western Zhou and early Spring and Autumn period, but the earliest complete examples that retain their backing materials are two leather belts from Tomb 45 at the Zhoujiadi  $\exists x \ddagger$  cemetery in Aohan  $\mbox{bmat}$  banner, Inner Mongolia (Figure 5.29).<sup>265</sup>

The bronze plaques on the more narrow of the two belts from Tomb 45 were shaped like two slightly protruding circles, with one placed on top of the other (Figure 5.30). Protruding rings on their backs were pushed through the leather belt, and a string was passed through them to secure them in place. <sup>266</sup> This vertically oriented design affixes the ornament to the belt in two places, and a belt with comparable small plaques encircles the waist of the "Golden man" at Issyk. Thirteen hourglass-shaped repoussé

<sup>&</sup>lt;sup>264</sup> Sun Ji, *Zhongguo gu yufu luncong* (Beijing : Wenwu Press, 2001): 253-292.

<sup>&</sup>lt;sup>265</sup> Gu Zhijie and Yang Hu, "Nei Menggu Aohan qi Zhoujiadi mudu fajue jianbao," *Kaogu* 1984.5 (1984): 417-426.

<sup>&</sup>lt;sup>266</sup> Sun, Zhongguo gu yufu luncong, 256-7.

plaques taper inward at the center and have two rings on the back for mounting on a belt (Figure 5.31). The precursor to this system, found on the belt of the man in Tomb 5 at Arzhan 2, involves wrapping the ornament vertically around the leather belt rather than puncturing it (Figure 5.32).<sup>267</sup> Large quantities of similarly structured gilt bronze plaques with knobs at the back were collected at Aluchaideng as well.

Beginning in the Han dynasty, two types of belts gained popularity China: the *kua dai* 銙带 and the *diexie dai* 蹀躞带. *Kua* belts consist of a series of plaques, placed at variable distances from one another, with rings suspended from their lower edge (Figure 5.33). These rings were functional—they allowed the wearer to attach objects like knives, tallies, small bottles, etc. using string. The *diexie* is also a sort of utility belt, except that strips of leather hang down from the belt instead of rings, and some of these have attached accessories, such as leather pouches (Figure 5.34).<sup>268</sup> Most Western studies have focused attention on the elaborate buckles at the ends of belts, perhaps because they occur with more regularity than the elements attached at intervals along the band of the kua. However, the plaques with pendant rings merit attention because their design became standardized, barely changing between the second and fourth centuries CE. This form spread to Korea and Japan during the Jin dynasty and remained popular in China through the Tang and Liao dynasties (Figure 5.35).<sup>269</sup>

A single *kua* ornament from Tomb 43 in Ding  $\neq$  county, Hebei, dates to the Han dynasty and appears to be the earliest example in China proper (Figure 5.36).<sup>270</sup> The

<sup>&</sup>lt;sup>267</sup> Antonini, Baipakov, and Popescu, eds., L'Uomo D'Oro, 184, Fig. 307-319.

<sup>&</sup>lt;sup>268</sup> Sun, Zhongguo gu yufu luncong, 269-270.

<sup>&</sup>lt;sup>269</sup> Sun, Zhongguo gu yufu luncong, 270.

<sup>&</sup>lt;sup>270</sup> Dingxian bowuguan, "Hebei Dingxian 43 hao Han mu fajue jianbao," *Wenwu* 1973. 11: 10, Fig. 2.4.

plaques consist of tall rectangles that are cinched at the center. The corners project outwards slightly to accommodate holes for rivets. A raised ridge at the center was either hammered into the design or applied as a strip of metal and fastened in place with rivets. On either side of the ridge are openwork shapes resembling commas. A bail projects from the bottom edge and holds in place an inverted mushroom-shaped ring. By the Jin dynasty, the ring sometimes takes on a heart- or leaf-shaped appearance, and the surface is embellished with incised lines or raised dots.

If the description sounds familiar, that is because it is essentially an inversion of the step-sway, minus the tree (Figures 2.4, 2.8, 2.9, 2.16, 2.22 and 2.23). In fact, the openwork of several of the *kua* plaques explains the source of the four pairs of comma shapes on the Murong bases. The openwork was probably initially intended to create a fleur-de-lis profile. However, because the sheet gold was too thin and delicate to support the same shape, a small bridge of material (like those found in stencils) had to be added. The peculiar flame shape at the center of the branches of the Murong step-sway ornaments might then be understood as a variation of the pendant ring at the bottom of *kua* plaques. We shall return to this possibility in the next section. One also wonders if at one time in their development the branches and leaves pointed downward, like a spray of cassia suspended from a ring on one's belt.

*Kua* belts of the Jin dynasty and in Korea's Three Kingdoms were routinely covered with pendant gold leaves or discs, as we see in a gilt bronze belt from Lamadong II Tomb 196 (Figure 5.37). Indeed, 24 sheet gold petals with pierced tips were found in
the same tomb in Ding county where the plaque was found.<sup>271</sup> This association, and the great importance of belts in the Han and Jin dynasty, is also confirmed by a painting in the mid to late fourth century CE Murong tomb at Yuantaizi in Liaoning (Figure 5.38). The rear wall of Han, Jin, Northern Dynasties, and Koguryŏ tombs frequently contain paintings of male seated figure wearing official Han dynasty dress. These appear to be portraits of the tomb occupant, but it is impossible to say for certain. Examples include the Han dynasty tomb at Anping 安平 (176 CE) (Figure 5.39), the mid fourth century CE tomb of Dong Shou 佟壽 in Anak, North Korea (Figure 5.40), and the 408-9 CE Tokhungri Tomb in Kangso, slightly further south (Figure 5.41).<sup>272</sup> Each of these portraits follows a rigid formula: the deceased sits on a low couch faces forward and wears an official cap and loose-fitting Chinese robes (in spite of the fashion for tighter fitting clothes by the Jin). In his proper right hand, he raises a fan at chest or shoulder level, while the left hand hovers near the waist.<sup>273</sup> The fans constituted an important costume element and were probably enclosed in the tomb with him, as in the case of a feather-shaped silver object with a fringed edge in the tomb of Feng Sufu (Figure 5.42), which bears a striking resemblance to the fan pictured in Dong Shou's tomb.

Little attention has been paid to the other hand, though. At first glance, it resembles later images of seated Buddhas with one hand touching the ground in *bhumisparsha* mudra and the other facing palm-up in *dhyana* mudra. Yet in the portrait of Dong Shou, he seems to gesture towards the waistband. In the occupant portrait from

<sup>&</sup>lt;sup>271</sup> Dingxian bowuguan, "Dingxian," 9, Fig. 28.12 and 28.28.

<sup>&</sup>lt;sup>272</sup> Hebei sheng wenwu yanjiusuo, *Hebei gudai muzang*, Pl. 29; Lena Kim, *Koguryo Tomb Murals* (Seoul: ICOMOS-Korea, 2004), 7, 19.

<sup>&</sup>lt;sup>273</sup> Audrey Spiro, *Contemplating the Ancients: Aesthetic and Social Issues in Early Chinese Portraiture* (Berkeley: University of California, 1990), 37-38.

Yuantaizi, the occupant even seems to be touching his belt, and a faintly visible object extends just beyond his fingertips. A horizontal line runs down its center, and several hastily applied black dots cover its surface. This image, which dates to the Former or Later Yan dynasty, may indicate that the occupant was wearing a *kua* belt covered in gold leaves like the one from Lamadong, and his pointing toward it in this somber and official setting conveys its weighty symbolic value to its owner.

If this reading of the Yuantaizi painting is correct, then the Murong step-sway ornaments might not be cap ornaments at all. It is equally possible they were modeled on *kua* belts plaques that were accidentally or intentionally flipped upside down and mounted on the front of caps. In any event, the construction of the ornaments reveals a much stronger connection to the *kua* belt plaques of the Han and Jin dynasty than to *dang* or any of the crowns discussed in Chapter 4.

### 3. Fabrication

Until now, no author has attempted to explain exactly how the Murong "stepsway" ornaments were made. This is perhaps because they are entirely unique in their fabrication, and the traces of the process have been erased or disguised by finishing. The task is made all the more difficult by the fact that museums across North China display replicas these ornaments without labeling them as such, making it difficult to distinguish modern brass from ancient gold. It is only through the examination of photographic reproductions of the originals that the process of their manufacture can be reconstructed with confidence. In an effort to uncover this mystery, I have studied modern metalsmithing at Moore College of Art & Design, and my findings about the manufacture of the step-sway ornaments are presented below.

# 3.1 The Making of the Step-sway

The base of the ornaments is made from a single piece of sheet gold which has been beaten thin enough that it is easily cut. Although there are no surviving treatises about the production of gold foil in medieval China, the technique was probably fairly comparable to those used other parts of the ancient world. According to medieval accounts in Christian Europe, gold leaf was made by interspersing coarsely hammered sheets with parchment covered in burnt ochre (which is still used in goldsmithing today as sort of nonreactive shield). The sheets would then be encased in a vellum pouch and beaten on the outside with a hammer. Presumably the basic tools for this thinning technique—a hammer and animal skins—were available to the Murong.<sup>274</sup>

After the sheet was formed, it was cut into a square with sloping shoulders, probably with a small rectangular projection left on the upper edge. The straight, uninterrupted edges of most of the ornaments suggest that scissors were used. Iron scissors have been uncovered in post-Han tombs throughout China, but they were fairly coarse instruments and might be more aptly described as shears. They also posed the added danger of sticking to the metal they were supposed to cut, but the Murong ornaments were thick enough that this seems not to have been a problem.

At the center of the ornaments is a raised ridge, and this is perhaps their most puzzling feature. As mentioned above, these might have covered a forward-facing seam. The ridges are perfectly straight and must have been formed by molding the pliable gold

<sup>&</sup>lt;sup>274</sup> Eric D. Nicholson, "The Ancient Craft of Gold Beating," Gold Bulletin 12 (1979): 161-6.

around a rod made from another material, like a bronze hairpin, but none has been found attached to or closely associated with the step-sway ornaments. In the upper portion of the plaques, the ridges terminate unexpectedly. If they covered a seam on a hat, the ridge would not need to extend any further than this because the hat would curve back away from the base. However, this might have been a coincidence, as the bases seem to have been inherited from the Han dynasty *kua* belt plaques.

A chisel was most likely used for the comma-shaped openings, and its cutting edge would be placed against the sheet while the other end was struck with a hammer. Punches are another option, but the edges are ragged and irregular, in contrast with the perfectly circular punched discs on the ornaments from Tillya Tepe. Moreover, the force from punch would probably cause the thin gold to tear. As was mentioned earlier, it is clear from the decoration of contemporary and earlier belt plaques that the intended visual effect was not one of two commas but of a single openwork area in the approximate shape of a "3." The positive shape enclosed by it resembles a trefoil or a fleur-de-lis.

On the ornaments from Tiancaogou, Fangshen, and Wangzifenshan (Figures 2.4, 2.8, 2.9, 2.22, and 2.23), the outer edge of the base (and in some cases, the edges of the openwork) has been lined with small raised dots. These are achieved using a dapping punch, which like a chisel is struck from behind by a hammer. Today, dapping punches consist of a rod and a spherical head, but the Murong artisans might have used something as simple as a needle or a pointed stick. The ornaments from Wangzifenshan and Lamadong, as well as the larger ornament from Fangshen, have all been pierced at the corners, presumably to attach the ornaments to a fabric cap.

The pendant sheet gold leaves were also cut from sheet gold, and for the most part are uniform within each object. They are droplet-shaped, pointed on only one end, and have no surface adornment, unlike the naturalistic leaves on the wreaths at Ur. The leaves on the Tiancaogou and Fangshen ornaments curl downward at the edges, suggesting the use of either a punch or a poorly made pair of scissors, in which a gap between the blades forced the metal downward before cutting it (Figure 5.43). Those from Wangzifenshan and Lamadong are cut more cleanly (Figures 2.4 and 2.16). They are also set apart from the Fengshen ornaments by the larger size of the leaves in relation to the branches and base, their fewer branches, and their relative lack of surface ornamentation.

A flat stalk grows out of the top edge of each base, dividing into two stalks and then reuniting at the top to form a flame-shaped opening with wavy edges. These vary substantially in style, but in all cases except for Wagzifenshan and the smaller ornament from Tiancaogou, an additional stalk with three projecting branches has been added inside the flame-shape. The branches are made from strip-twisted wire (see below), but the means by which they are attached to the main stalks is extremely difficult to ascertain. I was only able to determine the method after carefully inspecting the various ways in which wires were attached to stalks in the gold-wrapped hairpins from Issyk (Figure 4.28), the tree-shaped finial from Tomb 4 at Tillya Tepe (Figure 4.46), the trees on the crown from the Khokhlach kurgan (Figure 4.51), the antlered deer- and bovine-headed ornaments from Xihezi (Figures 2.40 and 2.41), and the finial from the tomb of Feng Sufu (Figure 3.16).

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In the case of the hairpins from Issyk, the method of attachment is fairly straightforward: thin wires were wound around the hairpins at intervals and then looped at the ends, creating an overall impression much like the Lamadong ornament. The treeshaped finial from Tillya Tepe, on the other hand, is a far more complicated case. Its central stalk is made from thick hammered wire, and its projecting branches are made from thinner wire whose end were flattened and placed against the central stalk. Once they had been smoothed or hammered tightly against the stalk, the join was secured by soldering. In the uppermost intersection of branches, thin bridges of solder is visible between the branches and the stalk (Figure 5.44). A related system can be detected in the trees of the Khokhlach kurgan crown. The lower portions of the trees are essentially hairpins mounted inside the diadem, as we see in the crown from Tomb 6 at Tillya Tepe. Meanwhile, the upper portion has also been formed by flattening thick wires and wrapping them around the base. Additional branches have been connected in the same manner, their flattened wire ends forming cuffs around several branches. Limited photographic evidence makes it difficult to determine whether soldering was used, but given the inclusion of separate bails on the pendant leaves, it is likely.

These two examples highlight the fact that round wires were originally composed of flat strips of gold sheet, and that areas that appear flat might once have been round in cross-section. The antlers/branches of the bovine-headed and deer-headed ornaments from Xihexi began as thick wires, their branches added in more or less the same way as described above, and then they were flattened to different degrees. Unlike the preceding examples, however, their joins were expertly finished and cleverly hidden by inlaid stones. We can be certain of the use of advanced joining techniques because of the

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extensive use of granulation, which, like soldering, requires a concentrated flame. The construction of these branches and the extensive use of granulation and inlay both point to the advanced skills of their creators. Chinese scholars have normally dated these objects to the Northern Wei period, but I believe they were either much earlier imports from abroad or were made by Northern Zhou workshops.<sup>275</sup>

Returning our attention to the Murong tombs of Northeast China, we again find a related technique in the finial from the tomb of Feng Sufu. Wires with flattened ends line the interior of the bowl-shaped base, and they have been secured by means of rivets (Figure 5.45). Riveting, like hammering and wire-wrapping, is a variety of joinery that does not require the localized application of heat. In fact, the Murong may not have needed torches at all to make the step-sway ornaments. They began with gold wires flattened at one end, and either by wrapping or hammering, they attached them to one another one at a time to form a ring (Figure 5.46). Although soldering or copper diffusion bonding would strengthen these connections, wrapping, hammering, and riveting all would have been sufficient to secure them. With general heating, the ring would become pliable and could be stretched out into a long narrow flame-shape terminating in a single branch, which was then hammered flat.

The ring could then be affixed to the ornament by means of a bail made from the projecting flap on top of the base, as the rings on the *kua* belts were. The flap was folded over onto itself and closed by a rivet. The ornament from Wangzifenshan represents a slight variation: the branches formed a U instead of a ring, and an extra branch (flattened at its middle) was inserted through the bail (Figure 5.47). In addition, the tripartite

<sup>&</sup>lt;sup>275</sup> Chen and Lu, "Damao."

branches seen on the Lamadong, Fangshen, and Tiancaogou ornaments could be added when the bail was riveted closed.

The smaller Tiancaogou ornament is the only significant departure from this procedure, and its zigzagging stalk appears to be an attempt to imitate the wavy edges of the flame-shaped stalks of the other ornaments. Its smaller branches were added in much the same way as those visible on the Khokhlach kurgan crown—some having been finished by hammering and others not (Figure 5.48). However, what the artist may not have understood was that the undulations of the other ornaments were not arbitrary. They were the unintended result of the manufacturing process. The presence winin a single tomb (Tiancaogou Tomb 2) of two ornaments conceived so differently suggests that the smaller one is a later imitation of the larger. This possibility is all the more likely when one considers the disc-shaped earrings with pendant leaves from Tiancaogou Tomb 1, which seem to rely on now-missing models from further west (Figure 4.92).

#### 3.2 The Murong goldsmith and his neighbors

The Murong, like other cultures in gold-rich areas of the ancient world, probably gravitated towards gold because it occurs in visible deposits in nature and is easily workable. Placer deposits (*shajin* 沙金 or "sand gold") occur when flakes of gold from subterranean deposits are transported down mountain by streams, combine with other minerals, and sink down to the riverbed. However, the mining of vein or lode deposits (*shanjin* 山金 or "mountain gold"), which are embedded in quartz sulfides or in igneous rocks, does not seem to have been practiced until later periods of Chinese history.<sup>276</sup>

<sup>&</sup>lt;sup>276</sup> Ogden, *Jewellery of the Ancient World*, 10, and Peter Golas, *Science and Civilisation in China*, Vol. 5: *Chemistry and Chemical Technology*, Pt. XIII: *Mining* (Cambridge: Cambridge UP, 1999) 111-113.

Placer gold sits is relatively pure in comparison to other metals, containing only about 5 to 30% silver and 1% or less copper. Chinese gold tends to be lower in purity than Hellenistic or Roman gold, but this is undoubtedly because of the recycling of the gold coinage in these areas. Ur and Etruria, in spite of their exceptional gold industries, had relatively low purity levels (65 to 80%) for the same reason.<sup>277</sup> Impurities cause slight differences in color—higher amounts of silver result in a lighter, more silvery color, while large amounts of copper will turn the color more pink (Figure 5.49). Variations in color indicate the ratio of the metals in a gold alloy, small amounts of copper, iron, etc. will migrate to the surface and corrode.<sup>278</sup> The pinkish coloring of some of the Murong ear pendants and traces of corpors.

The making of thin gold sheets, described above, is one of the most straightforward techniques employed in the ancient world. Beating does require repeated annealing (heating of the gold to make it malleable), but this process can be undertaken on a small scale and without elaborate furnaces or massive quantities of fuel. With gold sheet on hand, wire was relatively easy to produce (Figure 5.50). The easiest approach is hammering, which results in a faceted wire of uneven diameter that can be further refined by rolling between two wooden boards. It can be identified by its solid cross-section and creases that appear as longitudinal streaks. Block-twisting is similar, except that a thick sheet is cut into strips with square cross-sections, and then they are twisted and rolled between boards. The product is a more round and uniform wire with a solid center (Figure 5.51) with four spiral grooves on the surface (Figure 5.52).

<sup>&</sup>lt;sup>277</sup> Ogden, Jewellery of the Ancient World, 19.

<sup>&</sup>lt;sup>278</sup> Ogden, Jewellery of the Ancient World, 21.

The next two varieties of wire are more economical because they are hollow. The first, strip-drawing, involves drawing a strip of metal foil through a hole in a metal, wood, or bone plate—or even the hole in a precious stone bead—so that it coils up into a hollow wire. In theory, this can be repeated until the hollow space disappears and an extremely fine wire is produced, but the wire has a tendency to break. Strip-drawn wires have an extremely regular diameter and exhibit longitudinal seams parallel with the length of the wire (Figure 5.53) and sometimes parallel scratches left by irregularities in the drawplate.<sup>279</sup> The second is strip-twisting, in which a strip of metal foil is wrapped like helix around a metal rod, the rod is removed, and the resulting coiled strip is tightened into wire using only one's fingers (Figure 5.54). The process in some ways resembles the spinning of wool, and correspondingly, the direction of the coiling is usually S-twist rather than a Z-twist (because more craftsmen were right-handed). This wire has fairly even diameter, a single spiral seam around the exterior, and a hollow center (Figure 5.55).

Strip-twisting was by far the most common technique in the ancient world, but because strip-twisted and strip-drawn wires are comparable in size and are both hollow, they can be difficult to distinguish in finished objects. Fortunately, piles of coiled thingauge gold wire from Tomb 4 at Vani (Figure 5.56), Tomb 1 at Tillya Tepe (Figure 5.57), and at the Paekche Royal tombs tombs at Neungsan-ri, in Buyeo, South Korea (Figure 5.58) assure us of the popularity of strip-twisted wire from the Black Sea to the East China Sea over at least a millennium. Although individual threads have not come to light in Muryong areas, their widespread use is evident (Figure 5.59). The faceting associated with hammered wire can be detected in the trunk of the tree-shaped finial from Tillya

<sup>&</sup>lt;sup>279</sup> Andrew Oddy, "The Production of Gold Wire in Antiquity," *Gold Bulletin* 10 (1977): 79-87.

Tepe and the Hantanpo ornament (Figure 3.9) from Gansu but is rare. The prominent vertical seams of strip-drawn wire appear in Central Asian and China predominantly in the form of the hoops atop Western-style pendant earrings, at Issyk (Figure 5.60), the Gongliu 鞏留 in the Yili Valley in Xinjiang (Figure 5.61), and at Aluchaideng. In contrast, the thick hoop-shaped earrings of Northeast China, Korea, and Japan are usually bronze hoops wrapped in gold foil.

In East Asia, where bronze-casting was developed early on, gold primarily functioned as an inlaid or wrapped embellishment on the surface of bronze objects. The thin sheets could also be applied as foil to the surface using the wrapped gold (guojin 裹  $\hat{a}$  or baojin 包金) technique, which one encounters already in the second millennium BCE on the surface of bronze "masks" uncovered at Sanxingdui in Sichuan province.<sup>280</sup> Many of the horse trappings in Murong, Korean, and Japanese tombs were wrapped in gold foil, now flaking, which was originally adhered either by incising small burrs into the surface of the bronze or by using a plant gum or resin as a natural adhesive. Murong belt plaques were also normally embellished in this way (Figure 5.62). The thickness of foil depends on whether it was intended for a funerary context. Objects made for daily life had to withstand constant wear and so were typically thicker, while those displayed in the tomb might be exceptionally thin.<sup>281</sup>

In China, wrapped gold was largely replaced during the last centuries BCE by mercury amalgam gilding (*gongqi liujin* 貢齊鎏金) in which a small amount of powdered gold is mixed with liquid mercury, painted onto a metal surface, and heated to a

<sup>&</sup>lt;sup>280</sup> Robert Bagley, ed. *Ancient Sichuan: Treasures from a Lost Civilization* (Princeton, NJ: Seattle Art Museum and Princeton UP, 2001).

<sup>&</sup>lt;sup>281</sup> Ogden, Jewellery of the Ancient World, 34.

temperature of about 700°F. The advantage of this system is its economical use of material: when the mercury burns off, only an extremely thin layer of gold is left behind.<sup>282</sup> However, its detriment was the requirement of mercury and the physical *danger* that the inhalation of its vapors posed to artisans. Large quantities of gilded plaques have been uncovered at Xiongnu sites, but these must have been export wares produced by Chinese craftsmen because the Xiongnu themselves do not seem to have grasped this technique.<sup>283</sup> Whether the Xianbei ever acquired this knowledge in the early centuries CE remains an open question, but they seem to have preferred instead wrapping and casting (Figure 5.63).<sup>284</sup> This distinction is significant because it highlights a major divergence between the mobile goldsmithing traditions of the steppe and the more complicated processes developed by sedentary cultures.

Aside from gold wrapping and mercury amalgam gilding, there were essentially methods of manufacturing three-dimensional gold objects in the ancient world: repoussage, die- or matrix-hammering, and casting. Repoussage is literally the "pushing back" of metal to create relief work, and its companion process is chasing, the adding of indented grooves or channels to increase the design's definition. The metal must be supported when it is worked, and when the relief is low, dampened leather or hardwood can be used. For deeper objects with more undercutting, room-temperature pitch is used.<sup>285</sup> Repoussage and chasing are time-consuming techniques that produce unique works of art, like the stunningly realistic ram from Tomb 4 at Tillya Tepe (Figure 5.64) and the shallow abstracted animals of the cap from Aluchaideng (Figure 4.38). The

<sup>&</sup>lt;sup>282</sup> Sun and Kwan, *Zhongguo gu dai jin shi*, 25, and Bunker 1994, 47-48.

<sup>&</sup>lt;sup>283</sup> Bunker and So, *Traders and Raiders*, 62.

<sup>&</sup>lt;sup>284</sup> Bunker, *Nomadic Art*, 169.

<sup>&</sup>lt;sup>285</sup> Oppi Untracht, Jewelry Concepts and Technology (New York: Doubleday, 1985), 118-132.

goldsmithing industries at Ur, in Minoan Crete, and probably in Aegina all relied on freehand repoussage, which spread through the Levant in the mid second millennium BCE, reaching its artistic peak under the Phoenician goldsmiths of the Levant.<sup>286</sup>

These techniques were not, however, suited for mass-production. Consequently, wooden matrices came into use in Mesopotamia and Anatolia by the early second millennium BCE and in Greece and the Eastern Mediterranean a few centuries later.<sup>287</sup> By the Late Bronze Age, vessels and armor in Europe were decorated with the aid of punches, a term that applies to a wide range of tools that consist of a striking end, a shank, and a working end. In this case, it specifically refers to a tool with a decorated tip that leaves an impression in the metal sheet—a process also called die-hammering or stamping.<sup>288</sup> Matrix-hammering, the impressing of sheet gold into a concave matrix, was developed in Phoenicia in the late second to early first millennium BCE and reached Greece a short time later, possibly as the result of Northern Syrian metalworkers setting up workshops in overseas Greek colonies.<sup>289</sup>

Matrix-hammering and die-hammering both allowed for the production of thin gold ornaments on an unprecedented scale. This technique had arrived in Athens by the mid-eighth century and was subsequently employed throughout the Classical and Hellenistic Greek worlds. The famous hollow gold clothing ornaments uncovered at Scythian tombs on the Pontic Steppe, which combined the themes and imagery of many diverse regions, may have been imported from Greece or made by itinerant workshops. Local artisans would have learned the Classical techniques from Greek and Pontic Greek

<sup>&</sup>lt;sup>286</sup> Treister, *Hammering Techniques*, 373-375.

<sup>&</sup>lt;sup>287</sup> Treister, *Hammering Techniques*, 373.

<sup>&</sup>lt;sup>288</sup> Untracht, Jewelry Concepts and Technology, 132-146.

<sup>&</sup>lt;sup>289</sup> Treister, *Hammering Techniques*, 376-378.

craftsmen, but the iconography would have been harder to pick up.<sup>290</sup> The profusion of gold ornaments uncovered at Issyk and Arzhan 2 demonstrate the diffusion of this technology throughout the steppes in the first millennium BCE. However, hammering fell out of use somewhat during the Roman period, and free-hand repoussage became more common again, especially for the manufacture of vessels.

Meanwhile, gold had only begun to gain the status of prestige metal around the fifth century BCE when it began to decorate vessels, weapons, and belt hooks cast. Although there are a few rare instances of solid-cast gold objects, gold was usually conceived of as a surface embellishment for bronze objects cast using the traditional piece-mold system, the lost-wax system, or the lost-textile system. Rarely, matrix- or die-hammering was employed in China to make coinage, as in the case of a gold sheet with impressed Chinese seat a Nanyaozhuang in Xuyi in Jiangsu in the Han dynasty (Figure 5.65), but the most widespread form of decoration remained gilding and the inlay of precious metal in openwork patterns. In the Murong tombs, however, we typically see thin sheets of gold applied to the surfaces of bronze objects, as in the case of a plaque depicting three deer from Lamadong Tomb IIM192 (Figure 5.66). The wrinkling of the surface demonstrates the latter technique, but it is not clear whether the missing bronze plaque against which it was formed was intended to be worn with it or merely functioned as a model.

It is by now clear that the Murong drew upon several systems to create virtually the same object. The recent excavation of ceramic mold fragments at the site of the city of Liucheng in Yuantai testifies to local expertize in Chinese-style piece-mold casting

<sup>&</sup>lt;sup>290</sup> Treister, *Hammering Techniques*, 378-381.

(Figures 5.67 and 5.68).<sup>291</sup> Whether that technology was applied to bronze or gold at this site remains unclear, though, and it could be argued that following Chinese occupation, the Murong merely used the ceramic piece molds as dies or matrices for forming sheet gold. It is impossible to say for certain which objects are originals and which are copies—or copies of copies. Ellen Reeder explains the difficulties of discerning between what is original and what has been borrowed in Hellenistic goldwork:

In addition to matrices, an artist would have had on hand a collection of plaster casts or impressions taken from objects that he had made or from imported, finished pieces with which he had had brief contact; his workshop would also have been stocked with a number of plaster and bronze trial castings. He would also have been able to consult wax or plaster impressions taken at various stages in the fabrication of cast objects. Supplementing these were fragments of terracotta molds used in casting statuary, and stone molds employed in casting reliefs. All of this material served the artist and customer as sources of inspiration and functioned as instructional guides to apprentices.<sup>292</sup>

While the Murong artisan's collection was perhaps not quite this extensive, he had a great

deal more choice than has been previously thought. The Murong craftsmen, having had

seen or possessed gold or gilded belt plaques with relief designs, replicated them by

adapting the techniques at their disposal. Gold wrapping seems to have been the most

convenient and least labor- and resource-intensive approach.

The Chinese *dang* ornaments with cicada designs discussed in Chapters 2 and 3

(Figures 2.44, 2.51, 2.55, 2.58, 2.59, 2.65, 2.69, 2. 70, 2.71, 2.72, 2.73, 2.82, 2.86 and

2.87) and other repoussé ornaments from the same tombs exemplify the same spirit of

adaptation. Although Chinese artisans had developed a unique form of bronze-casting,

amalgam gilding, and precious metal inlay, sheet gold was a new and poorly understood

<sup>&</sup>lt;sup>291</sup> Sun Yutie and Yu Junyu, "Liaoning Chaoyang Yuantaizi Faxian Han Wei Xianbei paishi taofan [Han-Wei period Xianbei decorated ceramic mold pieces discovered at Yuantaizi in Chaoyang, Liaoning]," *Beifang Wenwu* 2009.2: 43-45.

<sup>&</sup>lt;sup>292</sup> Ellen Reeder, "The Mother of the Gods and a Hellenistic Bronze Matri," *American Journal of Archaeology* 91.3 (Jul. 1987): 439.

material. Looking closely at the designs of the *dang*, we see that they consist of thin, raised lines. While these could have been made by matrix-hammering in a ceramic mold with incised lines, the gradated angle approaching the relief areas suggests that foil was instead wrapped around an existing object whose surface was covered with filigree wires bent into the shape of a cicada. Nowhere is this clearer than in the Hebei ornament whose design is a shallow impression of bent wire loops and rings, some of which are not fully closed (Figure 2.55).

As noted above, according to the standard histories, the Chinese began to imitate the barbarian custom of placing a gold cicada plaque on the front of the cap in the Warring States period. What did they look like? While there are no exact parallels, they might have resembled the openwork Han dynasty cicada from Simon Kwan's collection (Figure 2.67) or the wasp pendant from Mallia (Figure 4.55), both of which have raised linear patterning. Bearing in mind Reeder's words about Hellenistic artisans' taking impressions of jewelry and mold, we might consider the possibility that the *dang* were literally impression of imported filigree insects—and of other ornaments. A set of sheet gold fragments from a fourth century tomb at Linyi were fashioned in a similar way. The most complete among them, at half an inch tall, has been identified as ornaments in the shape of a peacock with a fanned tail (Figure 2.61). Looking closely, we find that the underlying wire structure once consisted of braches with coarsely looped ends like in the fourth century BCE Issyk hairpins, and these emit from a flame shape with a three branches at the center (Figure 5.69). If we examine the published image and recall that the overall height of this object is half an inch, we are able to recognize it as a pendant ring from a kua belt that anticipates the leaf- or flame-shaped kua pendants in the late

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fourth and fifth century tombs of Liaoning and Korea. In other words, this miniscule object (and a similar one in the Xianheguan tomb (Figure 2.52) demonstrates that the Murong could have been modeling their step-sway ornaments either on the Han belt plaques with rings mentioned earlier, or on an even earlier steppe prototype, whose only remaining traces are impressions made in sheet gold by Chinese artisans of the Jin dynasty.

Because these underlying prototypes do not survive, it is impossible to know what their surface decoration would have looked like, and is unclear whether the Murong could have captured these details anyhow. Very few of the gold objects in Murong tombs show signs of granulation, filigree, inlay, or soldering. All these technologies function on the same principle: chemically bonding decorative elements to a metal surface. In order to achieve this, the point where the surfaces meet must be lowered enough so that the objects do not melt when heat is applied. Granulation, the attachment of tiny granules of gold to a flat metal surface, is an example that is common throughout the ancient world. Granules—sometimes thousands or tens of thousands of them—are coated with a solution of copper and an adhesive (usually a plant gum or animal glue, but some studies show that saliva would have sufficed), placed on a metal surface, and heated so that a bond is formed at the point of contact.<sup>293</sup> At least one object exhibiting this technique can be seen at almost every site west of China that is mentioned in Chapter 4, except for Minoan Crete and Aegina.

The earliest known example of granulation is a ring-shaped six-grained gold ornament from the tomb of Queen Pu'abi at Ur (Figure 5.70). Like matrix-hammering, it

<sup>&</sup>lt;sup>293</sup> Untracht, Jewelry Concepts and Technology, 348-363.

seems to have been spread from one culture to another rather than arising independently through local experimentation (Figure 5.71). Following the destruction of Ur around 2000 BCE, Sumerian craftsmen dispersed throughout the Near East and introduced granulation to the Phoenicians of the northern Levant. By the sixth century BCE, it had reached the Greek world, and from there it entered the Greek hinterlands.<sup>294</sup> It was then transmitted, via routes that are not clearly understood, from the lands of the Scythians and other early nomads spread to the Xiongnu. It has often been claimed that the granulation on the crown and earrings from Aluchaideng are the earliest found in China proper, but a hoop-shaped gold earring with inlaid turquoise belonging to the Shajing 沙井 Culture (ca. 1000-500 BCE) and was discovered at Chaiwangang 柴灣崗 in Yongchang 永昌 county, Gansu (Figure 5.72).<sup>295</sup> Nonetheless, individual occurrences in tombs of the Warring States period should not confused with local mastery, and as one intuit from this map, we are still awaiting a more comprehensive study concerning its movement through Central Asia , into Northeast Asia (Figure 5.73).

Granules can be as small as 0.1 millimeter across and almost invisible to the naked eye. They are normally produced by placing direct heat on a small chip of gold, and when it reaches its melting point, surface tension causes it to retract into a ball. However, because gold was so precious, some advanced goldsmithing cultures developed a laborious process forming hollow hemispheres from sheet metal and joining them together. This technique can be perceived in small triangular decorative elements from Tomb 1 at Tillya Tepe (Figure 5.74), where one encounters twenty eight one-centimeter-

<sup>&</sup>lt;sup>294</sup> Ogden, *Jewellery of the Ancient World*, 62-65, and Sun and Kwan, *Zhongguo gu dai jin shi*, 19-20. <sup>295</sup> This earring is now displayed in the Gansu Provincial Museum, Lanzhou, but the earring does not appear to be published in excavation reports.

tall triangles, each made from fifteen granules that consist of joined hemispheres—in other words 840 individual pieces.<sup>296</sup> This painstaking technique is less surprising when one considers the fact that much Greek and Hellenistic gold jewelry was filled with resin or marbles dust in order to economize on material.<sup>297</sup> However, sites to the north and east of Tillya Tepe seem to have made granules the old-fashioned way, perhaps using the scrap produced by openwork designs.

Another measure of the artisan's level of advancement is the degree to which he could control the size and positioning of granules, which have a tendency to jump around when touched by a torch flame. The size of the granules depends on the size of the sheet from which it is made—irregularity in size suggests granules made from scrap rather than uniform lengths of wire. However, sizes could also be sorted after their creation by sending them through sieves with successively smaller holes. As for the scattering under fire, several strategies seem to have been used by ancient artisans to keep them in line. The easiest was pushing the granules against wires or flat bezels, like the ones surrounding rings on the leaves of the Mallia bee pendant (Figure 4.55) and the surface of the cicada ornament from the tomb of Feng Sufu (Figure 2.33) and a pair of earrings from Silla (Figure 5.75). A second was the stacking of granules into triangles or pyramids before attachment, like the ones seen on the earrings from Aluchaideng, Xinzhuangtou, and the Shangwang cemetery (Figures 4.40, 4.41 and 4.42) or the pyramids from Tillya Tepe (Figure 5.48). An inventive approach seen on some of the *dang* from China was the impressing of channels in which the granules would rest, as in the example excavated near Beijing (Figure 5.76). Finally, the haphazard in-filling with thousands of tiny

<sup>&</sup>lt;sup>296</sup> Schiltz, "Catalogue," 236.

<sup>&</sup>lt;sup>297</sup> Ogden, Jewellery of the Ancient World, 40.

granules in areas delineated by wire was popular in classical Greece, as well as India and Central Asia.

The same bonding at work in granulation can be used for other small decorative elements, including small wires and bezels. This process, called "colloidal hard soldering" or "copper diffusion bonding," can be observed in the attachment of rings on the surface of a pin with rosettes and spirals from Troy (Figure 5.77), surrounding the stones at the center of the sheet gold flowers on the Tillya Tepe crown, and on the snout of the bovine-headed ornaments from Xihexi. Yet without a microscope, it is difficult to distinguish copper diffusion bonding from soldering, which can also be used to close and attach the ring-shaped bezel around an inlaid stone. Soldering is the joining of two pieces of metal with miniscule chips or wires of solder, "an intermediary . . . alloy whose composition in a molten state becomes extremely fluid, and has an affinity for the metals joined."<sup>298</sup> In both ancient and modern goldsmithing, solder alloys are made with silver or copper to lower the melting temperature, and they leave little trace behind except for occasional pooling.

The equipment that copper diffusion bonding and soldering required was relatively easy to obtain: an oil lamp, a hammer, a chisel, and some charcoal and stone. However, they also necessitated an intense localized flame that could liquefy chips of solder or cause the copper at the point of contact to flow without overheating and destroying the rest of the object. In modern goldsmithing, this is accomplished by using an acetylene or propane torch with an adjustable flame that can trained on a small area. Ancient cultures primarily relied on the mouth blowpipe, which in its earliest forms could

<sup>&</sup>lt;sup>298</sup> Untracht, Jewelry Concepts and Technology, 388.

have been made from a reed or a wooden tube (Figure 5.78). Like a bellows, the blowpipe introduced oxygen from the lungs into the flame, increasing its intensity. A typical bronze blowpipe is narrow and slightly tapered, and air escapes from a pinhole-sized opening in the downward-pointing tip. In order to maintain a steady flame, the artisan must gently and continuously exhale, periodically inhaling through the nose.<sup>299</sup>

In addition to the tools mentioned above, copper diffusion bonding requires an adhesive and a source of copper, such as pulverized malachite or another cupric hydroxide. Solder, on the other hand, requires the preparation of an alloy of gold and silver or gold and copper. These ingredients all occur in nature and would not be difficult to obtain, but the Murong seem to have lacked the most essential component in both processes: the expertise to carry out the procedure. A quick survey of Murong tombs confirms that copper diffusion bonding and soldering were not in the Murong artisan's repertoire. In earrings from Lamadong, the joints of the rings have not been closed (Figure 5.79), and gold bells from Fangshen are formed by closely overlapping two hemispheres rather than fusing them (Figure 5.80). Inlaid stones held in place by bezels are almost completely absent from Murong tombs, and when they do occur, they are usually very clumsy, obtrusive bezels like the one from a crescent-shaped ornament in Tomb 2 at Fangshen, which is riveted rather than soldered to the backing plate (Figure 2.13).

The use of the bonding technologies described above are limited to a crescentshaped ornament decorated with openwork covered in granulation and small inlaid stones from Tomb 1 at Tiancaogou (Figure 2.26), the cicada *dang* from the Tomb of Feng Sufu

<sup>&</sup>lt;sup>299</sup> Untracht, Jewelry Concepts and Technology, 410-411.

(Figure 2.33), and a gold ring with inlaid stones and a granulated border from Tomb 2 at Fangshen (Figure 5.81). The first is unlike the other openwork plaques discovered in Liaoning in that its decoration protrudes from the surface. This feature and the sporadic use of small inlaid stones is closely tied to the surface decoration of the Chinese *dang* cicada plaques discussed in Chapters 2 and 3. In terms of design, however, one thinks of the much more ancient pendant with agate from Kurgan 8 at Trialeti in Georgia (Figure 4.93). The second item is undoubtedly an import from China or an attempt to recreate the *dang* locally. The third item knows no local parallels in Northeast China and must have arrived via down-the-line trade. The granulation shows substantial signs of wear on the sides, where the soft gold would have come into contact with the adjacent fingers of the wearer's hand. It calls to mind the simple bracelet from Tomb 5 at Tillya Tepe, with its bettered granulated borders and stones probably borrowed from seal rings (Figure 4.50).

If we momentarily widen our scope to include bovine-headed ornaments from the Xihezi in Inner Mongolia, we find another testament to the limitations of the Xianbei goldsmith's craft (Figures 2.40 and 2.41). The flat bezels for stones and the extensive use of granulation show skilled use of copper diffusion bonding and soldering. There are two gold circles adorned with wire rings and granulated borders projecting from either side of the face, and one of these broke off in antiquity. When it was repaired in antiquity, the granulation was simulated with a series of raised dots, and it was joined using a rivet. Whoever repaired this ornament could not replicate its decoration and so improvised a solution—in this case, the substitution of granulation with impressed dots, and of heated bonding with simple riveting. This is precisely the situation that the Murong routinely faced: imitating foreign models with a limited selection of locally available techniques.

Indeed, they could well have been the owners of this object at one point in time, before the Tuoba conquest of the Northern Yan in the fifth century.

### 4. The Steppes way, not the Chinese way

In summary, if we consider the form, function and fabrication of the gold objects from Murong tombs identified as the Chinese "step-sway" ornaments, we discover a much stronger link with the technologies of early nomads of the steppe than with China. That is to say, the step-sway did not pass through China en route to the Murong—instead, it went the steppes way, following a path across North Asia.

While the profile of the base does resemble the *dang* from Chinese tombs, it is actually closer in conception to openwork belt plaques. Although these have been uncovered in Chinese tombs from the Han onward, their prototype was akin to the belts seen at steppe sites like Arzhan 2. The modeling of the step-sway ornaments' design on a plaque with an attached ring underscores this point. It is doubtful, however, that the horse-riding Murong would have worn these cumbersome ornaments at the waist, though—particularly the ones that are a few inches tall. It is more likely that they were worn on the head, perhaps in imitation of the Chinese *dang*, which would have been familiar through trade and diplomatic contact. As inverted cap ornaments, they retained the raised ridge that conveniently covered front seams of peaked Murong caps. However, other elements like granulation and filigree that they could not produce with their limited goldsmith's repertoire were omitted.

### **CONCLUSION: LEAVES THAT SWAY**

A complex relationship exists between the small number of step-sway ornaments found in the Murong Xianbei tombs of Liaoning, the *dang* worn by Chinese officials and the *buyao* ornaments worn by court ladies, and the gold crowns adorned with shimmering sheet gold leaves that have been excavated across Eurasia between the third millennium BCE and the first millennium CE. It is true that the bases of these enigmatic ornaments resemble visual depictions of *dang*, and that their leaves quiver with the wearer's slightest movement, like the swaying beads mentioned in literary descriptions of women's *buyao*. At the same time, the pendant gold leaves appear to continue an ornamental tradition seen in Central Asia and the Near East. Do these ornaments then represent a hybrid form? The reconstruction of the gold headdress in the 415 CE tomb of Feng Sufu seems to argue that they do, and the presence of sheet gold leaves (or petals) in many of the same tombs where the *dang* were excavated has only reinforced this assumption.

However, there are several other available explanations. Design features like the raised central ridge, openwork comma shapes, and the attachment of wire elements without chemical bonding distinguish the Murong step-sway ornaments from the men's *dang* and women's *buyao*, linking them instead to the sheet gold plaques with pendant rings of Han dynasty *kua* belts as prototypes. These in turn draw upon the imagery and construction of gold belts worn by the early nomads of the Eurasian steppe. Perhaps because belts were not originally part of Chinese official dress, scholars have been slow to recognize their importance in the costuming traditions of medieval China and Northeast Asia during the period of Murong dominance. Why the Murong turned the belt

plaques upside down and wore them as cap ornaments—if that is what they in fact did remains a question for further study.

In addition to elucidating the unlikely origins of the step-sway's form, this dissertation has attempted to address some methodological issues. The most problematic is the preeminence of word over image in Chinese scholarship, for instance in the location-based mapping of distinct ethnic identities described in the standard histories onto tombs whose contents are often quite similar. While the histories can be helpful in establishing a relative chronology of nomad tombs, Chapter 3 specifically highlights the *dang*er of basing our understanding of the excavated objects that happen to survive purely on the basis of the descriptions that happen to be preserved in received texts. The sizeable gaps in the archaeological remains surveyed in Chapter 4 remind us of how much information about the ancient past is now missing.

In the same chapter, I have attempted to show that that an art historical approach can be useful in identifying connections between cultures. However, these relationships may be the result of trade, migration, diplomatic relations, or intellectual exchange between craftsmen and should not be interpreted as cultural homogeneity, as the term "Swaying Leaf Culture" implies. As I noted in the introduction, the connoisseur's expert eye is best paired with a thorough knowledge of the materials and techniques of ancient craftsmen. A model based on the transfer of technology allows us to identify subgroups within the corpus of objects described in Chapter 2 and to identify lager trends, such as the distinctions made in Chapters 4 and 5 between the systems of attachment common in sedentary societies and on the nomadic steppe. While the majority of grave goods from the third to fifth century tomb in Liaoning speak to local production of simple grayware ceramics, gilt bronze horse trappings, and footed bronze cauldrons like those seen throughout the steppe, some objects contained in the many of the elite burials in Liaoning also lend themselves to conversations about Sinicization. Items like bronze mirrors, ink stones, and seals inscribed with the occupant's official titles seem to express the longing for Chinese imperial recognition described in the dynastic histories. Perhaps it was this this drive for the conferral of political legitimacy that led the Murong to don the step-sway as early as the late third century CE. However, it should be remembered that the most "Chinese" objects were associated with Feng Sufu, who was himself an official for the "barbarized Chinese" state of Northern Yan. Moreover, Feng died in 415 CE, making his the latest datable Murong tomb. By this time, Northern China was in a state of chaos, the Murong were already being encroached upon by the Tuoba, and the Jin dynasty was in its final death throes.

Meanwhile, amalgam gilded belt plaques and other small items like bells were probably obtained through trade along the Steppe Route and in local networks like the Yellow Sea Interaction Sphere. Local versions were produced using casting, wrapping, and a limited number of other techniques. In contrast, rare and exotic items passed over great distances via the Silk Road and Inner Asian Mountain Corridor were of much greater antiquity that inspired new designs. Glass vessels would have been impossible to recreate, but the inlaid and granulated gold ring from Fangshen and the round ear pendants from Tiancaogou provide an idea of available models and their possible results. Another likely adaptation was the step-sway, which may have replicated a ring with pendant leaves hanging from a belt plaque. In this respect, the Murong craftsmen should be considered alongside Sarmation creators of the Khokhlach kurgan crown. They made the best possible use of their limited skills, substituting wrapping and casting for matrixhammering, and the impressing of for granulation, which was practiced in China at least by the Han dynasty.

There is much that remains unknown about China's early goldsmithing traditions, but a constant stream of excavations brings new objects to light every year. The importance of these materials has long been overlooked because of the myth that this precious metal was rarely used before the Tang dynasty. However, it has gradually become clear that transitional geographic zones like the Murong burials in Liaoning where East meets West and sedentarist meets nomad—defy our conventional knowledge about Chinese art. It is in unique intermediary spaces like these that a syncretic methodological approach combining art history, sinology, and conservation science will yeild the most fruitful results. Thus, even though the time and distance between the gold headdress of a Sumerian queen, the laurel wreaths of ancient Greece, and tree-shaped crowns of Three Kingdoms Korea once seemed insurmountable, in the end, the study of their swaying, shimmering leaves illuminated the pathways between them.

# CHRONOLOGY

PERIOD AND DATES

## <u>CHINA</u>

Shang dynasty (c. 1500 – 1050 BCE)

Zhou dynasty (c. 1050 – 256 BCE)

Western Zhou dynasty (c. 1050 – 771 BCE) Eastern Zhou dynasty (771 – 256 BCE) Warring States period (c. 475 – 221 BCE)

Qin dynasty (221 – 206 BCE)

Han dynasty (206 BCE – 220 CE)

Western Han dynasty (206 BCE – 9 CE) Eastern Han dynasty (23 – 220 CE)

Three Kingdoms period (220 - 265 CE)

Shu (221 – 263) Wei (220 – 265 CE) Wu (320 – 280 CE)

Northern and Southern Dynasties (220 – 589 CE)

Sixteen Kingdoms period (304 – 439 CE)

Yan states Former Yan (337 – 370 CE)

Later Yan (384 – 407 CE)

Western Yan State (384 – 394 CE)

Northern Yan State (407 - 436 CE)Southern Yan State (398 - 410 CE)

Other relevant northern states

Northern Liang (397 – 439 CE)

Later Liang (386 – 403 CE) Former Qin (351 – 384 CE) Later Qin (384 – 417 CE) Later Zhao (319 – 351 CE) LOCATION OF CAPITAL

Yinxu (Henan)

Haojing (Xi'an, Shaanxi) Luoyang (Hebei)

Xianyang (Xi'an, Shaanxi)

Chang'an (Xi'an, Shaanxi) Luoyang (Hebei)

Chengdu (Sichuan) Luoyang (Hebei) Wuchang (Hubei) Jianye (Nanjing, Jiangsu)

Jicheng (Liaoning) Longcheng (Liaoning) Yecheng (Hebei/Henan) Zhongshan (Hebei) Longcheng (Liaoning) Chang'an (Xi'an, Shaanxi) Zhangzi (Shanxi) Changli (Liaoning) Guanggu (Shandong)

Guzang (Gansu) Zhangyi (Gansu) Guzang (Gansu) Chang'an (Xi'an, Shaanxi) Chang'an (Xi'an, Shaanxi) Xiangguo (Hebei) Yecheng (Hebei/Henan) Jin dynasty Western Jin dynasty (265 – 316 CE) Eastern Jin dynasty (318 – 420 CE) Northern Dynasties Northern Wei (386 – 534 CE) Northern Qi (550 – 577 CE) Northern Zhou (557 – 581 CE) Sui dynasty (581 – 618 CE) Tang dynasty (618 - 907 CE)Song dynasty (907 – 1279 CE) Northern Song dynasty (907 – 1126 CE) Southern Song dynasty (1127 – 1279 CE) Yuan dynasty (1271 – 1368 CE) Ming dynasty (1368 – 1644 CE) Qing dynasty (1644 – 1912 CE) KOREA Puyŏ/Buyeo state (2<sup>nd</sup> century BCE – 494 CE) Proto-Three Kingdoms period (c. 0 - 300 CE)

Three Kingdoms period (c. 300 - 668 CE)

Koguryŏ/Goguryeo state (37 BCE – 668 CE) Paekche/Baekje state (18 BCE – 660 CE)

Silla state (57 BCE – 668 CE) Kaya/Gaya state (42 – 562 CE)

# <u>JAPAN</u>

Yayoi period (c. 400 BCE – c. 300 CE) Kofun period (c. 300 – 710 CE) Asuka period (552 – 645 CE) Hakuhō period (646 – 701 CE) Nara period (701 – 794 CE) Chang'an (Xi'an) Jiankang (Nanjing, Jiangsu) Shengle (Inner Mongolia) Pingcheng (Shanxi) Luoyang (Hebei) Yecheng (Hebei/Henan) Chang'an (Xi'an, Shaanxi) Daxing (Xi'an, Shaanxi) Daxing (Xi'an, Shaanxi) Chang'an (Xi'an, Shaanxi) Bianjing (Kaifeng) Lin'an (Hangzhou) Xanadu/Shangdu (Inner Mongolia) Dadu (Beijing) Nanjing (Jiangsu)

Luoyang (Hebei)

Beijing

Beijing

Gungnae (Ji'an, Jilin, China) Ungjin (Gongju, South Korea) Sabi (Puyŏ, South Korea) Kyongju/Gyeongju (South Korea)

Asuka (Nara, Japan) Fujiwara (Nara, Japan) Heijō (Nara, Japan)

# **ILLUSTRATIONS**



#### 1. A TEXTUAL AND ARCHAEOLOGICAL HISTORY OF THE MURONG XIANBEI

Figure 1.1 The Five Commanderies in the Warring States Period (Crespigny and Gardiner, "T'an-shih-huai," 25)



Figure 1.2 Sources of the Liao River, including the Xilamulun River (Wikimedia Commons, "Liao River")



Figure 1.3 Provinces of China under the Eastern Jin dynasty, c. 300 CE (Graff, *Medieval Chinese Warfare*, 36, Map 3)



Figure 1.4 The Former Yan state in 352-384 CE (Herrmann, ed., *Historical Atlas of China*, 29)



Figure 1.5 The Later Yan state and Western Yan states in 384-397 CE (Herrmann, ed., *Historical Atlas of China*, 29)



Figure 1.6 The Southern Yan and Northern Yan states in 397-420 CE (Herrmann, ed., *Historical Atlas of China*, 29)



1.冯素弗墓 2.仓粮窖墓 3.金岭寺建筑群址 4.奉车都尉墓 5.喇嘛洞墓地 6.大板 营子墓地 7.东团山子、西团山子遗址(龙腾苑) 8.三官营子遗址 9.东山墓 10.北庙墓 11.龙城城址 12.八宝墓 13.医M13 14.房身墓 15.房身北沟墓地 16.袁台子墓 17.袁 台子壁画墓 18.崔遹墓 19.西沟墓 20.十二台砖厂墓地 21.大平房墓 22.三合成墓 23.甜草沟墓地 24.榆树沟墓 25.保安寺墓 26.前山墓 27.李廆墓

图例: ■遗址、建筑址、城址 △墓葬 ▲墓地

Figure 1.7 Distribution of Murong Xianbei remains in the Liaoxi Area (Wan, "Xianbei Muzang," 227)





Figure 2.1 Location of Wangzifenshan cemetery (Shang, "Wangzifenshan," Fig. 1)



Figure 2.2 Distribution of tombs at the Wangzifenshan cemetery (Shang, "Wangzifenshan," Fig. 2)



1.陶尊 2.牛腿骨 3.金耳环 4、6.陶罐 5、10.陶壶
7.银片饰 8.半月形金牌饰 9.金指环 11.金泡饰
12.铁棺环 13.铁棺钉 14.河卵石

Figure 2.3 Plan of Tomb M9022 at Wangzifenshan (Shang, "Wangzifenshan," Fig. 16)



Figure 2.4 Buyao ornament from Tomb M8713 at Wangzifenshan (Wang, ed., *San Yan*, 33, Fig. 5)



Figure 2.5 Deer plaque from Tomb M8713 at Wangzifenshan (Shang, "Wangzifenshan," Fig. 35.1)



1. 快完整 2. 铁甲 3. 缓泡套管步摇 4. 截桥 5. 马镫 6. 带扣 7. 主形杏叶 8. 心形杏叶 9. 节约
10. 姿吟 11. 萧簇饰 12. 快柄环 13. 牛腿骨 14. 灰陶瓷 15. 釉陶罐 16. 残木棺 17. 皮鞭残痕
18. 夹砂褐陶大口罐 19. 骨管 20. 使孔带扣 21. 素面質形片





Figure 2.7 Objects on top of the coffin and around the head and waist of tomb 88M1 at Shi'ertai brick factory (Sun, Tian, and Zhang, "Shi'ertai 88M1," Fig. 2)


Figure 2.8 *Buyao* from Tomb 2 at Fangshen (Wang, ed., *San Yan*, 32, Fig. 4)



Figure 2.9 *Buyao* from Tomb 2 at Fangshen (Wang, ed., *San Yan*, 31, Fig. 3)



Figure 2.10 Vine-shaped ornament, Tomb 2 at Fangshen (Zhongguo banben tushuguan, *Jinyin qi*, 86, Pl. 105)



Figure 2.11 Openwork square plaque, Tomb 2 at Fangshen (photo by author)

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Figure 2.12 Openwork square plaque, Tomb 2 at Fangshen (Wang, ed., San Yan, 36, Fig. 9)



Figure 2.13 Pectoral with inlaid jade, Tomb 2 at Fangshen (Wang, ed., *San Yan*, 38, Fig. 12)



Figure 2.14 Location of Lamadong cemetery (Wan, "Lamadong," 209, Fig. 1)



Figure 2.15 Distribution of tombs at the Lamadong cemetery (Wan, "Lamadong," 210, Fig. 2)



Figure 2.16 *Buyao* from Tomb 7 at Lamadong (Wang, ed., *San Yan*, 33, Fig. 6)



Figure 2.17 Location of Tiancaogou tombs (Wan, Wang, and Zhang, "Tiancaogou," Fig. 1)



Figure 2.18 Plan and section of Tomb 1 at Tiancaogou (Wan, Wang, and Zhang, "Tiancaogou," Fig. 2)



Figure 2.19 Plan of Tomb 1 at Tiancaogou (Wan, Wang, and Zhang, "Tiancaogou," Fig. 3) 226



Figure 2.20 Section of Tomb 2 at Tiancaogou (Wan, Wang, and Zhang, "Tiancaogou," Fig. 4)



14~16、18~21. 灰陶壶 17. 金泡饰 22. 金步摇冠饰 23、31. 包金铜环 24、25、37. 松绿石 26、27. 金锁形饰 28、38. 小铁刀 29. 漆器残迹 30. 牛 骨 32、33. 金钏 34、35. 金指环 36. 头骨残片 37. 金牌饰 40~47. 铁棺钉

Figure 2.21 Plan of Tomb 2 at Tiancaogou (Wan, Wang, and Zhang, "Tiancaogou," Fig. 5)



Figure 2.22 *Buyao* from Tomb 1 at Tiancaogou (Wang, ed., *San Yan*, 29, Fig. 1)



Figure 2.23 Buyao from Tomb 2 at Tiancaogou (Wang, ed., San Yan, 30, Fig. 2)



Figure 2.24 (Left:) Openwork square plaque from Tomb 1 at Tiancaogou (Wan, Wang, and Zhang, "Tiancaogou," Fig. 11.1)

Figure 2.25 (Right:) Openwork square plaque from Tomb 1 at Tiancaogou (Wang, ed., *San Yan*, 37, Fig. 10)



Figure 2.26 Crescent-shaped plaque from Tomb 1 at Tiancaogou (Wang, ed., *San Yan*, 37, Fig. 11)



Figure 2.27 Location of the tomb of Feng Sufu (Li, "Feng Sufu mu," Fig. 1)



Figure 2.28 Section and plan of the tomb of Feng Sufu (Li, "Feng Sufu mu," Fig. 2)



Figure 2.29 Painted figure with a tall cap from the tomb of Feng Sufu (Li, "Feng Sufu mu," Fig. 16)



Figure 2.30 Wooden coffin from the tomb of Feng Sufu (Li, "Feng Sufu mu," Fig. 4)



Figure 2.31 Four seals from the tomb of Feng Sufu (Li, "Feng Sufu mu," Pl. 3.2-5)



Figure 2.32 Cicada ornament and finial from the tomb of Feng Sufu (Wang, ed., San Yan, 34, Fig. 7)



Figure 2.33 Detail of the cicada ornament (Wang, ed., San Yan, 34, Fig. 7 detail)





Figure 2.34 (Left:) Cicada ornament from the tomb of Feng Sufu (Li, "Feng Sufu mu," Fig. 47.3)

Figure 2.35 (Right:) Peaked square plaque from the tomb of Feng Sufu (Zhongguo banben tushuguan, *Jinyin qi*, 83, Pl. 100)



Figure 2.36 Repoussé plaque from the tomb of Feng Sufu (Watt, ed., *China*, 130, Cat. 37)



Figure 2.37 Rubbing of repoussé plaque (Li, "Feng Sufu mu," Fig. 14)



Figure 2.38 Peaked square plaque from Shi'ertai 88M1 (Sun, Tian, and Zhang, "Shi'ertai 88M1," Fig. 30)



Figure 2.39 Bird finial from Maolitu (Zhang, *Beifang Caoyuan*, Fig. 51)



Figure 2.40 Bovine- and horse-headed ornaments from Xihezi (Watt, ed., China, 128, Cat. 33)



Figure 2.41 Detail of bovine- and horse-headed ornaments from Xihezi (Zhang, *Beifang Caoyuan*, Fig. 68) 236



Figure 2.42 Plan and section of the tomb at Nanjing University (Jiang, *Changjiang*, 141, Fig. 1)



1、98. 青瓷鸡头壶 2、32、38、47、62、78、92、102、122、141. 花瓣形金片 3、4、15、119、135. 青瓷 5、66. 青瓷盖罐 6、64、75、110、121、146. 五铢钱 7. 小型陶案足 8、45. 方形陶座 9. 长方形陶 硕 10、28、115、132、138. 青瓷盘 11、12、50、72、100、108、142. 大型陶案碎片 13、24、34、39、 座 57、74、90、101、陶盘 14、40、85、陶果盒 16. 青瓷四耳小壶 17、52. 青瓷双耳壶 18、19、29、82、 134、147. 镂花金片 20、43、70、105. 陶凭几及几足 21、23、35、58、69、81. 中型陶案碎片 22、53、 54、123. 残陶俑及座 25、51、55、56、63、80、106、118、126、129. 桃形金片 26. 漆盒的铜盖片 27、 114、128. 青瓷耳杯 30. 青瓷钵 31、120. 银环 33. 青瓷瓶 36. 小金珠 37、86、93、96. 陶盆 41、65、 79、117. 陶三足盘 42. 银泡 44. 玻璃杯残片 46、61、77、87. 陶瓢尊及把手 48、109、113、124. 青瓷 49. 陶钵 59、91、94、97、111. 陶耳杯 60、73. 长方形陶棒 67、103. 错金铜片 68. 料珠 71. 玛瑙 灯 76. 青瓷香熏盖 83. 小铜帽 84. 水晶珠 88、116. 青瓷勺 89. 残陶熏 95. 方形陶板座 99、133. 陶 珠 104、130. 青瓷洗 107. 铜棺钉 112. 银铺首 125. 青瓷辟邪 127. 卧龙陶座 131. 卧虎陶座 131. 陶 管 唾壶 137. 卧羊陶座 139. 银钉 140. 琉璃饰件 143. 陶砚 144. 铁刀、剑 145. 陶烛盘 (图中未注明号码的钉形器均为铁棺钉)

Figure 2.43 Distribution of grave goods in the tomb at Nanjing University (Jiang, *Changjiang*, 143, Fig. 2)



Figure 2.44 Four ornaments from the tomb at Nanjing University (Jiang, *Changjiang*, Pl. 5)



Figure 2.45 Detail of ornament with a rider, tomb at Nanjing University (Jiang, *Changjiang*, Pl. 6)



Figure 2.46 Ornament with a rider from the tomb of Zhang Zhen in Suzhou (Watt, ed., *China*, Cat. 10)



Figure 2.47 (Left:) Map of the Xianheguan area (Jia, Wang, and Zhang, "Xianheguan," Fig. 1) Figure 2.48 (Right:) Map of the Xianheguan site (Jia, Wang, and Zhang, "Xianheguan," Fig. 2)



Figure 2.49 Plan and section of Tomb 6 at Xianheguan (Jia, Wang, and Zhang, "Xianheguan," Fig. 3)



## 图九 M6 出土遗物分布图

1.2. 玉璜 3.5.12. 玉珩 4. 心形玉佩 6. 玉环 7. 玉柄節 8.9. 玉猪 10.11. 玉珠 13. 漆唾壶 14.15. 玉带钩 16. 水晶珠 17. 铜弩机 18. 鎏金铜砚滴 19. 铜砚 20. 漆盘 21. 玉剑首 22. 玉剑形 23. 铁剑 24. 玉剑竜 25. 玉剑格 26. 铁剪刀 27. 33. 金钗 28~31.47.84.109. 漆盖 32.37~39.46.70.73.99.106. 花形金片 34.35.94.101.102. 桃形金片 36.103. 不规则形金片 40.45.92.108. 云母片 41.55.63.66.119.121.136.139~155.157~166. 料珠 42. 蚌纹金饰 43.51.55.50.120.122. 金辟邪 44. 松香球 48.93.104. 金环 49.50. 铜钱 52.54.74.95~98. 金镯 53.65.112. 绿松石辟邪 57.79.82.87.110.124~128. 金珠 58. 琥珀兽 59. 金比翼乌 61.129. 金羊 62. 银铃 64.118.123.琥珀珠 67. 金铃 68. 鎏金铜友架 69. 铁锈 71. 铜铺首 72. 银箸 75. 鎏 金银鼎盖 76.100. 圆形金片 77.130. 漆耳杯 78. 鎏金银鼎 80. 铜耳杯 81. 铁针刀 83. 玻璃碗 85.金顶针 86.89. 瓷罐 88. 90. 容器盖 91. 蜻蜓 105. 陶壶 107. 金茸花 111. 升丸. 113~115.138. 漆器帽镶饰 116.134. 铜环形纽 117. 镯 131. 方形琥 铅饰 132. 金饰 133. 漆金 135. 绿松石珠 137. 漆箍 156. 料鼻 167. 铁棺钉 168. 铜棺钉

Figure 2.50 Distribution of grave goods in Tomb 6 at Xianheguan (Jia, Wang, and Zhang, "Xianheguan," Fig. 9)



Figure 2.51 (Left:) Cicada ornament from Tomb 6 at Xianheguan (Jia, Wang, and Zhang, "Xianheguan," Fig. 41)

Figure 2.52 (Middle:) Ornament from Tomb 2 at Xianheguan (Jia, Wang, and Zhang, "Xianheguan," 43, Fig. 109.12)

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Figure 2.54 Pierced leaves or petals from Wen Jiao's tomb at Guojiashan (Nanjing shi bowuguan, "Wen Jiao mu," 23, Fig. 14)



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Figure 2.56 Section and plan of Tomb 1 on Xiyanchi Street in Linyi (Feng, "Linyi," 5, Fig. 2)



1. 漆盘 2,5、铜礁斗 3. 铜削 4. 铜弩机 6. 铜釜 7. 铁镜 8. 酱釉壶 9. 鸡首壶 10. 漆盘底(戎) 11、18. 铜铺首 12. 漆勺 13. 漆盘(戎) 14. 石球 15. 酱 釉壶 16. 漆尺 17. 棋子(置于漆盘内) 19. 漆器戏片 20. 银钗(4件) 21.1~12(铁棺钉 22. 帽纱 23. 鸭形漆勺 24,62. 金珰 25,26. 金钗 27. 银钗 28,29. 金簪 30. 铁刀 31. 铜带扣 32,34~37,39,42,46,51,52,55,56. 银铃 33,49,50. 金镯 38. 金珠 40.41、53,54. 金铃 43. 铜带扣 44. 金镯 45. 玉珠 47. 金兽首 48. 铜带钩 57. 料珠 58. 漆器(戏) 59. 铁刀 60. 药丸? 61. 金戒指





Figure 2.58 Gold ornament from Tomb 2 in Linyi (Feng, "Linyi," 33, Fig. 88)



Figure 2.59 Cicada ornament from west chamber of Tomb 1 in Linyi (Feng, "Linyi," cover)



Figure 2.60 Distribution of grave goods in Tomb 2 on Xiyanchi Street in Linyi (Feng, "Linyi," 29, Fig.78)



Figure 2.61 Gold ornament from Tomb 2 in Linyi (Feng, "Linyi," 33, Fig. 88)



Figure 2.62 Gold leaves from Tomb 2 in Linyi (Feng, "Linyi," 33, Fig.87)

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Figure 2.63 Map of Xindiantai near Dunhuang (Ma and Cun, "Dunhuang," 1919, Fig. 1)



图二 60M1 所在"坟圈"平面图

Figure 2.64 Tomb enclosures at Xindiantai, Dunhuang (Ma and Cun, "Dunhuang," 1919, Fig. 2)



Figure 2.65 Cicada rnament from Tomb 60M1 at Xindiantai, Dunhuang (Ma and Cun, "Dunhuang," 1919, Pl. 3)



Figure 2.66 Ornament from the tomb of the Ruru Princess (Tang, "Ruru Gongzhu mu," Pl. 5.4) 248



Figure 2.67 (Left:) Pentagonal ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 119)

Figure 2.68 (Right:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 123



Figure 2.69 (Left:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 141)

Figure 2.70 (Right:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 142)



Figure 2.71 (Left:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 143)

Figure 2.72 (Right:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 144)



Figure 2.73 (Left:) Cicada ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 145)

Figure 2.74 (Right:) Bird ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 146)



Figure 2.75 (Left:) Bird ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 147)

Figure 2.76 (Right:) Bird ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 148)



Figure 2.77 (Left:)Monster face ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 149)

Figure 2.78 (Right:) Monster face ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 151)



Figure 2.79 (Left:) Monster face ornament from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 150)

Figure 2.80 (Right:) Circular ornaments from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 152)



Figure 2.81 Circular ornaments from the Muwentang Collection (Sun and Kwan, *Zhongguo gu dai jin shi*, Cat. 153)



Figure 2.82 Cicada ornament from the Kempe Collection (Gyllensvärd, *Chinese Gold & Silver*, 79, Figs. 20 a and b)



Figure 2.83 (Left:) Dragon and rider ornament from the Kempe Collection (Gyllensvärd, *Chinese Gold & Silver*, 76, Figs. 17b)

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Figure 2.85 Monster ornament from the Kempe Collection (Gyllensvärd, *Chinese Gold & Silver*, 79, Figs. 18b)

3. BUYAO, DANG, AND THE SECONDARY EVIDENCE



Figure 3.1 (Left:) *Menxia zeicao*, west wall of the front chamber, tomb of a high-ranking official, Wangdu county, Hebei, Eastern Han dynasty (Hebei sheng wenwu yanjiusuo, *Hebei gudai muzang bihua*, Pl. 31)

Figure 3.2 (Right:) "The Righteous Stepmother of Qi," from the *Lienü zhuan*, Wu Family Shrines, Jiaxiang county, Shandong, Eastern Han dynasty (Wu, *Wu Liang Shrine*, 264-265, Fig. 126)



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Figure 3.5 (Left:) "The Emperor Rebuffs a Fawning Beauty" (Scene 7), "Admonitions of the Court Instructress," silk handscroll, copy of an original by Gu Kaizhi, Tang dynasty, British Museum (Wu, "Admonitions Scroll Revisited," 78, Pl. 7)

Figure 3.6 (Right:) Introductory Scene (Scene 7), "Admonitions of the Court Instructress," silk handscroll, copy of an original by Gu Kaizhi, Song dynasty, Palace Museum, Beijing (Yu, "Admonitions Scroll," 44)



Figure 3.7 "Emperor Shun's Two Wives, Ehuang and Nüying," painted screen from the tomb of Sima Jinlong (d. 484), Datong, Shanxi, Northern Wei dynasty (McCausland, ed., *Admonitions Scroll*, 150, Pl. 16)



Figure 3.8 *Ladies with Flowers in their Hair*, ink and color on silk, Zhou Fang, Tang dynasty (Shen, *Gudai fushi*, 231)


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Figure 3.11 Chinese cinnamon (*cinnamomum cassia*) plant (Rosengarten, *Book of Spices*, 194)



Figure 3.12 Headdresss from the tomb of the Princess of Chen at Qinglongshan, Naiman banner, Inner Mongolia, Liao dynasty (Shen, ed., *Gilded Splendor*, 152, Cat. 27)



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Figure 3.16 (Left:) Line drawing of a cicada (Lutz, *Field Book of Insects*, 75, Pl. 16)Figure 3.17 (Right:) Detail of the cicada split-pin clasp from a gold oak leaf crown in the British Museum (1908.414.1) (Ogden and Williams, *Greek Gold*, 107, Cat. 60)



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Figure 3.20 Gold and emerald olive wreath from Asia Minor, East Greek, 350 – 300 BCE, Altes Museum, Berlin (30219,497) (Plazt-Horster, *Altes Museum*, 58-59, Cat. 35)



4. DIGGING UP THE ROUTES OF TRANSMISSION

Figure 4.1 Gold crown from the Lucky Phoenix Tomb, Silla, Gyeongju National Museum (Gyeongju National Museum, *Silla*, 27)



Figure 4.2 Gilt bronze crown from Gaya fromTomb 37 at Bisan-dong, Daegu, Hoam Art Museum (Daegu National Museum, *Daegu*, 65)



Figure 4.3 (Left:) Tomb chamber (PG 800) of Queen Puabi in the royal cemetery at Ur (Zettler, "King and Queen," 34, Fig. 31)

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Figure 4.5 (Left:) Diadem with gold and lapis lazuli from the tomb of Queen Puabi (Pittman, "Jewelry," 93, Cat. 30)

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Figure 4.10 (Left:) Line drawings of leaf-shaped ornaments from *Mochlos* tombs (Seager, *Mochlos*, Fig. 11)

Figure 4.11 (Right:) Crushed silver cup from Tomb 4/5/6 at Mochlos containing gold leaves (Davaras, "Early Minoan Jewellery, Pl. 17a)



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Figure 4.13 (Left:) Sophie Schliemann wearing a gold diadem from Troy (Penn Museum, "Gold of Troy")

Figure 4.14 (Right:) Pierced gold leaves on a chain from Treasure H-A at Troy, L. 1.25 in (Anbrosio and Inzaghi, eds., *Treasure of Troy*, 127, Cat. 148)



Figure 4.15 (Left:) Arrow-shaped gold pendant leaf from Troy (Anbrosio and Inzaghi, eds., *Treasure of Troy*, 192, Cat. 154)

Figure 4.16 (Right:) Gold pendant earring with leaves from Troy, L. 2 in, Penn Museum (Bass, "Ur and Troy," 38)



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Figure 4.18 (Center:) Gold pendants from the Hwangnam Great Tomb in Gyeongju (Whitfield, ed., *Treasures from Korea*, 96, Cat. 90)

Figure 4.19 (Right:) Gold pendants from the Hwangnam Great Tomb in Gyeongju (Whitfield, ed., *Treasures from Korea*, 97, Cat. 91)



Figure 4.20 Tomb 5 at Arzhan 2 in Tuva, Siberia (Chugunov, Nagler, and Parzinger, "Arzhan 2," 130, Fig. 17)



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Figure 4.23 Positioning of the headdress ornaments from Tomb 5 at Arzhan 2 (Chugunov, Nagler, and Parzinger, "Arzhan 2," 133, Fig. 21)



Figure 4.24 (Left:) Burial of the "Golden Man" at Issyk Kul (Lebedynsky *Les Saces*, 94)

Figure 4.25 (Right:) Reconstruction of the costume of the "Golden Man" at Issyk Kul (Antonini, Baipakov, and Popescu, eds., *L'Uomo D'Oro*, 175, Fig. 270)



Figure 4.26 (Left:) Reconstruction of the headdress of the "Golden Man" at Issyk Kul (Antonini, Baipakov, and Popescu, eds., *L'Uomo D'Oro*, 42)

Figure 4.27 (Right:) Gold and wood ornaments from the headdress of the "Golden Man" at Issyk Kul (Antonini, Baipakov, and Popescu, eds., *L'Uomo D'Oro*, 185, Cats. 322-325)



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Figure 4.31 (Right:) Gold earring with inlaid stones from Tomb 2 at Pazyryk, Siberia (Rudenko, *Frozen Tombs*, Fig. 49, Pl 68B)



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Figure 4.47 Gold crown from Tomb 6 at Tillya Tepe, Afghanistan (Schlitz, "Catalogue," 285, Fig. 134)



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Figure 4.61 Gold and carnelian ear pendants from the Aegina Treasure (Aruz, Benzel, and Evans, eds., *Beyond Babylon*, 105, Cat. 59)



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5. THE "STEP-SWAY," THE STEPPES WAY



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Figure 5.2 (Left:) Wall painting of a husband and wife, eastern side chamber of the painted tomb at Yuantaizi (Li, "Yuantaizi," 41, Fig. 39)

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- Figure 5.10 (Left:) Warrior in armor on horseback from Xinji village, near Guyuan, Ningxia, late fifth to early sixth century CE (Juliano and Lerner, *Monks and Merchants*, 90, Fig. 23.a-d)
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- Figure 5.13 (Left:) Gilt bronze finial with one sheet gold leaf, found at the front end of the coffin of Tomb 2 at Tiancaogou, H. 11.5 in (Wan, Wang, and Zhang, "Tiancaogou," Fig. 12.1)
- Figure 5.14 (Center:) Gilt bronze ornament with leaves in the Chaoyang Museum, H. 10 in, exact origins unknown (Tian and Zhi, "Chaoyang faxian de San Yan wenhua," Fig. 24, p. 28)
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Figure 5.25 (Left:) Gilt bronze saddle cantle covers from Tomb 2 M101 at Lamadong (Wang, ed., *San Yan*, Cat. 37, p. 50)

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Figure 5.31 (Right:) Gold plaque from the belt worn by the "Golden man" at Issyk (Antonini, Baipakov, and Popescu, eds., *L'Uomo D'Oro*, 184, Fig. 307-319)



Figure 5.32 Belt of the man in Tomb 5 at Arzhan 2 (Chugunov, *Der Goldschatz von Arzan*, 35, Cat. 18)



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带扣与其相对的饰牌	悬蹄形环之镑	悬心形环之镑	悬圆角方牌之镑	铊 尾
2				
		The second se	« « « « « « « « « « « « « « « « « « «	9
10 11				
	15	16	The second secon	<u>18</u>
19 20				
	晋式	带具		
1. 定县 43 号汉墓出土 2、3. 洛阳 2	4号西晋墓出土	4~9. 宜兴西晋・	周处墓出土 10-	~12. 日本新山古坟出土

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Figure 5.36 (Left:) Single *kua* ornament from Tomb 43 in Ding county, Hebei, Han dynasty (Dingxian bowuguan, "Hebei Dingxian," 10, Fig. 2.4)

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Figure 5.38 Seated figure, painted tomb at Yuantaizi, mid- to late fourth century CE (Li, "Yuantaizi," Pl. 6.1)



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Figure 5.41 (Left:) Seated figure in the tomb at Tokhungri, Kangso, North Korea, 408-9 CE (Kim, *Koguryo Tomb Murals*, 19)

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Figure 5.50 (Right:) Strip-twisted and strip-drawn wire (Ogden, Ancient Jewellery, 46, Fig. 30)



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Figure 5.56 (Left:) Unused pile of gold thread from Tomb 4 at Vani, Georgia (Kacharava and Kvirkvelia, eds., *Wine, Worship, and Sacrifice*, 201, Pl. 52a)

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Figure 5.60 (Left:) Gold and turquoise pendant earring suspended from a hoop, Issyk, Kazakhstan (Antonini, Baipakov, and Popescu, eds., *L'Uomo D'Oro*, Fig. 276)

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Figure 5.62 Gold-wrapped bronze plaque with three stags, Northeast China, first to third century CE, ex-collection of Joseph G. Gerena Fine Art (Bunker, *Nomadic Art*, 169, Fig. 154)



Figure 5.63 Cast gold plaque with three stags, Jintan village, Ulanqab league, Inner Mongolia, Eastern Han (Zhang, *Beifang caoyuan*, 72, Fig. 47)



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Figure 5.74 Pyramids of granules from Tillya Tepe (Schlitz, "Catalogue," 43, Cat. 236)



Figure 5.75 Detail of the granulation on a pair of earrings from Silla (Gyeongju national Museum, Silla, 71, Cat. 90)



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5.77 Pin with filigree rosettes and spirals from Troy, H. 2.3 in (Anbrosio and Inzaghi, eds., *Treasure of Troy*, 184, Cat. 240)



Figure 5.77 Modern use of a mouth blowpipe as a torch (Untracht, *Jewelry Concepts and Technology*, 349, Fig. 9.36)



Figure 5.78 Pendant earring suspended from a hoop from Lamadong (Wang, ed., San Yan, 42, Fig. 22)



Figure 5.79 Gold bells from Tomb 2 at Fangshen (Wang, ed., San Yan, 44, Fig. 26)



Figure 5.80 Gold inlaid ring from Tomb 2 at Fangshen (Wang, ed., San Yan, 44, Fig. 28)

### BIBLIOGRAPHY

**PRIMARY SOURCES:** 

- Han shu [Book of Han] 漢書. By Ban Gu 班固 (Eastern Han dynasty). Beijing: Zhonghua shuju, 1960.
- Hou Han shu [Book of Later Han] 後漢書. By Fan Ye 範曄 (398-445 CE). Beijing: Zhonghua shuju, 1965.
- Jin shu [Book of Jin] 晉書. By Fang Xuanling 房玄齡 (578-648 CE). Reprinted in Ershisi shi [The Twenty-four histories] 二十四史. Vol. 4. Beijing: Zhonghua shuju, 1997.
- Shiming shuzheng bu [The Commentary and Supplementary of Explaining Words] 釋名 疏證補. By Liu Xi 劉熙 (Eastern Han). Ed. Bi Yuan 畢沅 (Qing) and Wang Xianqian 王先謙. Beijing: Zhonghua shuju, 2008.

## SECONDARY SOURCES:

#### Abbaye de Daoulas

1995 *L'Or des Sarmates entre Asie et Europe: Nomades des Steppes dans l'Antiquité: 17 Juin-29 Octobre 1995.* Daoulas: Abbaye de Daoulas.

## Akišev, Kemal

1983 Drevnee Zoloto Kazachstana. Almaty. Quoted in Adam: L'Uomo D'Oro: La Cultura delle Steppe del Kazakhstan dall'Età del Bronzo alle Grandi Migrazioni, ed. Chiara Silvia Antonini, Karl Baipakov, and Grigore Arbore Popescu, 42-43. Rome: Bagatto Libri.

Anbrosio, Franco and Marisa Inzaghi, eds.

- 1996 *The Treasure of Troy: Heinrich Schliemann's Excavations*. Moscow: Pushkin Museum.
- Antonini, Chiara Silvia, Karl Baipakov, and Grigore Arbore Popescu, eds.
- 1999 Altyn Adam: L'Uomo D'Oro: La Cultura delle Steppe del Kazakhstan dall'Età del Bronzo alle Grandi Migrazioni. Rome: Bagatto Libri.
- Aruz, Joan, Kim Benzel, and Jean M. Evans, eds.
- 2008 *Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium B.C.* New York: Metropolitan Museum of Art.

Aruz, Joan, Ann Farkas, and Elisabetta Valtz Fino, eds.

2006 *The Golden Deer of Eurasia: Perspectives on the Steppe Nomads of the Ancient World.* New York: Metropolitan Museum of Art.

Baadsgaard, Aubrey

2008 Trends, Traditions, and Transformations: Fashions in Dress in Early Dynastic Mesopotamia. Ph.D. diss., University of Pennsylvania.

Robert Bagley, ed.

- 2001 *Ancient Sichuan: Treasures from a Lost Civilization* (Princeton, NJ: Princeton UP).
- Bai Bin 白彬, Dang Zhihao 党志豪, ZhaoZhenjiang 趙振江, Fu Bingbing 付兵兵, Huo Daqing 霍大清, Yu Mengzhou 于孟洲, Hu Songhe 胡松鶴, and Liu Bingbing 刘兵兵
- 2009 Henan Weihui Dasima mudi Jin mu (M18) fajue jianbei [A Brief Excavation Report of the Western Jin Tomb (M18) in the Dasima Cemetery near Weihui in Henan] 河南衛輝大司馬墓地晉墓 (M18)發掘簡報. *Wenwu* 2009.1: 15-21.

### Barnes, Gina L.

1999 *Rise of Civilization in East Asia: The Archaeology of China, Korea and Japan.* London: Thames and Hudson.

### Bass, G.F.

1966 "Ur and Troy: Gold Links between Two Ancient Capitals." *Expedition* 8.4: 27-39.

Beasley, W. G. and E. G. Pulleyblank, eds.

1961 *Historians of China and Japan* (London: Oxford UP).

## Beavis, Ian C.

1988 *Insects and Other Invertebrates in Classical Antiquity*. Exeter: University of Exeter.

# Beck, B.J. Mansvelt

1990 The Treatises of Later Han: Their Author, Sources, Contents, and Place in Chinese Historiography (Leiden: E.J. Brill).

## Benzel, Kim

2008 "Ornaments of Interaction: The Art of the Jeweler." In *Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium B.C.*, ed. Joan Aruz, Kim Benzel, and Jean M. Evans, 101-103. New York: Metropolitan Museum of Art.

Bunker, Emma C.

1983-5 "The Steppe Connection," Early China 9-10: 70-76.

- 1993 "Gold in the Ancient Chinese World: A Cultural Puzzle," *Artibus Asiae* 53.1/2: 27-50.
- 2002 *Nomadic Art of the Eastern Eurasian Steppes: The Eugene V. Thaw and Other New York Collections.* New York: Metropolitan Museum of Art.
- Bunker, Emma C. and Jenny F. So
- 1995 *Traders and Raiders on China's Northern Frontier*. Seattle: Arthur M. Sackler Gallery, Smithsonian Institution.
- Bunker, Emma C. and Julia M. White
- 1994 *Adornment for Eternity: Status and Rank in Chinese Ornament*. Denver, CO: Denver Art Museum.
- Calinescu, Adriana, ed.
- 1996 Ancient Jewelry & Archaeology. Bloomington: Indiana UP.
- Cambon, Pierre and Fredrik Hiebert, eds.
- 2008 *Afghanistan: Hidden Treasures from the National Museum, Kabul.* Washington, DC: National Geographic Society.
- Chase, W. Thomas
- 1991 *Ancient Chinese Bronze Art: Casting the Precious Sacral Vessel.* New York: China House Gallery.
- Chen Dawei 陳大為
- 1960 "Liaoning Beipiao Fangshen cun Jin mu fajue jianbao [Report on the Excavation of Jin Tombs at Fangshen village in Beipiao county, Liaoning] 遼 寧北票房身村晉墓發掘簡報." Kaogu 1960.1: 24-26.
- 1990 "Chaoyang Goumenzi Jin bihua mu [The Jin painted tomb at Goumenzi in Chaoyang county] 朝陽縣溝門子晉壁畫墓." *Liaohai wenwu xuekan* 遼海文物學刊 1990.2: 12-24.
- Chen Dawei 陳大為 and Li Yufeng 李宇峰
- 1981 "Liaoning Chaoyang faxian Shiliuguo shiqi Hou Yan Cui Wei mubei [The Sixteen Kingdoms period epitaph of Cui Wei of the Later Yan in Chaoyang, Liaoning] 遼寧朝陽發現十六國時期后燕崔遹墓碑." *Wenwu* 1981.4 (1981): 270-274.
- Chen Maotong 陳茂同, ed.
- 2005 Zhongguo lidai yiguan fushi zhi [Chinese Historical Systems of Dress and Personal Adornment] 中國歷代衣冠服飾 (Tianjin: Baihua wenyi chubanshe).

Chen Tangdong 陳棠棟 and Lu Sixian 陸思賢

- 1984 "Damao qi chutu de gudai beifang minzu jinshi jian [Items of Gold Ornamentation from Ancient Northern Peoples Excavated in Damao Banner] 達茂旗出土的古代北方民族金飾件." *Wenwu* 1984.1: 83-85, 31, 108.
- Choi, Kyu-soon 崔圭順
- 2007 *Zhongguo Lidai Diwang Mianfu Yanjiu [A Historical Study of Emperor's Official Costume in China]* 中國歷代帝王冕研究. Hualian, Taiwan: National Dong Hwa University 東華大學出版社.
- Christian, David
- 2000 "Silk Roads or Steppe Roads? The Silk Roads in World History." *Journal of World History* 11.1: 1-26.
- Chugunov, Konstantin V.
- 2006 Der Goldschatz von Arzan: Ein Fürstengrab der Skythenzeit in der südsibirischen Steppe. München: Schirmer Mosel.

Chugunov, K., A. Nagler, and H. Parzinger

- 2004 "Arzhan 2: La Tombe d'un Prince Scythe en Sibérie du Sud: Rapport
   Préliminaire des Fouilles Russo-allemandes de 2000-2002." Arts Asiatiques 59: 5-29.
- Corradini, Piero
- 2006 "The Barbarian States in North China." *Central Asiatic Journal* 50.2: 163-232.
- Crespigny, R.R.C. de and H. J. Gardiner
- 1977 "T'an-shih-huai and the Hsein-pi Tribes of the Second Century A.D." *Papers* on Far Eastern History 15: 1-44.
- Cui Xue'an 崔學諳, ed.
- 2004 Jinyinqi juan [Gold and Silver Wares Volume] 金銀器卷. Beijing wenwu jingcui daxi [Gems of Beijing Cultural Relics Series] 北京文物精粹大系. Beijing: Beijing chubanshe.
- Daegu National Museum
- 2001 The Daegu National Museum. Daegu: Daegu National Museum.

### Dalby, Andrew

2000 Dangerous Tastes: The Story of Spices. Berkeley: University of California.

Davaras, Costis

1975 "Early Minoan Jewellery from Mochlos." *Annual of the British School at Athens* 70: 101-114.

Davis-Kimball, Jeannine

1997 "Chieftain or Warrior Priestess?" Archaeology 50.5: 40-41.

Day, Peggy L.

1992 "Anat: Ugarit's 'Mistress of Animals.'" *Journal of Near Eastern Studies* 51.3: 181-190.

## Demargne, P.

1930 "Bijoux Minoens de Mallia." *Bulletin de Correspondence Hellénique* 54: 404-421.

Deydier, Christian and Han Wei

2001 Ancient Chinese Gold. Paris: Editions d'Art et d'Histoire.

Dingxian bowuguan 定縣博物館

1973 "Hebei Dingxian 43 hao Han mu fajue jianbao [A Brief Excavation Report of Han tomb 43 at Dingxian in Hebei] 河北定縣 43 号漢墓發掘簡報." *Wenwu* 1973. 11: 8-20.

Di Cosmo, Nicola

1999 "The Northern Frontier in Pre-Imperial China." In *The Cambridge History of Ancient China*, eds. Michael Loewe and Edward L. Shaughnessy, Cambridge: Cambridge UP: 885-966.

Dong Gao 董高

1981 "Chaoyang diqu chutu Xianbei maju de chubu yanjiu [Preliminary Research on Xianbei Horse Trappings Uncovered in the Chaoyang Area] 朝陽地區出土鮮 卑馬具的初步研究." In Liaoning sheng kaogu bowuguan xuehui chengli dahui huikan [Proceedings of the Liaoning Archaeological Museum Association Inaugural Conference] 遼寧省考古博物館學會成立大會會刊, ed. Liaoning sheng kaogu bowuguan xuehui 遼寧省考古博物館學會. Shenyang: Liaoning sheng kaogu bowuguan xuehui 遼寧省考古博物館學會成立大會會 刊.

Du Yusheng 杜玉生

1981 "Bei Wei Yongning sita ji fajue jianbao [A Brief Report on the Excavation of the Foundations of the Yongningsi Pagoda] 北魏永寧寺塔基發掘簡報." Kaogu 1981.3: 212, 223-224

Fairbank, John K. and Denis Twitchett

1986 *The Cambridge History of China*, Vol. 1: *The Ch'in and Han Empires*. Cambridge University Press.

Fang Zhijun 方志軍, Ma Mingyuan 馬明遠, Zhou Guangji 周廣濟, and Xie Yan 謝言

2008 "2006 nian Gansu Zhangjiachuan Hui zu zizhixian Majiayuan zhanguo mudi fajue jianbao [A Brief Report on the 2006 Excavation on the Majiayuan Cemetery of the Warring States Period in Zhangjiachuan Autonomous County of Hui Nationality, Gansu] 2006 年度甘肅張家川回族自治縣馬家塬戰國墓 地發掘簡報, Wenwu 2008.9: 4-28.

Feng Yi 馮沂

2005 "Shandong Linyi Xiyanchi jie Jin mu [The Jin tombs on Xiyanchi Street in Linyi, Shandong] 山東臨沂洗硯池街晉墓." Wenwu 2005.7: 4-37.

Fitton, J. Lesley ed.

2009 *The Aigina Treasure: Aegean Bronze Age Jewellery and a Mystery Revisited.* London: British Museum Press.

Francfort, H.-P., D.T. Potts, and M. Tengberg

2008 "The Golden Leaves of Ur." Antiquity 82: 925-936.

Frachetti, Michael D.

- In press "Multi-Regional Emergence of Mobile Pastoralism and Nonuniform Institutional Complexity across Eurasia," *Current Anthropology*: 1-47.
- Gao Feng 高峰
- 2004 "Datong Hudong Bei Wei yi hao mu [Northern Wei Tomb 1 at Hudong, Datong, Shanxi] 大同湖東北魏一号墓." *Wenwu* 2004.12: 26-34.
- Gao Feng 高峰, Li Ye 李晔, Zhang Haiyan 張海雁, Yuan Xinhua 員新, Jiang Weiwei, 江偉偉, and Liu Junxi 劉俊喜
- 2006 "Shanxi Datong Shaling Bei Wei bihua mu fajue jianbao [A Brief Excavation Report on the Mural Tomb of the Northern Wei located in Shaling, Datong, Shanxi Province] 山西大同沙嶺北魏壁画墓发掘简报." *Wenwu* 2006.10: 4-24.

### Golas, Peter

1999 Science and Civilisation in China. Vol. 5: Chemistry and Chemical Technology. Part XIII: Mining. Cambridge: Cambridge UP.

Graff, David. A.

2002 *Medieval Chinese Warfare: 300-900.* New York: Routledge.

Gu Zhijie 顧智界 and Yang Hu 陽虎

1984 "Nei Menggu Aohan qi Zhoujiadi mudi fajue jianbao [A Brief Report on the Cemetery at Zhoujiadi in Aohan Banner, Inner Mongolia] 内蒙古敖漢旗周家 地墓地發掘簡報." *Kaogu* 1984.5: 417-426.

Gubel, Eric and Bruno Overlaet, eds.

2008 *De Gilgamesh à Zénobie: Proche-Orient et Iran Millénaires*. Bruxelles: Fonds Mercator.

Guo Suxin 郭素新 and Tian Guangjin 田廣金

- 1980a "Neimenggu Aluchaideng faxian de Xiongnu yiwu [Objects of the Xiongnu People Found at Aluchaideng in Inner Mongolia] 内蒙古阿魯柴登發現的匈奴遺物." *Kaogu* 1980.4: 333-338.
- 1980b "Xigoupan Xiongnu mu fanying de zhu wenti [Various Questions about the Report on the Xiongnu tomb at Xigoupan] 西溝畔匈奴墓反映的諸問題." *Wenwu* 1980.7: 15-19, 24.

Gyeongju National Museum

2001 Sinbihan hwanggum ui nara Silla hwanggum [The Golden Arts of Silla] 신비한황금의나라. Seoul: Sit'i P'at'uno.

Gyllensvärd, Bo

- 1953 *Chinese Gold & Silver in the Carl Kempe Collection*. Stockholm: Nordisk Rotogravyr.
- Harada, Yoshito
- 1967 *Chinese Dress and Personal Ornaments in the Han and Six Dynasties* (Tokyo: Toyo Bunko).

Harrsch, Mary

2005 "Etruscan footed bowl depicting Master of Horses 7th century BCE." *Penn Museum Photostream* on Flickr. Accessed April 9. http://www.flickr.com/photos/mharrsch/59853971/in/set-1259214

Hebei sheng wenwu yanjiusuo 河北省文物研究所

2000 *Hebei gudai muzang bihua* [*Wall Paintings of the Ancient Tombs of Hebei*] 河 北古代墓葬壁画 (Beijing: Wenwu chubanshe).

Herrmann, Albert, ed.

1966 An Historical Atlas of China. Chicago: Aldine Publishing Co.

Hickman, Jane

2008 Gold before the Palaces: Crafting Jewelry and Social Identity in Minoan Crete. Ph.D. diss., University of Pennsylvania.

Hebei sheng wenwu yanjiusuo 河北省文物研究所

1996 Yan Xiadu [Yan Xiandu] 燕下都. Beijing: Wenwu.

Holmgren, Jennifer

- 1981-83 "Social Mobility in the Northern Dynasties: A Case Study of the Feng of Northern Yan." *Monumenta Serica* 35: 19-32.
- 1990 "The Last of the Mu-Jung: Southern Yen and the History of the Shantung Peninsula, AD 399-410." *Papers on Far Eastern History* 42: 1-46.

Hong Yinxing 洪银興 and Jiang Zanchu 蔣贊初, eds.

2002 Nanjing Daxue wenwu zhenpin tulu [南京大學文物珍品圖錄] Catalogue of Treasures from Nanjing University. Beijing: Kexue chubanshe.

Horne, Lee, and Zettler, Richard L., eds.

1998 *Treasures from the Royal Tombs of Ur.* Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

Hucker, Charles O.

Ilioukov, L.S.

1995 "Kobiakovo, le Kourgane d'une Princesse Sarmate." In L'Or des Sarmates entre Asie et Europe: Nomades des Steppes dans l'Antiquité: 17 Juin-29 Octobre 1995, ed. Abbaye de Daoulas, 60-66. Daoulas: Abbaye de Daoulas.

Jia Weizhong 賈維勇, Wang Zhigao 王志高, and Zhang Jinxi 張金喜

2001 "Jiangsu Nanjing Xianheguan Dong Jin mu [The Eastern Jin Tombs at Xianheguan on the Outskirts of Nanjing] 江蘇南京仙鶴觀東晉墓." Wenwu 2001.3: 5-40.

Jiang Nan 江楠

2006-7 Zhongguo dongbei diqu jin buyao shipin de faxian yu yanjiu [The Discovery and Study of Gold-*Buyao* Ornaments in Northeast China] 中國東北地區金步 搖飾品的發現與研究. Ph.D. diss., Jilin University.

Jiang Zanchu 蔣贊初, ed.

2000 *Changjiang zhong xiayou lishi kaogu lunwenji* [Collected Essays on the History and Archaeology of the Middle and Lower Reaches of the Yangzi] 長 江中下游歷史考古論文集. Beijing: Kexue chubanshe.

Jilin shen wenwu kaogu yanjousuo 吉林省文物考古研究所, ed.

1987 Yushu Laoheshen [Laoheshen, Yushu] 榆樹老河深. Beijing: Wenwu.

Juliano, Annette L. and Judith A. Lerner

2001 Monks and Merchants: Silk Road Treasures from Northwest China: Gansu and Ningxia, 4th-7th Century. New York: Harry N. Abrams.

<sup>1985</sup> A Dictionary of Official Titles in Imperial China (Stanford: Stanford UP).
Kacharava, Darejan and Guram Kvirkvelia, eds.

2008 *Wine, Worship, and Sacrifice: The Golden Graves of Ancient Vani.* New York: Institute for the Study of the Ancient World.

Kessler, Adam T.

1993 *Empires Beyond the Great Wall: The Heritage of Genghis Khan.* Los Angeles: Natural History Museum of Los Angeles County.

# Kim, Lena

2004 *Koguryo Tomb Murals*. Seoul : ICOMOS-Korea.

Kitchell, Kenneth F.

1981 "The Mallia 'Wasp' Pendant Reconsidered." Antiquity 55: 9-15.

Kubo Tomoyasu 久保智康

- 2001 "Kigiri Kanagu 飾金具." Nihon no Bijutsu 日本の美術 437 (Oct. 2001): 1-98.
- LaFleur, Richard A., Robert W. Matthews, and David B. McCorkle Jr.
- 1979 "A Re-Examination of the Mallia Insect Pendant." *American Journal of Archaeology* 83.2: 208-212.

#### Lebedynsky, Iaroslav

- 2001 *Les Scythes: La Civilisation de Steppes, VIIe IIIe Siècle av. J.C.* Paris: Editions Errance.
- 2006 *Les Saces: Les "Scythes" d'Asie, VIIIe Siècle av. J.C. IVe Siècle apr. J.C.* Paris: Editions Errance.

#### Leskov, A.M.

2008 *The Maikop Treasure*. Philadelphia: University of Pennsylvania Museum of Archeology and Anthroplogy.

# Li Jian, ed.

- 2003 *The Glory of the Silk Road: Art from Ancient China*. Dayton, OH: Dayton Art Institute.
- Li Qingfa 李慶發
- 1984 "Chaoyang Yuantaizi Dong Jin huamu [The Eastern Jin Painted Tomb in Yuantaizi, Chaoyang] 朝陽袁台子東晉畫墓," *Wenwu* 1984.6: 29-45.

Li Yaobo 黎瑤渤

1973 "Liaoning Beipiao xian Xiguan gongzi Bei Yan Feng Sufu mu [The Northern Yan tomb of Feng Sufu at Xiguan Village in Beipiao County, Liaoning] 遼寧 北票縣西官营子北燕馮素弗墓." *Wenwu* 1973.3: 4-30, 67-71.

Liaoning sheng Wenwu Kaogu Yanjiusuo 遼寧省文物考古研究所

2003 Liaoning Kaogu Wenji [Collected Works on Liaoning Archeology] 遼寧考古 文集. Shenyang: Liaoning jiaoyu chubanshe [Liaoning Educational Press] 遼 寧教育出版社.

Liaoning sheng kaogu bowuguan xuehui 遼寧省考古博物館學會

1981 Liaoning sheng kaogu bowuguan xuehui chengli dahui huikan [Proceedings of the Liaoning Archaeological Museum Association Inaugural Conference] 遼寧 省考古博物館學會成立大會會刊. Shenyang: Liaoning sheng kaogu bowuguan xuehui.

Liu Qian 劉謙

1963 "Liaoning Yi xian Bao'ansi faxian de gudai muzang [The Ancient Tomb Discovered at Bao'ansi in Yi county, Liaoning] 遼寧義縣保安寺發現的古代 墓葬." *Kaogu* 1963.1: 53.

Loewe, Michael

1993 *Early Chinese Texts: A Bibliographical Guide*. Berkeley, Institute of East Asian Studies, University of California.

Loewe, Michael and Edward L. Shaughnessy, eds.

1999 The Cambridge History of Ancient China. Cambridge: Cambridge UP.

Lu Baolin 鲁宝林, Wu Peng 吴鵰, and Xing Fa 幸發

1995 "Jinzhou Qian Yan Li Hui mu fajue jianbao [A Brief Report on the Excavation of the Former Yan Tomb of Li Hui in Jinzhou] 錦州前燕李廆墓發掘清理." *Wenwu* 文物 1995.6: 42-46.

Lutz, Frank E.

- Ma Shichang 馬世長 and Sun Guozhang 孫國璋
- 1974 "Dunhuang Jin mu [The Jin Tombs at Dunhaung] 敦煌晉墓. *Kaogu* 1974.3: 191-199.

Mallory, J. P. Mallory and Victor Mair

2000 *The Tarim Mummies: Ancient China and the Mystery of the Earliest Peoples from the West.* New York: Thames & Hudson.

Maxwell-Hyslop, K. R.

McCausland, Shane, ed.

<sup>1948</sup> *Field Book of Insects*. New York: G.P. Putnam's Sons.

<sup>1971</sup> Western Asiatic Jewellery c.3000-612B.C. London: Methuen.

2003 *Gu Kaizhi and the Admonitions Scroll*. London: The British Museum.

# Melikian, Souren

- 2008 "Whiff of mystery hangs over sale of China objects." *New York Times* 5.23.2008.
- Miho Museum, Ancient Orient Museum 古代オリエント博物館, and Okayama Orient Museum 岡山市立オリエント美術館, eds.
- 2009 Yūrashiya no fū Shinra he [Eurasian Winds Toward Silla] ユーラシアの風 新羅へ. Tokyo: Yamakawa.

## Miller, Naomi

- Miron, Andrei and Winfried Orthmann, eds.
- 1995 *Unterwegs zum goldenen Vlies: archäologische Funde aus Georgien.* Saarbrücken: Museum für Vor- und Frühgeschichte.
- Mullie, Josef L.M.
- 1972 "À la Recherche de Ki-Tch'eng la Capitale des Mou-Joung." *Central Asiatic Journal* 15:4: 284-294.

Nanjing Daxue Lishi Xi Kaogu Zu 南京大學歷史係考古組

1973 "Nanjing Daxue beiyuan Dong Jin mu [The Eastern Jin Tomb in the North Garden at Nanjing University] 南京大學北園東晉墓." *Wenwu* 1973.4: 36-50.

Nanjing shi bowuguan 南京市博物館

2002 "Nanjing beijia Dong Jin Wen Jiao mu [The Eastern Jin Tomb of Wen Jiao in the Northern Suburbs of Nanjing] 南京北郊東晉溫嶠墓. *Wenwu* 2002.7: 19-33.

#### Nicholson, Eric D.

- 1979 "The Ancient Craft of Gold Beating." Gold Bulletin 12: 161-166.
- Ningxia Huizu Zizhiqu Guyuan bo wu guan 寧夏回族自治區固原博物館
- 1999 Yuanzhou gumu jicheng [A Compendium of Ancient Tombs in Yuanzhou] 原州 古墓集成. Beijing: Wenwu chubanshe.

Oddy, Andrew

- 1977 "The Production of Gold Wire in Antiquity." *Gold Bulletin* 10: 79-87.
- 1996 "Jewelry Under the Microscope: A Conservator's Guide to Cataloguing." In Ancient Jewelry & Archaeology, ed. Adriana Calinescu, 185-197. Bloomington: Indiana UP.

<sup>2000 &</sup>quot;Plant Forms in Jewellery from the Royal Cemetery at Ur." *Iraq* 61: 149-155.

# Ogden, Jack

- 1982 *Jewellery of the Ancient World*. London: Trefoil.
- 1992 Ancient Jewellery. Berkeley: University of California.
- 1994 "The Techniques of the Greek Goldsmith." In *Greek Gold: Jewelry of the Classical World*, eds. Ogden and Williams, 17-30. New York, Harry N. Abrams.

## Ogden, Jack and Defry Williams

1994 *Greek Gold: Jewelry of the Classical World.* New York: Harry N. Abrams.

Pak, Young-sook

1988 "The Origins of Silla Metalwork." *Orientations* 19.9: 44-53.

# Penn Museum

2011 "The Gold of Troy." *Penn Museum* website. Accessed April 9, 2011. http://www.penn.museum/troy-gold.html.

#### Plazt-Horster, Gertrude

2002 *Altes Museum: Ancient Gold Jewelry*, trans. Michael Vickers and Mira Hofmann. Mainz am Rhein: Verlag Philipp vof Zabern.

# Piton, C.

1883-4 "China during the Tsin Dynasty, A.D. 264/419." *China Review* 12: 353-362, 390-402.

#### Pittman, Holly

1998 "Jewelry." In *Treasures from the Royal Tombs of Ur*, eds. Lee Horner and Richard L. Zettler, 86-122. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

#### Pu Shi 璞石

1994 "Liaoning Chaoyang Yuanzitai Bei Yan mu [The Northern Yan Tomb at Yuanzitai in Chaoyang, Liaoning 遼寧朝陽袁台子北燕墓." *Wenwu* 1994.11: 43-47.

## Psarras, Sophia-Karin

#### Qi Dongfang 齊東方, ed.

- 1999 *Tang dai jinyinqi yanjiu* [*Research on Tang Gold and Silver*] 唐代金银器研究. Beijing: Zhongguo shehui kexue chubanshe.
- 2001 "Xianbei jinyinqi yanjiu [Research on Xianbei Gold and Silver Wares] 鮮卑金 銀器研究." In Han Tang zhijian: wenwu yishu de hudong yu jiaorong [Between Han and Tang: Cultural and Artistic Interaction in a Transformative

<sup>1996 &</sup>quot;Pieces of Xiongnu Art." *Central Asiatic Journal* 40.2: 234-259.

*Period*] 漢唐之間: 文化藝術的互動與交融, ed. Wu Hung, 559-573. Beijing: Wenwu chubanshe.

# Reeder, Ellen

- 1987 "The Mother of the Gods and a Hellenistic Bronze Matrix." *American Journal* of Archaeology 91.3 (Jul. 1987): 423-440.
- 1999 *Scythian Gold: Treasures from Ancient Ukraine*. Baltimore: Walters Art Gallery.

#### Rehm, Ellen

## Frederic Rosengarten,

1969 *The Book of Spices*. Wynnewood, PA: Livingston.

# Rudenko, Sergei I.

- 1970 Frozen Tombs of Siberia: The Pazyryk burials of Iron Age Horsemen. Berkeley: University of California.
- Sarianidi, Viktor Ivanovich.
- 1985 *The Golden Hoard of Bactria: From the Tillya Tepe Excavations in Northern Afghanistan.* New York: Harry N. Abrams.
- 2008 "Ancient Bactria's Golden Hoard." In Afghanistan: Hidden Treasures from the National Museum, Kabul, eds. Pierre Cambon and Fredrik Hiebert, 211-218. Washington, DC: National Geographic Society.
- Schiltz, Véronique
- 2008a "Catalogue." In *Afghanistan: Hidden Treasures from the National Museum, Kabul*, eds. Pierre Cambon and Fredrik Hiebert, 232-293. Washington, DC: National Geographic Society.
- 2008b "Tillya Tepe, the Hill of Gold: A Nomad Necropolis." In *Afghanistan: Hidden Treasures from the National Museum, Kabul*, eds. Pierre Cambon and Fredrik Hiebert, 219-231. Washington, DC: National Geographic Society.

# Schreiber, Gerhard

- 1949-55 "The History of the Former Yen Dynasty, Part 1." *Monumenta Serica* 14: 274-480.
- 1956 "History of the Former Yen Dynasty, Part 2." *Monumenta Serica* 15: 1-141.

#### Seager, Richard B.

1912 *Explorations in the Island of Mochlos*. Boston: American School of Classical Studies at Athens.

Shang Xiaobo 尚曉波

<sup>1992</sup> Der Schmuck der Achaemeniden. Munster : Ugarit-Verlag.

1997 "Chaoyang Wangzifenshan muqun 1987, 1990 niandu kaogu fajue de zhuyao shouhuo [The Important Findings of the 1987 and 1990 Season Archaeological Excavations at Wangzifanshan in Chaoyang] 朝陽王子墳山墓群 1987, 1990 年度考古發掘的主要收穫." *Wenwu* 1997.11: 4-18.

Shanxi sheng Datong shi Bowuguan 山西省大同市博物馆 and Shanxi sheng wensu gongzuo weiyuanhui 山西省文物工作委員會

1972 "Shanxi Datong Shijiazhai Bei Wei Sima Jinlong mu [The Northern Wei Tomb of Sima Jinlong at Shijiazhai in Datong, Shanxi ] 山西大同石家寨北魏司马 金龙墓." *Wenwu* 1972.3: 20-33, 64, 89-92.

Shen Congwen, ed.

- 1981 *Zhongguo gudai fushi yanjiu* [*Studies on Ancient Chinese Costume*] 中國古代 服饰研究. Hong Kong: Shangwu yinshu.
- Shen, Hsueh-man, ed.
- 2006 *Gilded Splendor: Treasures of China's Liao Empire (907-1125).* New York: Asia Society.

Spiro, Audrey

1990 Contemplating the Ancients: Aesthetic and Social Issues in Early Chinese Portraiture. Berkeley: University of California.

Stepanova, E. V.

2006 Evoliutsiia konskogo snariazheniia i otnositel'naia khronologiia pamiatnikov Pazyrykskoi kul'tury [Evolution of horse harnesses and relative chronology of the monuments of the Pazyryk culture]. *Arkheologicheskie vesti* 13.

Su Bai 宿白

- 1977a "Dongbei, Nei Menggu diqu de Xianbei yizhi—Xianbei yizhi jilu zhiyi [Xianbei Relics of the Northeast and Inner Mongolia: A Compilation of Papers on Xianbei relics] 東北,内蒙古地區的鮮卑遺址—鮮卑遺址輯錄之一." *Wenwu* 1977.5: 42-54.
- 1977b "Shengle, Pingcheng yidai de Tuoba Xianbei—Bei Wei yiji—Xianbei yiji jilu zhi er [Shengle and Pingcheng area Tuoba Xianbei and Northern Wei Relics: Compiled Xianbei Relics, Part. 2] 盛樂、平城一帶的拓跋鮮卑—北緯遺跡— 鮮卑遺址輯錄之二." Wenwu 1977.11: 38-46.
- 1978 "Bei Wei Luoyangcheng he Beimang Lingmu—Xianbei yiji jilu zhi san [Northern Wei Luoyang and the Beimang Mausoleum] 卑微洛陽城和北邙陵 墓—鮮卑遺跡輯錄之三." Wenwu 1978.7 (1978): 42-52.

1979 "Xianbei remains in Manchuria and Inner Mongolia." Trans. David Fridley. *Chinese Studies in Archaeology* 1.2 (Fall 1979): 3-43.

Sun Guoping 孫國平

1981 "Shitan Xianbei zu de buyao guanshi [A Discussion of the Xianbei Buyao Cap Ornaments] 試談鮮卑族的步搖冠飾." In Liaoning sheng kaogu bowuguan xuehui chengli dahui huikan [Proceedings of the Liaoning Archaeological Museum Association Inaugural Conference] 遼寧省考古博物館學會成立大 會會刊, ed. Liaoning sheng kaogu bowuguan xuehui 遼寧省考古博物館學會, 121-127. Shenyang: Liaoning sheng kaogu bowuguan xuehui.

Sun Guoping 孫國平, Tian Likun 田立坤, and Zhang Keju 章克舉

1997 "Chaoyang Shi'ertai xiang zhuan chang 88M1 fajue jianbao [Brief Report on the Excavation of 88M1 at the Shi'ertai Brick Factory in Chaoyang] 朝陽十二 台磚廠發掘簡報." *Wenwu* 1997.11: 19-32.

Sun Yutie 孙玉铁 and Yu Junyu 于俊玉

- 2009 "Liaoning Chaoyang Yuantaizi Faxian Han Wei Xianbei paishi taofan [Han-Wei period Xianbei decorated ceramic mold pieces discovered at Yuantaizi in Chaoyang, Liaoning] 遼寧朝陽袁台子發現漢魏鮮卑牌飾陶範." *Beifang Wenwu* 2009.2: 43-45.
- Sun Ji 孫機
- 1991 "Buyao, buyao guan, yu yaoye shipian [Buyao, Buyao Caps, and Swaying Leaf Ornamental Pieces] 步搖, 步搖冠與搖葉飾片." *Wenwu* 1991.11: 55-64.
- 2001 *Zhongguo gu yufu luncong* [*Essays on Ancient Chinese Chariots and Clothing*] 中國古興服論叢. Beijing: Wenwu chubanshe.

Sun Ji 孫機 and Simon Kwan 關善明

2003 *Zhongguo gu dai jin shi* [*Chinese Gold Ornaments*] 中國古代金飾. Hong Kong: Muwentang meishu chubanshe youxian gongsi 沐文堂美術出版社有限 公司.

Sun Shoudao 孫守道

1960 "'Xiongnu Xichagou wenhua'" gu muqun de faxian [The Discovery of an Ancient Tomb Group of the 'Xiongnu Xichagou Culture'] '匈奴西岔溝文化' 古墓群的發現." *Wenwu* 1960.Z1.

Sun Zuoyun 孫作云

1973 "Changsha Mawangdui yihao Han my chutu huafan kaoshi [An Explanation of the Painted Banner from Tomb 1 at Mawangdui, in Changsha] 長沙馬王堆一 号漢墓出土畫幡考釋." *Kaogu* 1973.1: 54-61.

Taiyuan shi wenwu kaogu yanjiusuo 太原市文物考古研究所北齐娄叡墓

2004 Lou Rui Bei Qi mu [The Northern Qi tomb of Lou Rui] 北齊婁叡墓. Beijing: Cultural Relics Press.

# Tallon, Françoise

1995 *Les Pierres Précieuses de l'Orient Ancien des Sumériens aux Sassanides.* Paris: Réunion des Musées Nationaux.

# Tang Chi 湯池

1984 "Dong Wei Ruru Gongzhu mu bihua shitan [A Discussion of the Wall Paintings in the Eastern Wei Tomb of the Ruru Princess] 東魏茹茹公主墓壁 畫試探. *Wenwu* 1984.4: 10-15.

# Tian Likun 田立坤

1994 Chaoyang Qian Yan fengju duwei mu [The Former Yan tomb of the fengju duwei in Chaoyang] 朝陽前燕奉車都尉墓. *Wenwu* 1994.11 (1994): 33-37.

# Tian Likun 田立坤 and Li Zhi 李智

- 1994 "Chaoyang faxian de San Yan wenhua yiwu ji xiangguan wenti [Traces of Three Yan Culture Discovered in Chaoyang and Related Questions] 朝陽發現 的三燕文化遺物及相關問題." *Wenwu* 1994.11 (1994): 20-32.
- Tian Likun 田立坤 and Zhang Keju 章克舉
- 1996 Liaoning fajue Beipiao Lamadong Xianbei guixu mudi [An Aristocratic Xianbei Cemetery Excavated at Lamadong, Liaoning] 遼寧發掘北票喇嘛洞 鮮卑贵族墓地. Zhongguo Wenwu Bao 中國文物報 1996.12.24: 1.

#### Treister, Mikhail Y.

- 1996 "The Trojan Treasures: Description, Chronolgy, Historical Context." In *The Treasure of Troy: Heinrich Schliemann's Excavations*, eds. Franco Anbrosio and Marisa Inzaghi, 225-229. Moscow: Pushkin Museum.
- 2001 *Hammering Techniques in Greek and Roman Jewellery and Toreutics*. Boston: Brill.

# Trever, Camilla

1932 *Excavations in Northern Mongolia, 1924-25.* Leningrad [St. Petersburg]: J. Fedorov.

#### Untracht, Oppi

1985 *Jewelry Concepts and Technology.* New York: Doubleday.

Vandenabeele, Frieda

1992 *Malia: The Palace of Malia and Chersonissos.* Athens: Ekdotike Athenon.

# Wan Xin 萬欣

- 2003 "Xianbei muzang, San Yan shiji yu jin buyao shi de faxian yu yanjiu [The Discovery and Study of Xianbei Tombs and Three Yan Period Gold-Buyao Ornaments and Historical Relics] 鮮卑墓葬、三燕史跡與金步搖飾的發現與研究." In Liaoning Kaogu Wenji [Collected Works on Liaoning Archeology] 遼寧考古文集, ed. Liaoning sheng Wenwu Kaogu Yanjiusuo 遼寧省文物考古研究所, 268-281. Shenyang: Liaoning jiaoyu chubanshe [Liaoning Educational Press] 遼寧教育出版社.
- 2004 "Liaoning Beipiao Lamadong mudi 1998 nian fajue baogao [The 1998 Excavation Report for the Tomb at Lamadong, in Beipiao County, Liaoning Province] 遼寧北票喇嘛洞墓地 1998 年發掘報告." *Kaogu Xuebao* 2004.2: 209-240.
- Wan Xin 萬欣, Wang Chengshang 王成生, and Zhang Hongbo 張洪波
- 1997 "Liaoning Chaoyang Tiancaogou Jin mu [The Jin tombs at Tiancaogou, in Chaoyang, Liaoning] 遼寧朝陽田草溝晉墓." *Wenwu* 1997.11 (1997): 33-41.
- Wang Binghua
- 2003 "Gold and Silver Discovered in Boma, Xinjiang." In *The Glory of the Silk Road: Art from Ancient China*, ed. Li Jian, 15-31. Dayton, OH: Dayton Art Institute.
- Wang Jingchen 王晶辰, ed.
- 2002 San Yan wenwu jingcui [The Essence of the Three Yan Kingdoms relics] 三燕 文物精粹. Shenyang: Liaoning renmin chubanshe.
- Wang Xiuling 王秀玲
- 2009a "Ming Dingling chutu dihou fushi (san) [The Clothing and Ornaments of the Emperor and Empress Excavated at Ming Changling, Pt. 3] 明定陵出土帝后 服饰(三)," *Shoucangjia* 2009.9: 29-36.
- 2009b "Ming Dingling chutu dihou fushi (yi) [The Clothing and Ornaments of the Emperor and Empress Excavated at Changling, Pt. 1] 明定陵出土帝后服饰 (一)." *Shoucangjia* 2009.9: 17-24.

Watt, James C.Y., ed.

2004 *China: Dawn of a Golden Age.* New York: Metropolitan Museum of Art.

Waugh, Daniel C.

2007a "The Louvre: Ancient Middle East." *Silk Road Seattle* website. Accessed April 9, 2011. http://depts.washington.edu/silkroad/museums/ml/ancme.html

2007b "State Hermitage Museum: Southern Siberia/Pazyryk." *Silk Road Seattle* website. Accessed April 9, 2011. http://depts.washington.edu/silkroad/museums/shm/shmpazyryk.html

Whitfield, Roderick, ed.

1984 *Treasures from Korea: Art through 5000 Years*. London: British Museum Publications for the Trustees of the British Museum.

Wikimedia Commons

2011	"Liao River." Wikipedia website. Accessed April 28, 2011.
	http://en.wikipedia.org/wiki/File:Liaorivermap.png
2009a	"Colored gold." Wikipedia website. Accessed April 28, 2011
	http://og.wilsingdia.org/wilsi/EilerA.g.A.y.Cy. colours anglich as

2009b http://en.wikipedia.org/wiki/File:Ag-Au-Cu-colours-english.svg "Jin Wudi." *Wikipedia* website. Accessed April 28, 2011. http://en.wikipedia.org/wiki/File:Jin Wu Di.jpg

#### Williams, Defry

2009 "The Story of the Aegina Treasure." In *The Aigina Treasure: Aegean Bronze Age Jewellery and a Mystery Revisited*, ed. J. Lesley Fitton, 11-16. London: British Museum Press.

#### Wittkower, Rudolf

1976 "East and West: The Problem of Cultural Exchange." In *Allegory and the Migration of Symbols*, ed. Rudolf Wittkower, 10-14. New York: Thames and Hudson.

## Wolters, Jochem

1983 *Die Granulation: Geschichte und Technik einer alten Goldschmiedekunst.* Munich: Callwey.

# Wu Hung

- 1989 *The Wu Liang Shrine: The Ideology of Early Chinese Pictorial Art* (Stanford: Stanford UP).
- ed. Han Tang zhijian: wenwu yishu de hudong yu jiaorong [Between Han and Tang: Cultural and Artistic Interaction in a Transformative Period] 漢唐之間: 文化藝術的互動與交融 (Beijing: Wenwu chubanshe).
- 2003 "The Admonitions Scroll Revisited: Iconology, Narratology, Style, Dating." In *Gu Kaizhi and the Admonitions Scroll*, ed. Shane McCausland, ed., 89-99. London: The British Museum.

# Xiao Tong

1996 *Wen xuan, or, Selections of Refined Literature*, Vol. 3. Trans. David R. Knechtges. Princeton: Princeton UP.

- Xinjiang Weiwu'er Zizhiqu duiwai wenhua jiaoliu xiehui 新疆維吾爾自治區對外文化 對流協會 and Xinjiang Xinboyi gongyipin shangdian 新疆鑫博藝工藝品商店
- 2008 Sichou zhilu: Xinjiang gudai wenhua [The Ancient Culture in Xinjiang Along the Silk Road] 絲綢之路:新疆古代文化. Urumqi: Xinjiang renmin chubanshe.

# Xu Bingkun 徐秉琨

1996 Xianbei, Sanguo, Gufen: Zhongguo, Chaoxian, Riben Gudai de Wenhua Jiaoliu [Xianbei, Three Kingdoms, and Kofun: The Ancient Cultural Interaction between China, Korea, and Japan] 鮮卑、三國、古墳: 中國、 朝鮮、日本古代的文化交流. Shenyang: Liaoning guji chubanshe.

#### Xu Ji 徐基

1987 "Guanyu Xianbei Murong bu yizhi de chubu kaocha [Initial Observations on the Murong Xianbei Relics] 關於鮮卑慕容部遺址的初步考察." In *Zhongguo kaogu xuehui di liu ci nianhui lunwen ji* [The Collected Papers of the Sixth Annual of Meeting of the Chinese Archaeology Society] 中國考古學 會第六次年會論文集, ed. Zhongguo Kaogu Xuehui 中國考古學會, 160-173. Beijing: Wenwu chubanshe.

# Yu Hui

2001 "The Admonitions Scroll: A Song Version." Orientations 32.6 (June 2001): 41-51.

# Yü Ying-shih

1986 "Han Foreign Relations." In *The Cambridge History of China*, Vol. 1: *The Ch'in and Han Empires.*, ed. John K. Fairbank and Denis Twitchett, 377–462. Cambridge University Press.

## Zettler, Richard L.

1998 "The Burials of a King and Queen." In *Treasures from the Royal Tombs of Ur*, eds. Lee Horne and Richard L. Zettler, 32-38. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

# Zhang Bozhong 張柏忠

1981 "Zhelimu meng faxian de Xianbei yicun [Xianbei Remains Discovered at Zhelimu League]哲里木盟發現的鮮卑遺存." Wenwu 1981.2: 9-15.

#### Zhang Jingming 張景明

2005 Zhongguo beifang caoyuan gudai jinyinqi [Ancient Gold and Silver Wares of China's Northern Steppes] 中國北方草原古代金銀器. Beijing: Wenwu chubanshe.

Zhao Yaxin 趙雅新

1999 "Kezuohou qi Maolitu faxian Xianbei jin fengniao guanshi [The Xianbei Gold Phoenix Crown Ornament Discovered in Maolitu, Kezuohou Banner] 科左後 旗毛力吐發現鮮卑金風鳥冠飾." *Wenwu* 1999.7: 39-40.

Zhongguo banben tushuguan 中國版本圖書館, ed.

Zhongguo jinyin boli falang qi quanji: Jinyin qi [Chinese Gold, Silver, Glass, and Enamel Collected Objects: Gold and Silver Objects] 中國金銀玻璃琺瑯 器全集: 金銀器. Hebei: Hebei meshu chubanshe.

Zhongguo shehui keyuan kaogu suo Anyang dui 中國社會科院考古所安陽隊

1983 "Anyang Xiaomintun Jin mu fajue baogao [Excavation Report for the Jin tombs at Xiaomintun, near Anyang] 安陽孝民屯晉墓發掘報告." *Kaogu* 1983.6: 501-511, 577-579, 584.

Zibo shi bowuguan 淄博市博物館 and Qi gucheng bowuguan 齊故城博物館

1997 *Linzi Shangwang mudi* [*The Shangwang Cemeteries in Linzi*] 臨淄商王墓地. Jinan: Qilu chubanshe.

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